Appendix A

Project Consistency with Greater Sage-grouse Approved Resource Management Plan Amendment (GRSG Amendment)

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A1.0 Introduction

In response to the USFWS 2010 “warranted, but precluded” ESA listing petition, the BLM initiated a review of conservation measures and policy within existing Resource Management Plans for field offices and districts that contain greater sage-grouse habitat. This review process was recently completed with the preparation of an Approved Resource Management Plan Amendment (ARMPA) and associated Environmental Impact Statement (EIS) to identify and incorporate conservation measures intended to conserve, enhance, and restore greater sage-grouse habitat (BLM 2015a). The 2015 ARMPA is more commonly referred to as the Greater Sage-Grouse Amendment (GRSG Amendment). The GRSG Amendment provides guidance on measures to avoid and minimize potential impacts resulting from proposed projects in addition to providing appropriate measures to compensate for impacts that are unavoidable to greater sage-grouse habitat resulting from development projects that access existing and valid rights. A summary of the Bald Mountain Mine (BMM) Proposed Action and other action alternatives is provided in Section 1.4, Consistency and Compliance.

The following sections provide information on the consistency of the BMM Proposed Action and other action alternatives with the requirements of the September 2015 GRSG Amendment. The Preferred Alternative is consistent with the Ely District Record of Decision and Approved Resource Management Plan (BLM 2008b, as amended), as required by regulation (43 CFR 1610.5-3(a)).**Table A-1** presents the five GRSG Amendment Minerals Resources Management Decisions (MRMD) applicable to locatable minerals projects and supporting information. **Table A-2** presents the four GRSG Amendment Management Decisions (MD) applicable to locatable minerals projects. **Table A-3** presents twenty-two GRSG Amendment general Required Design Features (RDF) applicable to all discretionary projects located within greater sage-grouse habitat in Nevada. **Table A-4** presents the seven GRSG Amendment RDFs specifically applicable to locatable mineral projects within greater sage-grouse habitat in Nevada. As discussed in Section 2.6, the BLM has identified the Western Redbird Modification Alternative as the Preferred Alternative.

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Table A-1 Minerals Resources Management Decisions

MRMD #	MRMD Text	Applicable (Yes/No)	GRSG Amendment Consistency (Yes/No)			Notes
			Proposed Action	Reconfiguration Alternative	Western Redbird Modification Alternative[1]	
15	Review **Objective SSS 4**, and to the extent allowed by law, apply **MDs SSS 1 through SSS 4** when reviewing and analyzing projects and activities proposed in GRSG habitat. (SSS 1 through SSS 4 are addressed below in **Table A-2**)	Yes	Yes	Yes	Yes	**Objective SSS 4:** In PHMAs and GHMAs, apply the concept of "avoid, minimize, and compensatory mitigation" for all human disturbance in areas not already excluded or closed, so as to avoid adverse effects on GRSG and its habitat. The first priority will be to avoid new disturbance; where this is not feasible, the second priority will be to minimize and mitigate any new disturbance (GRSG Amendment, Appendices F and I). The proposed project is a non-discretionary 43 CFR 3809 action, and discretion is limited to preventing unnecessary and undue degradation. The proponent has proposed a robust suite of applicant-committed environmental protection measures into their Proposed Action and all Alternatives, to incorporate Design Features and Management Decisions from the 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment. The BLM coordinated with the Nevada Sagebrush Ecosystem Technical Team (SETT) and Barrick to apply compensatory mitigation to offset residual impacts using the State of Nevada's Conservation Credit System (CCS). Barrick has agreed to purchase between 5,251 and 6,039 credits within 6 months of the credits being available, once the Record of Decision is signed. The final number of credits purchased will be determined based on proximity to the project. See Section A6.0, Compensatory Mitigation, below, for further detail. As a result, the analysis and resulting mitigation for greater sage-grouse outlined in Sections A6.0 (Compensatory Mitigation) and A7.0 (Other Mitigation and Monitoring) of this Final EIS are consistent with the GRSG Amendment. Under the Preferred Alternative, impacts to GRSG and habitat have been minimized and mitigated to the extent practicable. See Section A6.0, Compensatory Mitigation, and Section A7.0, Other Mitigation and Monitoring, below for further detail.
16	Recommend for withdrawal SFA under the General Mining Act of 1872, as amended, subject to valid existing rights (see Appendix A; Figures 2-1 and 2-4).	No	-	-	-	No Sagebrush Focal Areas (SFAs) are located within the project area.
17	On public lands, manage disturbances associated with notice-level activity in GRSG habitat on a landscape basis to avoid segmenting a project. Do this by encouraging operators and claimants to consolidate exploration into a plan of operations to reduce the proliferation of mining notices, in accordance with 43 CFR, Part 3809.21(b).	Yes	Yes	Yes	Yes	Barrick has consolidated the exploration plan under the NOA/SOA PoO. FEIS **Section 2.4.1.15** states: Ongoing exploration activities would be conducted within and adjacent to the proposed NOA project boundary, per existing approvals, to identify and delineate additional ore reserves. These activities would consist of geologic or geophysical surveys, access road grading or construction, and drilling programs. Drilling would be conducted to located new gold resources, confirm the grade and character of existing ore deposits (exploration drilling) or that an area contains no economically recoverable gold (condemnation drilling). Under the Proposed Action, Barrick would reallocate exploration disturbance previously apportioned to the Regional Exploration PoO to the NOA Project PoO. Although the boundary of the Regional Exploration PoO would not change, the mining PoO boundaries would, and therefore a reconciliation would occur to eliminate overlapped acreage. As a result, approximately 86 acres of exploration-related disturbance previously allocated to the Regional Exploration PoO would become part of the proposed NOA Project PoO. The transferred disturbance (86 acres) would be applied to the previously authorized exploration-related disturbance for the NOA project (475 acres). In addition, approximately 15 acres of exploration-related disturbance previously allocated to the Regional Exploration PoO would become part of the proposed SOA Project PoO. Appropriate permitting actions related to the Regional Exploration PoO would be conducted following approval of this EIS.

Table A-1 Minerals Resources Management Decisions

MRMD #	MRMD Text	Applicable (Yes/No)	GRSG Amendment Consistency (Yes/No)			Notes
			Proposed Action	Reconfiguration Alternative	Western Redbird Modification Alternative[1]	
18	Subject to valid existing rights and applicable law, authorize locatable mineral development activity, by approving plans of operation and apply mitigation and best management practices that minimize the loss of PHMAs and GHMAs or that enhance GRSG habitat by applying the "avoid, minimize and compensatory mitigation" process through an applicable mitigation system, such as the Nevada Conservation Credit System.	Yes	Yes	Yes	Yes	The proposed project is a non-discretionary 43 CFR 3809 action, and discretion is limited to preventing unnecessary and undue degradation. The proponent has proposed a robust suite of applicant-committed environmental protection measures into their Proposed Action and all Alternatives, to incorporate Design Features and Management Decisions from the 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan. Under the all BMM alternatives, including the Preferred Alternative, impacts to GRSG and habitat have been avoided and minimized to the extent practicable. See Section A7.0, Other Mitigation and Monitoring, below for further detail. The BLM coordinated with the Nevada Sagebrush Ecosystem Technical Team (SETT) and Barrick to apply compensatory mitigation to offset residual impacts using the State of Nevada's Conservation Credit System (CCS). Barrick has agreed to purchase between 5,251 and 6,039 credits within 6 months of the credits being available, once the Record of Decision is signed. The final number of credits purchased will be determined based on proximity to the project. See Section A6.0, Compensatory Mitigation, below for further detail. As a result, the analysis and resulting mitigation for greater sage-grouse outlined in Sections A6.0 (Compensatory Mitigation) and A7.0 (Other Mitigation and Monitoring) of this Final EIS are consistent with the GRSG Amendment.
19	Close or mitigate abandoned mine sites in PHMAs and GHMAs to reduce GRSG predation by eliminating physical structures that could provide nesting opportunities and perching sites for predators.	No	-	-	-	NA

[1] Preferred Alternative.

Table A-2 Management Decision(s) SSS 1 through SSS 4

MD #	MD Text	Applicable (Yes/No)	GRSG Amendment Consistency (Yes/No)			Notes
			Proposed Action	Reconfiguration Alternative	Western Redbird Modification Alternative[1]	
SSS 1	In PHMAs and GHMAs, work with the proponent/applicant, whether in accordance with a valid existing right or not, and use the following screening criteria to avoid effects of the proposed human activity on GRSG habitat: A. First priority—locate project/activity outside PHMAs and GHMAs B. Second priority—if the project/activity cannot be placed outside PHMAs and GHMAs, locate the surface-disturbing activities in non-habitat areas first, then in the least suitable habitat for GRSG C. Third priority—collocate the project/activity next to or in the footprint of existing infrastructure	No	Yes	Yes	Yes	Ore bodies are in place and not flexible in terms of location. Barrick has consolidated its proposed facilities at existing facilities and around ore bodies to increase feasibility and lower material handling costs. Barrick has worked with the BLM to avoid effects of human activity on GRSG and habitat. Evidence of the effort to avoid and minimize impacts is demonstrated in the acreage of impacts displayed in **Table 3.8-5**, **Table 3.8-6**, and **Table 3.8-8**. Impact acreages of PHMA and GHMA under the Preferred Alternative have been reduced by approximately 39% and 29% respectively, in comparison to the Proposed Action. Barrick has further reduced potential impacts by withdrawing and reducing the extent of some previously authorized facilities in addition to implementing concurrent reclamation in areas where no further activity is approved or planned.
SSS 2 (PHMA)	In PHMAs, the following conditions will be met in order to avoid, minimize, and mitigate any effects on GRSG and its habitat from the project/activity:					
SSS 2A (PHMA)	Manage discrete anthropogenic disturbances, whether temporary or permanent, so they cover less than 3 percent of 1) biologically significant units (BSUs; total PHMA area associated with a GRSG population area (see Appendix A; Figure 2-2) and 2) in a proposed project analysis area. See Appendix E (Disturbance Cap Guidance) for additional information on implementing the disturbance cap, including what is and is not considered disturbance and how to calculate the proposed project analysis area, as follows: 1. If the 3 percent human disturbance cap is exceeded on all lands (regardless of ownership) in PHMAs in any given BSU, then no further discrete human disturbances (subject to applicable laws and regulations, such as the 1872 Mining Law, as amended, and valid existing rights) will be permitted, by BLM within GRSG PHMA in any given BSU until the disturbance has been reduced to less than the cap (see Nevada exception under MD SSS 2 a. 3. Appendix E). 2. If the 3 percent disturbance cap is exceeded on all lands (regardless of land ownership) within a proposed project analysis area in a PHMA, then no further anthropogenic disturbance will be permitted by BLM until disturbance in the proposed project analysis area has been reduced to maintain the area under the cap (subject to applicable laws and regulations, such as the 1872 Mining Law, as amended, valid existing rights; see Nevada exception under MD SSS 2 a. 3. Appendix E).	Yes[3]	-	-	Yes	GRSG Amendment Appendix E directs that the disturbance cap analysis should be conducted and results provided in NEPA analyses, but any exceedances of the cap (at both the BSU and project levels scales) do not preclude a locatable mineral resources project with existing valid rights from BLM approval. The BSU disturbance is calculated once a year at the BLM National Operations Center. The affected BSU for this project is the Butte/Buck/White Pine BSU. In 2015, approximately 0.61% of PHMA within the Butte/Buck/White Pine BSU was disturbed by cumulative actions. BLM Nevada State Office has conducted project scale calculations for the Proposed Action and action alternatives. Results of the project scale disturbance calculations for the Preferred Alternative yields a 2.97 percent disturbance. See Section 2.0 of this appendix.
SSS 2B (PHMA)	In PHMA, in undertaking BLM management actions, and consistent with valid existing rights and applicable law, in authorizing third-party actions that result in habitat loss and degradation, the BLM will require and ensure mitigation that provides a net conservation gain to the species, including accounting for any uncertainty associated with the effectiveness of such mitigation. The project/activity with associated mitigation (such as the use of the State of Nevada Conservation Credit System) will result in an overall net conservation gain to GRSG (see Appendix F).	No	-	-	-	Compensatory mitigation for residual impacts to PHMA unable to be avoided and minimized will be offset by Barrick through the voluntary purchase of conservation credits through the Nevada Conservation Credit System. The BLM coordinated with the Nevada Sagebrush Ecosystem Technical Team (SETT) and Barrick to apply compensatory mitigation to offset residual impacts using the State of Nevada's Conservation Credit System (CCS). Barrick has agreed to purchase between 5,251 and 6,039 credits within 6 months of the credits being available, once the Record of Decision is signed. The final number of credits purchased will be determined based on proximity to the project. See Section A6.0, Compensatory Mitigation, below for further detail.
SSS 2C (PHMA)	Authorized/permitted activities are implemented by adhering to the RDFs described in Appendix C, consistent with applicable law. At the site-specific scale, if an RDF is not implemented, at least one of the following must be demonstrated in the NEPA analysis associated with the project/activity: 1. A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g., due to the site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable. 2. An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. 3. A specific RDF will provide no additional protection to GRSG or its habitat.	No	-	-	-	The proposed project is a non-discretionary 43 CFR 3809 action, and discretion is limited to preventing unnecessary and undue degradation. The proponent has proposed a robust suite of applicant-committed environmental protection measures (**Table 2.4-54**) into their Proposed Action and all Alternatives, to incorporate Design Features and Management Decisions from the 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan. As a result, the analysis and resulting mitigation for greater sage-grouse outlined in Sections A6.0 (Compensatory Mitigation) and A7.0 (Other Mitigation and Monitoring) of this Final EIS are consistent with the GRSG Amendment. Under the Preferred Alternative, the BMM would be consistent with a majority of RDFs presented in **Table A-3** and **Table A-4** below due to the application of the Applicant Committed Environmental Protection Measures (ACEPM) presented in **Table 2.4-54**.

Table A-2 Management Decision(s) SSS 1 through SSS 4

MD #	MD Text	Applicable (Yes/No)	GRSG Amendment Consistency (Yes/No)			Notes
			Proposed Action	Reconfiguration Alternative	Western Redbird Modification Alternative[1]	
SSS 2D (PHMA)	In management actions, and consistent with valid and existing rights and applicable law in authorizing third-party actions, the BLM will apply the lek buffer-distances identified in the USGS report, Conservation Buffer Distance Estimates for Greater Sage-Grouse—A Review Open File-Report 2014-1239 (Manier et al. 2014), in accordance with Appendix B.	No	-	-	-	The proposed project is a non-discretionary 43 CFR 3809 action, and discretion is limited to preventing unnecessary and undue degradation. The proponent has proposed a robust suite of applicant-committed environmental protection measures into their Proposed Action and all Alternatives, to incorporate Design Features and Management Decisions from the 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan. As a result, the analysis and resulting mitigation for greater sage-grouse outlined in Sections A6.0 (Compensatory Mitigation) and A7.0 (Other Mitigation and Monitoring) of this Final EIS are consistent with the GRSG Amendment. The BMM project holds valid existing rights and therefore is not subject to lek buffer distances identified in Appendix B of the GRSG Amendment.
SSS 2E (PHMA)	Seasonal restrictions will be applied during the period specified below to manage discretionary surface-disturbing activities and uses on public lands to prevent disturbances to GRSG during seasonal life-cycle periods: 1. In breeding habitat within 4 miles of active and pending GRSG leks from March 1 through June 30 a. Lek—March 1 to May 15 b. Lek hourly restrictions—6 p.m. to 9 a.m. c. Nesting—April 1 to June 30 2. Brood-rearing habitat from May 15 to September 15 a. Early—May 15 to June 15 b. Late—June 15 to September 15 3. Winter habitat from November 1 to February 28 The seasonal dates may be modified due to documented local variations (e.g., higher/lower elevations) or annual climatic fluctuations (e.g., early/late spring, long/heavy winter), in coordination with NDOW, in order to better protect GRSG and its habitat.	No	-	-	-	The proposed project is a non-discretionary 43 CFR 3809 action, and discretion is limited to preventing unnecessary and undue degradation. The proponent has proposed a robust suite of applicant-committed environmental protection measures into their Proposed Action and all Alternatives, to incorporate Design Features and Management Decisions from the 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan. As a result, the analysis and resulting mitigation for greater sage-grouse outlined in Section A6.0 (Compensatory Mitigation) and Section A7.0 (Mitigation and Monitoring) of this Final EIS are consistent with the GRSG Amendment. The BMM project holds valid existing rights and therefore is not subject to the application of seasonal restrictions identified in the GRSG Amendment.
SSS 2F (PHMA)	Authorizations and permits will limit noise from discretionary activities (during construction, operation, and maintenance) to not exceed 10 decibels above ambient sound levels at least 0.25 mile from active and pending leks, from 2 hours before to 2 hours after sunrise and sunset during the breeding season. See Appendix M, Greater Sage-Grouse Noise Protocol.	No	-	-	-	The proposed project is a non-discretionary 43 CFR 3809 action, and discretion is limited to preventing unnecessary and undue degradation. However, under mitigation measure SSS-1, Barrick would develop a GRSG Noise Mitigation Plan to outline proposed monitoring and potential mitigation measures to be implemented to avoid and reduce potential impacts resulting from increases in sound conditions at active leks within 3.1 miles of disturbance activities under the Preferred Alternative. In addition, the proponent has proposed a robust suite of applicant-committed environmental protection measures into their Proposed Action and all Alternatives, to incorporate Design Features and Management Decisions from the 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment. As a result, the analysis and resulting mitigation for greater sage-grouse outlined in Sections A6.0 (Compensatory Mitigation) and A7.0 Other Mitigation and Monitoring) of this Final EIS are consistent with the GRSG Amendment.

Table A-2 Management Decision(s) SSS 1 through SSS 4

MD #	MD Text	Applicable (Yes/No)	GRSG Amendment Consistency (Yes/No)			Notes
			Proposed Action	Reconfiguration Alternative	Western Redbird Modification Alternative[1]	
SSS 3 (GHMA)	In GHMAs, the following conditions will be met in order to avoid, minimize, and mitigate any effects on GRSG or its habitat from the project/activity:					
SSS 3A (GHMA)	In GHMAs, in undertaking BLM management actions, and consistent with valid existing rights and applicable law, in authorizing third-party actions that result in habitat loss and degradation, the BLM will require and ensure mitigation that provides a net conservation gain to the species, including accounting for any uncertainty associated with the effectiveness of such mitigation. The project/activity with associated mitigation (such as the use of the State of Nevada Conservation Credit System) in GHMAs will result in an overall net conservation gain to GRSG (see Appendix F, Regional Mitigation Strategy).	No	-	-	-	The proposed project is a non-discretionary 43 CFR 3809 action, and discretion is limited to preventing unnecessary and undue degradation. The proponent has proposed a robust suite of applicant-committed environmental protection measures into their Proposed Action and all Alternatives, to incorporate Design Features and Management Decisions from the 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment. As a result, the analysis and resulting mitigation for Greater Sage-Grouse outlined in Sections A6.0 (Compensatory Mitigation) and A7.0 (Other Mitigation and Monitoring) of this Final EIS are consistent with the GRSG Amendment. The BLM coordinated with the Nevada Sagebrush Ecosystem Technical Team (SETT) and Barrick to apply compensatory mitigation to offset residual impacts using the State of Nevada's Conservation Credit System (CCS). Barrick has agreed to purchase between 5,251 and 6,039 credits within 6 months of the credits being available, once the Record of Decision is signed. The final number of credits purchased will be determined based on proximity to the project. See Section A6.0, Compensatory Mitigation, below for further detail.
SSS 3B (GHMA)	Authorized/permitted activities are implemented adhering to the RDFs described in Appendix C, consistent with applicable law. At the site-specific scale, if an RDF is not implemented, at least one of the following must be demonstrated in the NEPA analysis associated with the project/activity: 1. A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g., due to the site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable. 2. An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. 3. A specific RDF will provide no additional protection to GRSG or its habitat.	No	-	-	-	The proposed project is a non-discretionary 43 CFR 3809 action, and discretion is limited to preventing unnecessary and undue degradation. The proponent has proposed a robust suite of applicant-committed environmental protection measures into their Proposed Action and all Alternatives, to incorporate Design Features and Management Decisions from the 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment. As a result, the analysis and resulting mitigation for Greater Sage-Grouse outlined in Sections A6.0 (Compensatory Mitigation) and A7.0 (Other Mitigation and Monitoring) of this Final EIS are consistent with the GRSG Amendment. Under the Preferred Alternative, the BMM would be consistent with a majority of RDFs as presented in **Table A-3** and **Table A-4** below due to the application of the ACEPMs presented in **Table 2.4-54**.
SSS 3C (GHMA)	In undertaking BLM management actions, and consistent with valid and existing rights and applicable law in authorizing third-party actions, the BLM will apply the lek buffer-distances identified in the USGS report, Conservation Buffer Distance Estimates for Greater Sage-Grouse—A Review Open File Report 2014-1239 (Manier et.al 2014]), in accordance with Appendix B.	No	-	-	-	The proposed project is a non-discretionary 43 CFR 3809 action, and discretion is limited to preventing unnecessary and undue degradation. The proponent has proposed a robust suite of applicant-committed environmental protection measures into their Proposed Action and all Alternatives, to incorporate Design Features and Management Decisions from the 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment. As a result, the analysis and resulting mitigation for Greater Sage-Grouse outlined in Sections A6.0 (Compensatory Mitigation) and A7.0 (Other Mitigation and Monitoring) of this Final EIS are consistent with the GRSG Amendment.

Table A-2 Management Decision(s) SSS 1 through SSS 4

MD #	MD Text	Applicable (Yes/No)	GRSG Amendment Consistency (Yes/No)			Notes
			Proposed Action	Reconfiguration Alternative	Western Redbird Modification Alternative[1]	
SSS 3D (GHMA)	Seasonal restrictions will be applied during the period specified below to manage discretionary surface-disturbing activities and uses on public lands to prevent disturbing GRSG during seasonal life cycle periods, as follows: 1. In breeding habitat within 4 miles of active and pending GRSG leks from March 1 through June 30 a. Lek—March 1 to May 15 b. Lek hourly restrictions—6 p.m. to 9 a.m. c. Nesting—April 1 to June 30 2. Brood-rearing habitat from May 15 to September 15 a. Early—May 15 to June 15 b. Late—June 15 to September 15 3. Winter habitat from November 1 to February 28 The seasonal dates may be modified due to documented local variations (e.g., higher/lower elevations) or annual climatic fluctuations (e.g., early/late spring, long/heavy winter), in coordination with NDOW, in order to better protect GRSG and its habitat.	No	-	-	-	The proposed project is a non-discretionary 43 CFR 3809 action, and discretion is limited to preventing unnecessary and undue degradation. The proponent has proposed a robust suite of applicant-committed environmental protection measures into their Proposed Action and all Alternatives, to incorporate Design Features and Management Decisions from the 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment. As a result, the analysis and resulting mitigation for Greater Sage-Grouse outlined in Sections A6.0 (Compensatory Mitigation) and A7.0 (Other Mitigation and Monitoring) of this Final EIS are consistent with the GRSG Amendment. The BMM project holds valid existing rights and therefore is not subject to the application of seasonal restrictions identified in the GRSG Amendment.
SSS 3E (GHMA)	Authorizations and permits will limit noise from discretionary activities (during construction, operation, and maintenance) to not exceed 10 decibels above ambient sound levels at least 0.25 mile from active and pending leks, from 2 hours before to 2 hours after sunrise and sunset during the breeding season. See Appendix M, Greater Sage-Grouse Noise Protocol.	No	-	-	-	The proposed project is a non-discretionary 43 CFR 3809 action, and discretion is limited to preventing unnecessary and undue degradation. However, under mitigation measure SSS-1, Barrick would develop a GRSG Noise Mitigation Plan to outline proposed monitoring and potential mitigation measures to be implemented to avoid and reduce potential impacts resulting from increases in sound conditions at active leks within 3.1 miles of disturbance activities under the Preferred Alternative. In addition, the proponent has proposed a robust suite of applicant-committed environmental protection measures into their Proposed Action and all Alternatives, to incorporate Design Features and Management Decisions from the 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment. As a result, the analysis and resulting mitigation for Greater Sage-Grouse outlined in Sections A6.0 (Compensatory Mitigation) and A7.0 (Other Mitigation and Monitoring) of this Final EIS are consistent with the GRSG Amendment.
SSS 4 (OHMA)	In OHMAs, authorized/permitted activities are implemented adhering to the RDFs described in Appendix C, consistent with applicable law. At the site-specific scale, if an RDF is not implemented, at least one of the following must be demonstrated in the NEPA analysis associated with the project/activity: 1. A specific RDF is documented to not be applicable to the site-specific conditions of the project/activity (e.g., due to the site limitations or engineering considerations). Economic considerations, such as increased costs, do not necessarily require that an RDF be varied or rendered inapplicable. 2. An alternative RDF is determined to provide equal or better protection for GRSG or its habitat. 3. A specific RDF will provide no additional protection to GRSG or its habitat.	No	-	-	-	The proposed project is a non-discretionary 43 CFR 3809 action, and discretion is limited to preventing unnecessary and undue degradation. The proponent has proposed a robust suite of applicant-committed environmental protection measures into their Proposed Action and all Alternatives, to incorporate Design Features and Management Decisions from the 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment. As a result, the analysis and resulting mitigation for Greater Sage-Grouse outlined in Section A6.0 (Compensatory Mitigation) and A7.0 (Other Mitigation and Monitoring) of this Final EIS are consistent with the GRSG Amendment. Under the Preferred Alternative, the BMM would be consistent with a majority of RDFs as presented in **Table A-3** and **Table A-4** below due to the application of the ACEPM presented in **Table 2.4-54**.

[1] Preferred Alternative.

[2] Decibels on the A-weighted scale.

[3] MD SSS 2A is considered applicable in that the results of the disturbance calculations are required to be disclosed in NEPA analyses. MD SSS 2A is not applicable to non-discretionary permit approvals with regards to the limitation of surface disturbance to 3% of PHMA within the BSU and project scales.

Table A-3 General Required Design Features (RDF)

RDF #	RDF Text	Applicable (Yes/No)	GRSG Amendment Consistency (Yes/No)			Notes
			Proposed Action	Reconfiguration Alternative	Western Redbird Modification Alternative[1]	
1	Locate new roads outside of GRSG habitat to the extent practical.	No	Yes	Yes	Yes	New roads are minimized to the extent practical while still allowing access to valid claims/ore bodies.
2	Avoid constructing roads within riparian areas and ephemeral drainages. Construct low water crossings at right angles to ephemeral drainages at stream crossings (note that such construction may require permitting under Sections 401 and 404 of the Clean Water Act).	No	Yes	Yes	Yes	Proposed access roads do not impact riparian areas but do cross ephemeral drainages. Barrick Water Quality ACEPMs include BLM Ely RMP Water BMPs (**Table 2.4-54**) • Access roads and fords that cross stream channels would be constructed to BLM road standards. • New road or existing road improvements would not occur within 300 feet of a stream channel unless authorized by the BLM Field Manager or Authorized Officer. • Stream crossings on travel routes and trails would be limited to the minimal number necessary to minimize sedimentation and compaction. The BLM Authorized Officer would determine if any impacts need to be rehabilitated by the permittee. • Low water crossings would be constructed at right-angles to ephemeral drainages.
3	Limit construction of new roads where roads are already in existence and could be used or upgraded to meet the needs of the project or operation. Design roads to an appropriate standard, no higher than necessary, to accommodate intended purpose and level of use.	No	Yes	Yes	Yes	New roads within NOA/SOA are limited to haul roads designed to MSHA standards. Barrick Soil Erosion ACEPMs include: • Existing roads would be used to the extent practicable (**Table 2.4-54**).
4	Coordinate road construction and use with ROW holders to minimize disturbance to the extent possible.	No	Yes	Yes	Yes	No new road ROW are proposed for public access other than the previously authorized but un-constructed Vantage area re-route. Other new roads within NOA/SOA are limited to haul roads. Barrick would coordinate with White Pine County for the existing ROWs within the project area. Barrick Traffic Management Plan (Appendix J PoO) includes: • Public access road re-routes will be constructed in accordance with White Pine County road standards located in Attachment A or as otherwise agreed with White Pine County. • White Pine County Public Works Department and Road Maintenance Agreement.
5	During project construction and operation, establish and post speed limits in GRSG habitat to reduce vehicle/wildlife collisions or design roads to be driven at slower speeds.	No	Yes	Yes	Yes	Speed limits are currently in place within the PoO boundary.
6	Newly constructed project roads that access valid existing rights would not be managed as public access roads. Proponents will restrict access by employing traffic control devices such as signage, gates, and fencing.	No	Yes	Yes	Yes	Barrick Traffic Management Plan (PoO Appendix J, Section 4.2) states: "If necessary, a gate system will be installed at the east and west sides of the Winrock facilities intersection, at the south side of the Vantage facilities, and/or at the west side of the Yankee Heap Leach Facility intersection to provide for monitored access into active mining areas. The gate system will be secured to preclude public access as these areas are not publically accessible." This commitment is restated in the PoO for other points of public access roads intersection with mine haul road traffic.
7	Require dust abatement practices when authorizing use on roads.	No	Yes	Yes	Yes	Barrick Air Quality ACEPMs (**Table 2.4-54**) relative to dust abatements practices include: • Air emissions, including point and fugitive sources, would be controlled in accordance with the air quality operating permits and current BMPs (e.g., dust control would be provided for haul roads through water or chemical application). • Speed limits would be posted and enforced to reduce airborne fugitive dust. • Dust abatement techniques would be used before and during surface clearing, excavation, or blasting activities.

Table A-3 General Required Design Features (RDF)

RDF #	RDF Text	Applicable (Yes/No)	GRSG Amendment Consistency (Yes/No)			Notes
			Proposed Action	Reconfiguration Alternative	Western Redbird Modification Alternative[1]	
8	No RDF #8 Listed in the GRSG Amendment					
9	Upon project completion, reclaim roads developed for project access on public lands unless, based on site-specific analysis, the route provides specific benefits for public access and does not contribute to resource conflicts.	No	Yes	Yes	Yes	Hauls roads will be reclaimed upon mine closure. Some will be concurrently reclaimed when no further use is needed.
10	Design or site permanent structures that create movement (e.g., pump jack/ windmill) to minimize impacts on GRSG habitat.	No	Yes	Yes	Yes	No structures that result in automated repetitive movement are proposed.
11	Equip temporary and permanent aboveground facilities with structures or devices that discourage nesting and perching of raptors, corvids, and other predators.	No	Yes	Yes	Yes	Barrick SSS Wildlife ACEPMs (**Table 2.4-54**) include: • Current science, guidelines, and methodologies (APLIC 2012, 2006) would be used for new transmission lines to minimize raptor and other bird electrocution and collision potential. • Where eagles are likely to nest in human-made structures, such as radio and cell phone towers, and such use could impede the operation and maintenance of the structures or jeopardize the safety of the eagles, the structures would be equipped with either devices engineered to discourage eagles from nest-building or would be constructed with nesting platforms that would safely accommodate eagle nests. • Industry-accepted BMPs would be employed at new utility lines, new towers, and new poles to prevent eagles from colliding with or being electrocuted as outlined in the Bird and Bat Conservation Strategy. Barrick Avian Protection Plan (PoO Appendix P) states: • Barrick will install anti-perch devices on new and existing transmission poles within two miles of active greater sage-grouse leks, or install artificial nesting structures to provide alternate nesting and perching sites that are at least two miles from active greater sage grouse leks.
12	Control the spread and effects of nonnative, invasive plant species (e.g., by washing vehicles and equipment, minimize unnecessary surface disturbance; Evangelista et al. 2011). All projects would be required to have a noxious weed management plan in place prior to construction and operations.	No	Yes	Yes	Yes	Barrick's Noxious Weed Control Plan is Appendix Q of the NOA & SOA PoOs. BLM confirmed its adequacy.
13	Implement project site-cleaning practices to preclude the accumulation of debris, solid waste, putrescible wastes, and other potential anthropogenic subsidies for predators of GRSG.	No	Yes	Yes	Yes	Barrick Solid Waste ACEPMs (**Table 2.4-54**) include: • Trash, garbage, debris, and foreign matter would be removed and properly disposed of. The disposal site would be maintained and left in a clean and safe condition. Unless approved by the BLM/NDEP, burning would be prohibited on-site. This will preclude the accumulative of debris, solid waste, putrescible wastes, and other potential anthropogenic subsidies for predators of GRSG.
14	Locate project related temporary housing sites outside of GRSG habitat.	No	Yes	Yes	Yes	No temporary housing is proposed under action alternatives.
15	When interim reclamation is required, irrigate site to establish seedlings more quickly if the site requires it.	No	-	-	-	Barrick's current interim reclamation practices have been successful within the BMM project area. No irrigation of interim sites is required.
16	Utilize mulching techniques to expedite reclamation and to protect soils if the site requires it.	No	-	-	-	Barrick's current interim reclamation practices have been successful within the BMM project area. No application mulching techniques is required.
17	Restore disturbed areas at final reclamation to the pre-disturbance landforms and desired plant community.	No	No	No	No	The majority of disturbance under the Preferred Alternative would be reclaimed. BMM Pits will not be backfilled and RDAs are reclaimed in place at 2.5 to 3:1 H:V, not returned to pre-disturbance landform. Large constructed topographic features, such as RDAs and HLFs, would have rounded crests and variable slope angles to resemble natural landforms, to the extent possible (**Table 2.4-54**).

Table A-3 General Required Design Features (RDF)

RDF #	RDF Text	Applicable (Yes/No)	GRSG Amendment Consistency (Yes/No)			Notes
			Proposed Action	Reconfiguration Alternative	Western Redbird Modification Alternative[1]	
18	When authorizing ground-disturbing activities, require the use of vegetation and soil reclamation standards suitable for the site type prior to construction.	No	Yes	Yes	Yes	BMM EIS Chapter 2.0 states: Reclamation and closure of disturbed areas resulting from the proposed project would be completed in accordance with BLM and NDEP regulations. Reclamation activities are designed to meet the BLM regulations contained in 43 CFR 3809; State of Nevada BMRR requirements per the authority of the NRS 519A.010-519A.290 and the NAC 519A.010-519A.415; and achieve post-mining land uses consistent with the Ely District ROD and Approved RMP.
19	Instruct all construction employees to avoid harassment and disturbance of wildlife, especially during the GRSG breeding (e.g., courtship and nesting) season. In addition, pets shall not be permitted on site during construction.	No	Yes	Yes	Yes	Barrick Avian Protection Plan (PoO Appendix P) states: • A Wildlife Education Program (WEP) would be implemented during the operations of the BMM for contractors, employees, and others who will be on-site on a regular basis. This training will instruct all employees and contractors to avoid disturbance and harassment of wildlife, especially during the GRSG breeding season. The training also will enable them to identify key avian species that may occur in the project area and take appropriate steps when injured or deceased wildlife are encountered. The program will be reviewed by a qualified biologist. The program would include printed reference materials and protocols for documenting and reporting injured or deceased wildlife. Barrick SSS Wildlife ACEPMs (**Table 2.4-54**) include: • During annual training, Barrick would remind employees of their individual and company-defined responsibilities toward protecting greater sage-grouse. Pets are not allowed within the BMM operations area.
20	To reduce predator perching in GRSG habitat, limit the construction of vertical facilities and fences to the minimum number and amount needed and install anti-perch devices where applicable.	No	Yes	Yes	Yes	Barrick Wildlife ACEPM (**Table 2.4-54**) and Mitigation Measures SSS-2 and SSS-3 discussed below in Section A7.0 of this appendix recommend these design features.
21	Outfit all reservoirs, pits, tanks, troughs or similar features with appropriate type and number of wildlife escape ramps.	No	Yes	Yes	Yes	Barrick SSS Wildlife ACEPMs (**Table 2.4-54**) include: • Sumps would be constructed with a ramp for wildlife egress, bermed to prevent wildlife entry, and remain bermed until backfilled. Berms would be constructed to direct storm water away from the sump, and unmixed drilling fluids would not be left exposed to the environment after completion of the hole. Sumps would be liquid free within 30 days after the end of drilling. If the drilling fluids that remain in sumps pose a hazard to wildlife, Barrick would work with the BLM to reduce the wildlife hazard by either removing the fluid or backfilling the sump. (see FEIS page 2-125). • Process areas would be designed to prevent contact between eagles and process solution by using bird balls on process ponds and placing overliner or other material over conveyance ditches. • Process ponds, storm water/event ponds, and other areas of cyanide use would be fenced with 8-foot-high wildlife exclusion fence in accordance with NDOW's Industrial Artificial Pond Permit.
22	Load and unload all equipment on existing roads to minimize disturbance to vegetation and soil.	No	Yes	Yes	Yes	Barrick Vegetation ACEPMs include: • Removal and disturbance of vegetation would be kept to a minimum through construction site management.

[1] Preferred Alternative.

Table A-4 Locatable RDFs

RDF #	RDF Text	Applicable (Yes/No)	GRSG Amendment Consistency (Yes/No)			Notes
			Proposed Action	Reconfiguration Alternative	Western Redbird Modification Alternative[1]	
1	Install noise shields to comply with noise restrictions (see Action SSS 7) when drilling during the breeding, nesting, brood-rearing, and/or wintering season. Apply GRSG seasonal timing restrictions when noise restrictions cannot be met.	No	Yes	Yes	Yes	The BMM project holds valid existing rights and therefore is not subject to the application of the requirement to restrict noise levels when conducting exploratory drilling. Mitigation measure SSS-1 discussed below in Section A7.0 of this appendix, provides additional information on recommended measures to avoid and minimize adverse impacts to GRSG resulting from mine related noise during the breeding season.
2	Cluster disturbances associated with operations and facilities as close as possible, unless site-specific conditions indicate that disturbances to GRSG habitat would be reduced if operations and facilities locations would best fit a unique special arrangement.	No	Yes	Yes	Yes	Barrick's facilities are clustered for economic and technical feasibility by limiting the distance haul trucks must move ore and tailings.
3	Restrict pit and impoundment construction to reduce or eliminate augmenting threats from West Nile virus.	No	Yes	Yes	Yes	Barrick SSS ACEPMs (**Table 2.4-54**) include: • Process areas would be designed to prevent contact between eagles and process solution by using bird balls on process ponds and placing overliner or other material over conveyance ditches. • Process ponds, storm water/event ponds, and other areas of cyanide use would be fenced with 8-foot-high wildlife exclusion fence in accordance with NDOW's Industrial Artificial Pond Permit.
4	Remove or re-inject produced water to reduce habitat for mosquitoes that vector West Nile virus. If surface disposal of produced water continues, use the following steps for reservoir design to limit favorable mosquito habitat: Overbuild size of ponds for muddy and non-vegetated shorelines Build steep shorelines to decrease vegetation and increase wave actions Avoid flooding terrestrial vegetation in flat terrain or low lying areas Construct dams or impoundments that restrict down slope seepage or overflow Line the channel where discharge water flows into the pond with crushed rock Construct spillway with steep sides and line it with crushed rock Treat waters with larvicides to reduce mosquito production where water occurs on the surface	No	Yes	Yes	Yes	See RDF #3 above.
5	Address post reclamation management in reclamation plan such that goals and objectives are to protect and improve sage-grouse habitat needs.	No	Yes	Yes	Yes	Chapter 2.0 (**Table 2.4-54**) states: • Reclamation and closure of disturbed areas resulting from the proposed project would be completed in accordance with BLM and NDEP regulations. Reclamation activities are designed to meet the BLM regulations contained in 43 CFR 3809; State of Nevada BMRR requirements per the authority of the NRS 519A.010-519A.290 and the NAC 519A.010-519A.415; and achieve post-mining land uses consistent with the Ely District ROD and Approved RMP.
6	Maximize the area of interim reclamation on long-term access roads and well pads including reshaping, topsoiling, and revegetating cut and fill slopes.	No	Yes	Yes	Yes	Haul roads would be reclaimed except for those used for long-term post-closure monitoring. The access road is public ROW and would not be reclaimed in order to provide continued access for recreation, etc.
7	Cover (e.g., fine mesh netting or use other effective techniques) all pits and tanks regardless of size to reduce sage-grouse mortality.	No	Yes	Yes	Yes	Barrick SSS ACEPMs (**Table 2.4-54**) include: • Process areas would be designed to prevent contact between eagles and process solution by using bird balls on process ponds and placing overliner or other material over conveyance ditches. • Process ponds, storm water/event ponds, and other areas of cyanide use would be fenced with 8-foot-high wildlife exclusion fence in accordance with NDOW's Industrial Artificial Pond Permit.

[1] Preferred Alternative.

A2.0 Disturbance Calculations

Under Management Decision SSS 2A of the GRSG Amendment (**Table A-2** above), the BLM is required to conduct analysis of the area of disturbance according to the methodology presented in GRSG Amendment Appendix E. The disturbance cap analysis results are provided in NEPA analyses, but any exceedances of the cap (at both the BSU and project levels scales) do not preclude a locatable mineral resources project with existing valid rights from BLM approval.

A2.1 Project Scale Calculation of the Preferred Alternative

Project scale disturbance calculations were conducted by the BLM according to the methods presented in Appendix E of the GRSG Amendment. PHMA habitat is the only habitat category considered in the calculation. PHMA within the study area for the calculation totaled 72,882 acres. The 3% disturbance cap for the BMM project study is approximately 2,186 acres of PHMA. Existing disturbance within the study area totaled 1,458 acres and included 650 acres of roads, 643 acres of mining related disturbance, and 165 acres of powerlines. The area of PHMA anticipated to be disturbed or removed under the Preferred Alternative would be 704 acres. The combination of existing disturbance (1,458 acres) and new proposed disturbance (704 acres) totals approximately 2,162 acres, representing 2.97% of the project study area. Therefore, under the Preferred Alternative, the BMM project would be consistent with the 3% disturbance cap.

A2.2 Biological Significant Unit Scale Calculation of the Preferred Alternative

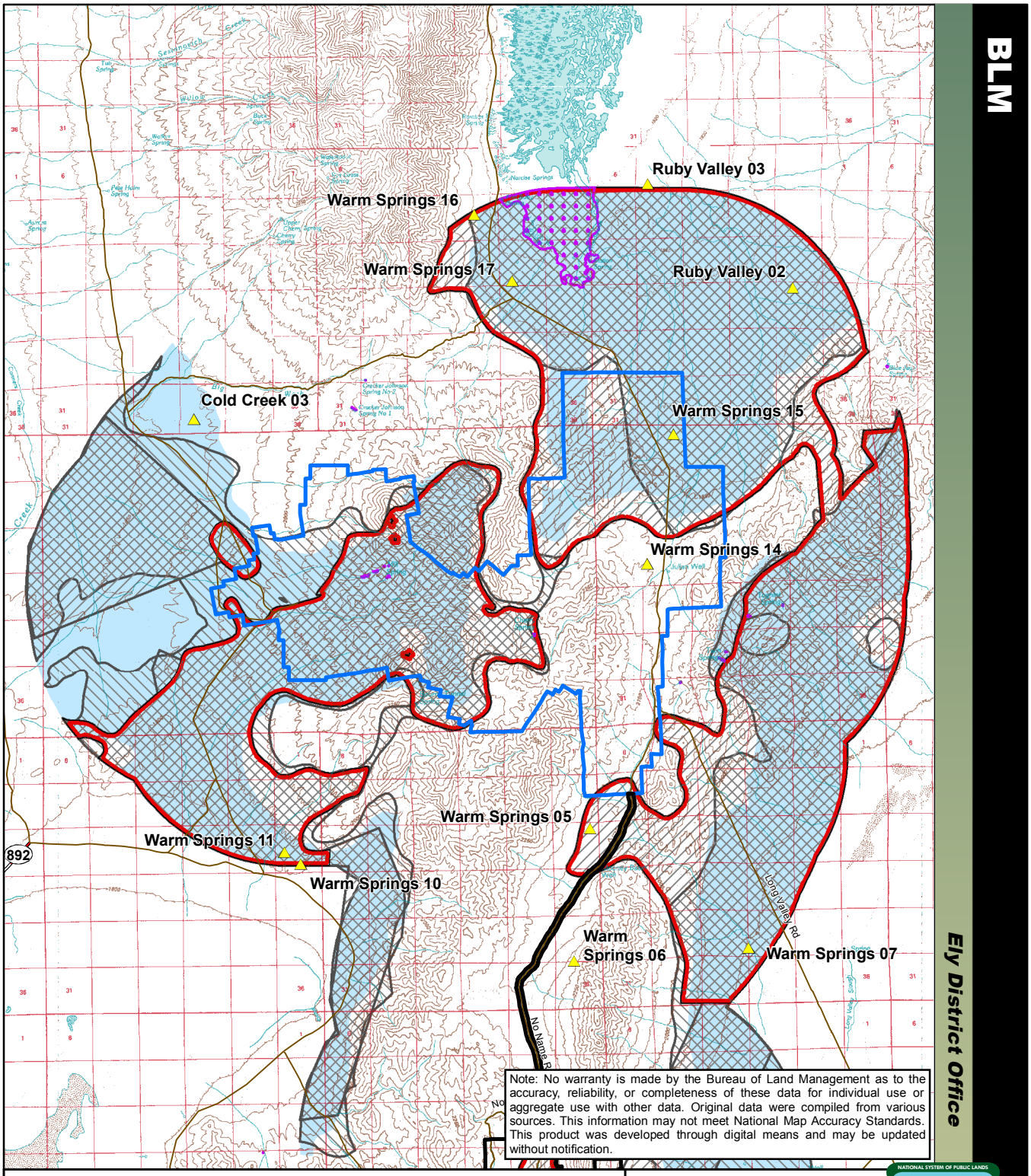
The BSU disturbance is calculated once a year at the BLM National Operations Center, and will be published on-line as soon as it is available. The affected BSU for this project is the Butte/Buck/White Pine BSU, and the calculated disturbance for this BSU will be incorporated as soon as it is available.

A3.0 Seasonal Habitats

Seasonal GRSG habitat within the BMM project area has been identified by NDOW in coordination with the BLM and is presented for the NOA and SOA in **Figure A-1** and **Figure A-2**, respectively. As discussed in **Table A-2** above, the proposed project is a non-discretionary 43 CFR 3809 action, and discretion is limited to preventing unnecessary and undue degradation. The proponent has proposed a robust suite of applicant-committed environmental protection measures into their Proposed Action and all Alternatives, to incorporate Design Features and Management Decisions from the 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment. As a result, the analysis and resulting mitigation for Greater Sage-Grouse outlined in Sections A6.0 (Compensatory Mitigation) and A7.0 (Other Mitigation and Monitoring) of this Final EIS are consistent with the GRSG Amendment.

A4.0 Required Lek Buffers

Under the GRSG Amendment, the BLM is directed to apply the lek buffer distances identified in the USGS Report Conservation Buffer Distance Estimates for Greater Sage-Grouse – A Review (Manier et al. 2014) to discretionary project approvals. The proposed project is a non-discretionary 43 CFR 3809 action, and discretion is limited to preventing unnecessary and undue degradation. The proponent has proposed a robust suite of applicant-committed environmental protection measures into their Proposed Action and all Alternatives, to incorporate Design Features and Management Decisions from the 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment.



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BLM

Ely District Office

Legend

- Proposed NOA Plan Boundary
- Proposed SOA Plan Boundary
- Habitat Monitoring Plot

Greater Sage-grouse Seasonal Habitat

- Lek Habitat
- Nesting Habitat
- Brood-rearing Habitat
- Riparian Habitat
- Winter Habitat

Bald Mountain Mine North and South Operations Area Projects EIS

Figure A-1

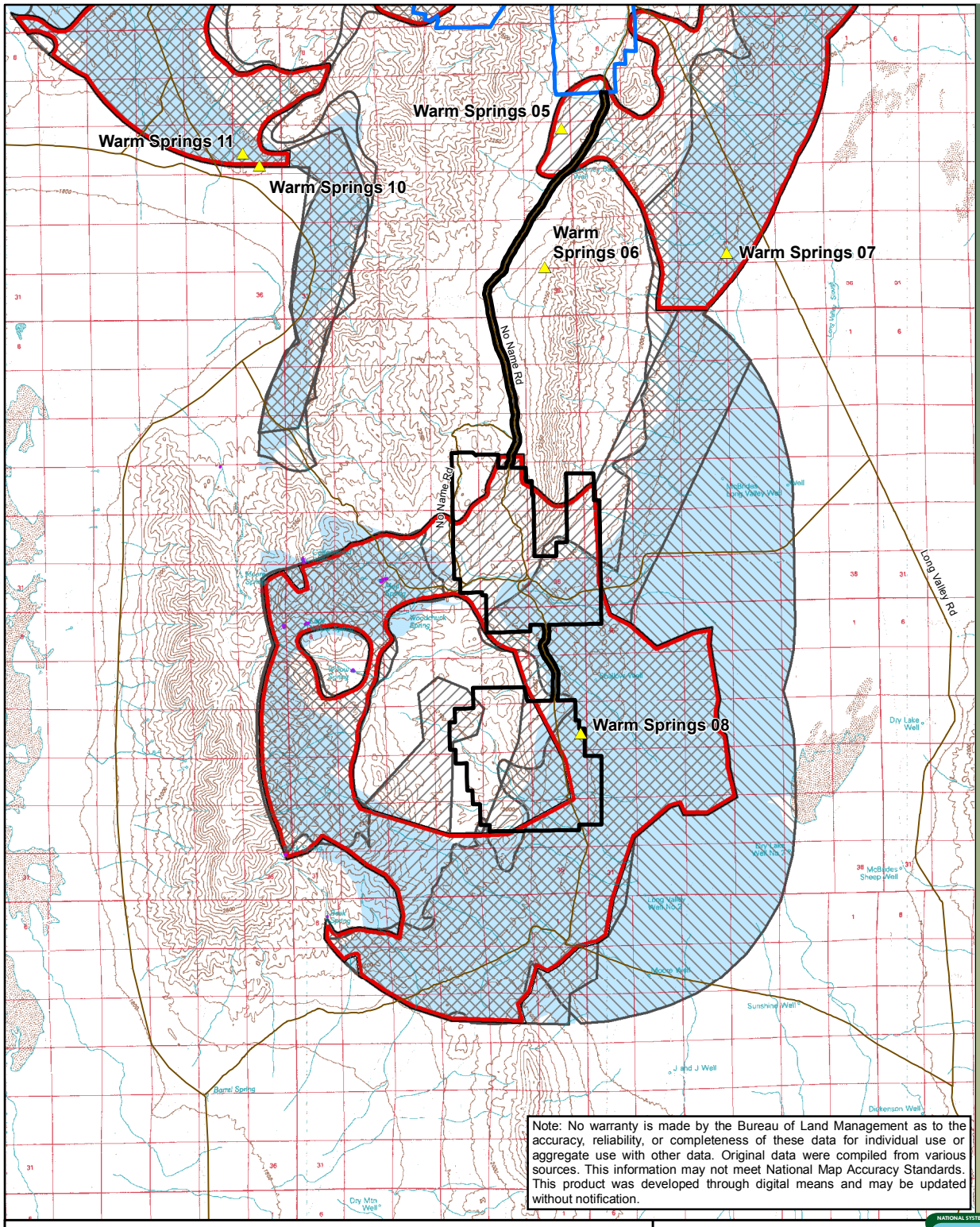
Greater Sage-grouse Seasonal Habitat within the Proposed North Operations Area

0 1 2 4 Miles

N

Source: NDOW 2016, SRK 2011b.

3/14/2016



Note: No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Legend

- Proposed NOA Plan Boundary
- Proposed SOA Plan Boundary
- Habitat Monitoring Plot

Greater Sage-grouse Seasonal Habitat

- Lek Habitat
- Nesting Habitat
- Brood-rearing Habitat
- Riparian Habitat
- Winter Habitat

Source: NDOW 2016, SRK 2011b.

Bald Mountain Mine North and South Operations Area Projects EIS

Figure A-2

Greater Sage-grouse Seasonal Habitat within the Proposed South Operations Area

0 1 2 4 Miles

N

BLM

Ely District Office

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3/14/2016

- Surface disturbance (activities that alter or remove the natural vegetation) within 3.1 miles of leks.
- Noise and related disruptive activities including those that do not result in habitat loss (e.g., motorized recreational events) at least 0.25 mile from leks.

As discussed in **Table A-2** above, the proposed project is a non-discretionary 43 CFR 3809 action, and discretion is limited to preventing unnecessary and undue degradation. The proponent has proposed a robust suite of applicant-committed environmental protection measures into their Proposed Action and all Alternatives, to incorporate Design Features and Management Decisions from the 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment. As a result, the analysis and resulting mitigation for greater sage-grouse outlined in Sections A6.0 (Compensatory Mitigation) and A7.0 (Other Mitigation and Monitoring) of this Final EIS are consistent with the GRSG Amendment.

A5.0 Habitat Objectives

As directed by the GRSG Amendment, all BLM use authorizations will contain terms and conditions regarding the actions needed to meet or progress toward meeting the habitat objectives. BLM habitat objectives from Table 2-2 of the GRSG Amendment are presented in **Table A-5** below. The BLM in coordination with NDOW has identified 13 separate long-term habitat monitoring plot locations within the vicinity of the BMM project. These monitoring plot locations have been stratified by seasonal habitat type and are presented in **Figure A-1** and **Figure A-2** above. Baseline GRSG habitat conditions would be assessed in the field in 2016 and then repeated periodically over the life of the BMM project and reclamation period. This baseline data will become part of the BLM's landscape-level land health assessments for the area. The project is an activity that will result in habitat loss/degradation. These residual habitat impacts will be mitigated through utilization of the Nevada Conservation Credit System (see Section A6.0).

Table A-5 GRSG Habitat Objectives

Attribute	Indicators	Desired Condition (Habitat Objectives)
GENERAL/LANDSCAPE-LEVEL[1]		
All life stages	Rangeland health assessments	Meeting all standards[2]
Cover (nesting)	Seasonal habitat needed	>65% of the landscape in sagebrush cover
	Annual grasses	<%5
Security (nesting)	Conifer encroachment	<3% phase I (>0 to <25% cover) No phase II (25 to 50% cover) No phase III (>50% cover)
Cover and food (winter)	Conifer encroachment	<5% phase I (>0 to <25% cover) No phase II (25 to 50% cover) No phase III (>50%)
	Sagebrush extent	>85% sagebrush land cover

Table A-5 GRSG Habitat Objectives

Attribute	Indicators	Desired Condition (Habitat Objectives)
LEK (Seasonal Use Period: March 1 to May 15)[1]		
Cover	Availability of sagebrush cover	Has adjacent sagebrush cover
Security[3]	Pinyon or juniper cover	<3% landscape cover within .6 mile of leks
	Proximity of tall structures[4]	Use Manier et al. 2014- Conservation Buffer Distance Estimates for GRSG-A Review; preference is 3 miles
NESTING (Seasonal Use Period: April 1 to June 30)[1]		
Cover	Sagebrush cover	≥20%
	Residual and live perennial grass cover (such as native bunchgrasses)	≥10% if shrub cover is <25%[5]
	Annual grass cover	<5%
	Total shrub cover	≥30%
	Perennial grass height (includes residual grasses)	Provide overhead and lateral concealment from predators
Security[2]	Proximity of tall structures[4] (3 feet [1 meter] above shrub)	Use Manier et al. 2014, Conservation Buffer Distance Estimates for GRSG-A Review; preference is 3 miles
BROOD-REARING/SUMMER (Seasonal Use Period: May 15 to September 15; Early: May 15 to June 15; Late: June 15 to September 15)[1]		
UPLAND HABITATS		
Cover	Sagebrush cover	10 to 25%
	Perennial grass cover and forbs	>15% combined perennial grass and forb cover
	Deep rooted perennial bunchgrass (within 522 feet [200 meters] of riparian areas and wet meadows)	7 inches[6, 7]
Cover and food	Perennial forb cover	≥5% arid ≥15% mesic
RIPARIAN/MEADOW HABITATS		
Cover and food	Riparian areas/meadows	PFC
Security	Upland and riparian perennial forb availability and understory species richness	Preferred forbs are common with several species present[6] High species richness (all plants)
	Riparian area/meadow interspersion with adjacent sagebrush	Has adjacent sagebrush cover

Table A-5 GRSG Habitat Objectives

Attribute	Indicators	Desired Condition (Habitat Objectives)
WINTER (Seasonal Use Period: November 1 to February 28)[1]		
Cover and Food	Sagebrush cover	≥10% above snow depth
	Sagebrush height	>9.8 inches above snow Depth

[1] Any one single habitat indicator does not define whether the habitat objective is or is not met. Instead, the preponderance of evidence from all indicators within that seasonal habitat period must be considered when assessing greater sage-grouse habitat objectives.

[2] Upland standards are based on indicators for cover, including litter, live vegetation, and rock, appropriate to the ecological potential of the site.

[3] Applicable to Phase I and Phase II pinyon and/or juniper.

[4] Does not include fences.

[5] In addition, if upland rangeland health standards are being met.

[6] Relative to ecological site potential.

[7] In drought years, 4-inch perennial bunchgrass height with greater than 20 percent measurements exceeding 5 inches in dry years

A6.0 Compensatory Mitigation

A6.1 Nevada Conservation Credit System

The proposed project is a non-discretionary 43 CFR 3809 action, and discretion is limited to preventing unnecessary and undue degradation. The proponent has proposed a robust suite of applicant-committed environmental protection measures into their Proposed Action and all Alternatives, to incorporate Design Features and Management Decisions from the 2015 Nevada and Northeastern California Greater Sage-Grouse Approved Resource Management Plan Amendment. In addition, Barrick shall utilize the State of Nevada's Conservation Credit System (CCS) to offset impacts of proposed project surface disturbance (GRSG Amendment, Mitigation MD MIT1). The Nevada CCS is a relatively new program, and sufficient credits to offset project impacts may not be available for purchase in time for when the BMM project ROD is signed. As agreed between the SETT and the BLM, Barrick shall obtain credits based on the credit obligation determined by the CCS's associated Habitat Quantification Tool (HQT) within 6 months of such credits being available for purchase through the CCS. The final number of credits obtained will be determined based on proximity to the BMM project. Results of the CCS HQT analysis of the Preferred Alternative indicate that the Barrick credit obligation range of 5,251 to 6,039 would be required to fully offset the anticipated temporary impacts during the life of the BMM as presented in **Table A-6**. The credit obligation range is not the result of uncertainty in the results of the CCS HQT analysis of the Preferred Alternative, but rather from the application of a Proximity Ratio that incentivizes Barrick to obtain credits to offset BMM impacts from projects located within the local Butte/Buck/White Pine GRSG Population Management Unit (PMU). Utilizing the CCS to obtain credits based on functional acres lost in addition to the implementation of voluntary Applicant Committed Design Features (**Table 2.4-54**) and other mitigation measures discussed in Section A7.0 would result in net conservation gain for the species.

Table A-6 Range of Temporary Conservation Credit Obligations for the Preferred Alternative

Area of Credit Purchase	Base Credit Obligation	Proximity Ratio Multiplier	Adjusted Credit Obligation
Within Butte/Buck/White Pine/Ruby Valley PMU[1]	5,251	1.0	5,251
Within Ruby or Butte/Buck/White Pine BSU[2]	5,251	1.05	5,514
Within WAFWA[3] Zone III	5,251	1.1	5,776
Outside WAFWA Zone III	5,251	1.15	6,039

[1] Population Management Unit.

[2] Biologically Significant Unit.

[3] Western Association of Fish and Wildlife Agencies.

A7.0 Other Greater Sage-grouse Mitigation and Monitoring

The following mitigation measures are recommended to minimize and mitigate potential impacts to GRSG and are analyzed in the EIS:

Issue: Noise from construction or operations associated with the proposed NOA and SOA could impact active leks from project activities during lekking season.

EIS Mitigation Measure SSS-1: For the proposed NOA and SOA projects, noise surveys following protocols required under the GRSG Amendment would be conducted at the perimeter of active greater sage-grouse leks within 3.1 miles of mining activity. Lek distances to mining activity are presented in **Table 3.8-2** and **Table 3.8-7**. Noise monitoring would therefore be required at leks potentially affected by noise generated from the proposed project. Potential leks to be monitored for noise include Beck Pass 3, Beck Pass 4, Blue Jay Road, Buck Mountain East 2, Long Valley Well 2, and Ruby Valley South leks. The final list of leks selected for noise monitoring would be determined during development of the Noise Mitigation Plan. The measured ambient noise levels (L_{90}) at these leks are listed in **Table 3.8.3**. Noise generated by the project will be managed so that it does not exceed 10 dBA above the measured ambient levels during the period of 1 hour before sunrise until 3 hours after sunrise at the perimeter of each of the aforementioned leks during the active breeding season of March 1 through May 15. If exceedances occur, mitigation measures would be implemented to limit noise to less than 10 dBA above ambient. Barrick, in coordination with the BLM and NDOW, is actively developing a Bald Mountain Mine Noise Mitigation Plan that outlines the lek noise monitoring protocols and specific adaptive mitigation measures to be implemented in response to observations of noise conditions of 10 dBA above observed ambient noise levels at lek perimeters. The Plan will be approved by the BLM and put in place no later than 90 days following the signing of the Record of Decision for the project. Mitigation measures included in the final Bald Mountain Mine Noise Mitigation Plan may include but would not be limited to:

- Seasonal mining traffic restrictions or closures of roads within close proximity to active leks during the breeding season;
- Installation of noise limiting technology on mining and construction equipment to be used during the breeding season in close proximity to active leks;
- Seasonal operational restrictions of construction and mining activity that are determined to produce noise levels above 10 dBA above observed ambient noise levels at lek perimeters;
- Shielding of both exploration and blasting related drilling activity and equipment within close proximity of active leks on an as needed basis to be determined by monitoring; and

- Seasonal restriction of blasting activity in areas that could be determined to adversely impact breeding greater sage-grouse.

Effectiveness: By implementing mitigation measure **SSS-1**, Barrick would be able to monitor noise and ensure that mine-generated noise is limited to 10 dBA above observed ambient noise levels.

Issue: Mortality resulting from greater sage-grouse striking fencing could impact greater sage-grouse populations within the project area.

EIS Mitigation Measure SSS-2: For the proposed NOA and SOA projects, the installation of fencing located within greater sage-grouse PHMA, GHMA, and OHMA (based upon lek proximity and topography) should be minimized to the extent possible. In areas where the installation of fencing is unavoidable, in coordination with the BLM and NDOW, fencing would be modified or marked in a manner that results in increased visibility to greater sage-grouse. NDOW currently recommends using the NRCS Fence Collision Risk Tool to determine the need for fence marker placement.

Effectiveness: By implementing mitigation measure **SSS-2**, Barrick would be able to minimize mortalities of greater sage-grouse resulting from collisions with mine operations fencing.

Issue: Mortality or injury resulting from greater sage-grouse striking transmission line structures, and mortality or injury as a result of predation from transmission line (perching) structures could impact greater sage-grouse populations within the project area.

EIS Mitigation Measure SSS-3: Within greater sage-grouse PHMA, GHMA, and OHMA, proposed transmission lines would be constructed using monopole towers with perch deterrents to minimize predation and with line-strike diverters to minimize strike potential. Specific tower and strike diverter types would be determined on a case by case basis, in coordination with BLM and NDOW biologists.

Effectiveness: By implementing mitigation measure **SSS-3**, direct impacts associated with structure strikes and predation to greater sage-grouse would be reduced.

Appendix B

Detailed Conceptual Schedule for Reclamation, Closure, and Post-closure

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Appendix B1

Proposed Action - Conceptual Reclamation Schedule for the North Operations Area Project

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Appendix B1 Proposed Action - Conceptual Reclamation Schedule for the North Operations Area Project[1,2]

Component	Year																																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50 to 80
Open Pit Closure																																																		
Poker Flats Pit																																																		
Duke Pit																																																		
Redbird Pit																																																		
Casino Pit																																																		
Royale Pit																																																		
Bida Pit																																																		
Winrock Main, North, and South Pits																																																		
Top Pit Complex																																																		
South Duke Pit																																																		
Pit Safety Berm Reclamation																																																		
Earthworks																																																		
Seed																																																		
Rock Disposal Area Reclamation																																																		
LBM RDA #1 and #2																																																		
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Growth Media Application																																																		
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Appendix B1 Proposed Action - Conceptual Reclamation Schedule for the North Operations Area Project[1,2]

Component	Year																																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50 to 80
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Growth Media Application																																																		
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Growth Media Application																																																		
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Contour/Regrade																																																		
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Winrock North, West, East RDAs																																																		
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Appendix B1 Proposed Action - Conceptual Reclamation Schedule for the North Operations Area Project[1,2]

Component	Year																																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50 to 80
Heap Leach Facility Earthwork																																																		
Mooney North HLF																																																		
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Contour/Regrade																																																		
Growth Media Application																																																		
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Growth Media Application																																																		
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Contour/Regrade																																																		
Growth Media Application																																																		
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Winrock HLF																																																		
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Backfill/Regrade																																																		
Cover/Growth Media Application																																																		
Seed																																																		
Haul Roads, Access Roads, Ancillary Facilities (Non-structure related) Reclamation																																																		
Contour/Regrade																																																		
Growth Media Application																																																		
Seed																																																		
Structure Demolition and Reclamation																																																		
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Concrete Rubblizing																																																		
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Processing Facility Site Reclamation																																																		
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Growth Media Application																																																		
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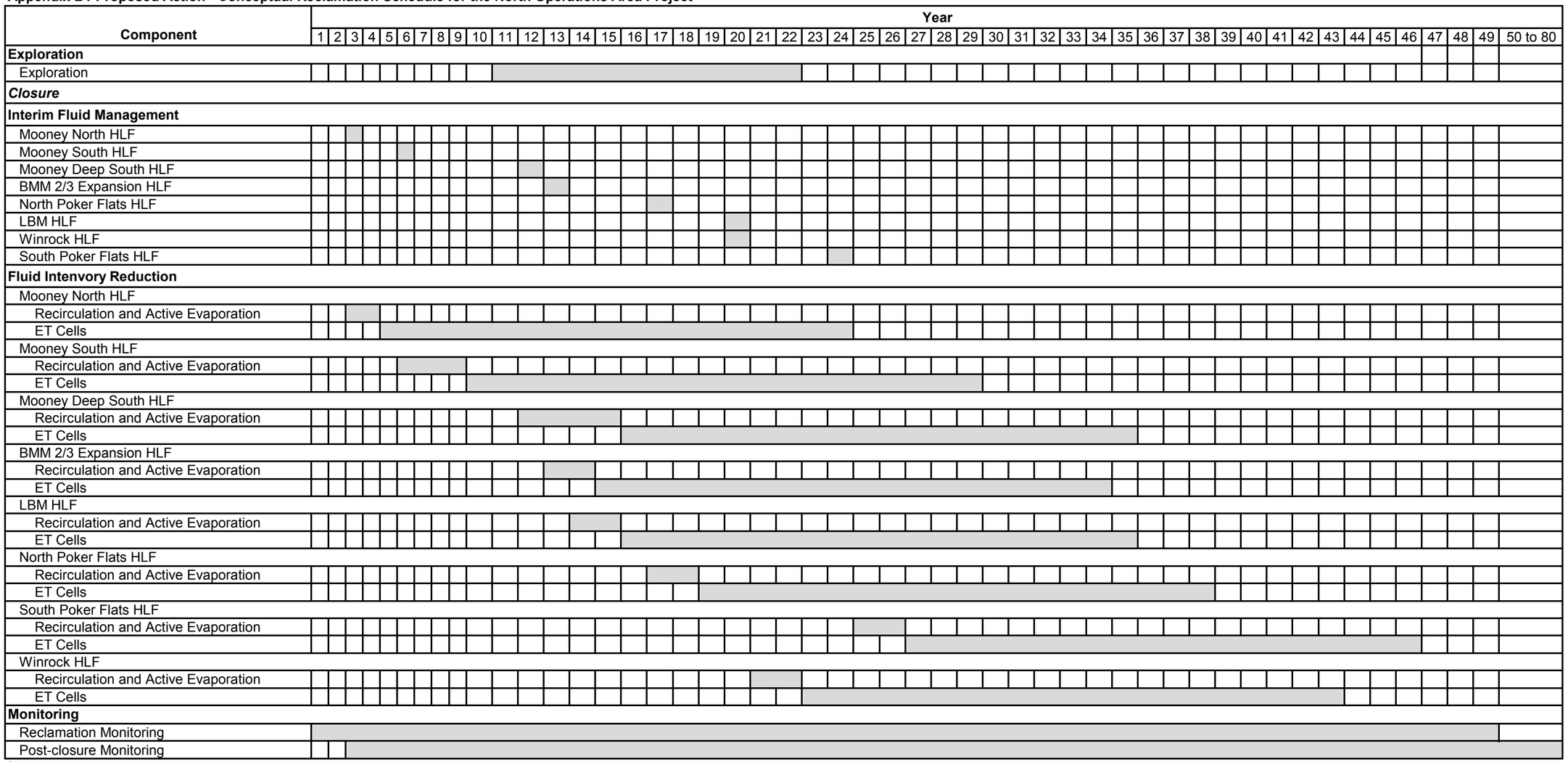
Appendix B1 Proposed Action - Conceptual Reclamation Schedule for the North Operations Area Project[1,2]



[1]This schedule is conceptual and subject to changes due to mining sequences that may affect the overall plan.

[2]The shaded areas indicate the potential timeframe when certain activities could occur, but do not imply an actual duration for this conceptual reclamation schedule.

Source: Barrick 2012a.

Appendix B2

Proposed Action - Conceptual Reclamation Schedule for the South Operations Area Project

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Appendix B2 Proposed Action - Conceptual Reclamation Schedule for the South Operations Area Project[1,2]

Component	Year																																																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50 to 80
Open Pit Closure																																																		
Gator Pit																																																		
Yankee Pit																																																		
Vantage Pit																																																		
Pit Safety Berm Reclamation																																																		
Earthworks																																																		
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Rock Disposal Area Reclamation																																																		
Gator North and South RDAs																																																		
Contour/Regrade																																																		
Growth Media Application																																																		
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Luxe RDA																																																		
Contour/Regrade																																																		
Growth Media Application																																																		
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Contour/Regrade																																																		
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Contour/Regrade																																																		
Growth Media Application																																																		
Seed																																																		
Process Ponds Reclamation																																																		
Backfill/Regrade																																																		
Cover/Growth Media Application																																																		
Seed																																																		
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Growth Media Application																																																		
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Structure Demolition and Reclamation																																																		
Structure Removal																																																		
Concrete Rubblizing																																																		
Cover/Growth Media Application																																																		
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Processing Facility Site Reclamation																																																		
Contour/Regrade																																																		
Growth Media Application																																																		
Seed																																																		

Appendix B2 Proposed Action - Conceptual Reclamation Schedule for the South Operations Area Project[1,2]

Component	Year																																																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50 to 80
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Exploration																																																				
Closure																																																				
Interim Fluid Management																																																				
Yankee HLF																																																				
Vantage HLF																																																				
Gator HLF																																																				
Fluid Intenvory Reduction																																																				
Yankee HLF																																																				
Recirculation and Active Evaporation																																																				
ET Cells																																																				
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Recirculation and Active Evaporation																																																				
ET Cells																																																				
Gator HLF																																																				
Recirculation and Active Evaporation																																																				
ET Cells																																																				
Monitoring																																																				
Reclamation Monitoring																																																				
Post-closure Monitoring																																																				

[1]This schedule is conceptual and subject to changes due to mining sequences that may affect the overall plan.

[2]The shaded areas indicate the potential timeframe when certain activities could occur, but do not imply an actual duration for this conceptual reclamation schedule.

Source: Barrick 2012a.

Appendix B3

North and South Operations Area Facilities Reconfiguration Alternative - Conceptual Reclamation Schedule for the North Operations Area Project

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Appendix B3 North and South Operations Area Facilities Reconfiguration Alternative - Conceptual Reclamation Schedule for the North Operations Area Project, including Actual Completed Reclamation[1,2,3]

		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051-2080
Component	**COMPLETED**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36 to 64**
Open Pit Closure																																					
Numbers Pit Complex																																					
Poker Flats Pit																																					
Redbird Pit																																					
Keno Pit																																					
Duke Pit																																					
Bida Pit																																					
Saga Pit																																					
LBM Pit																																					
Winrock Main, North, and South Pits																																					
Top Pit Complex																																					
Pit Safety Berm Reclamation																																					
Earthworks																																					
Seed																																					
Rock Disposal Area Reclamation																																					
Rat West RDA																																					
Contour/Regrade																																					
Growth Media Application																																					
Seed																																					
LBM RDA																																					
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Poker Flats RDA[2]																																					
Contour/Regrade																																					
Growth Media Application																																					
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North 1 RDA																																					
Contour/Regrade																																					
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North 4 RDA																																					
Contour/Regrade																																					
Growth Media Application																																					
Seed																																					
RBM North RDA																																					
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Growth Media Application																																					
Seed																																					
RBM South RDA																																					
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Contour/Regrade																																					
Growth Media Application																																					
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Duke RDA																																					
Contour/Regrade																																					

Appendix B3 North and South Operations Area Facilities Reconfiguration Alternative - Conceptual Reclamation Schedule for the North Operations Area Project, including Actual Completed Reclamation[1,2,3]

		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051-2080
Component	**COMPLETED**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36 to 64**
Growth Media Application																																					
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South Duke RDA 1																																					
Contour/Regrade																																					
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Contour/Regrade																																					
Growth Media Application																																					
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Contour/Regrade																																					
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Seed																																					
Winrock North, West, and East RDAs																																					
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Growth Media Application																																					
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South Water Canyon RDA																																					
Contour/Regrade																																					
Growth Media Application																																					
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East Sage RDA																																					
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Heap Leach Facility Earthwork																																					
Mooney North HLF																																					
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BMM 2/3 Expansion HLF																																					
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Process Ponds Reclamation																																					
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Support Facilities Reclamation																																					
Contour/Regrade																																					
Growth Media Application																																					
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Building Demolition and Reclamation																																					
Structure Removal																																					
Concrete Rubblizing																																					
Cover/Growth Media Application																																					
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Appendix B3 North and South Operations Area Facilities Reconfiguration Alternative - Conceptual Reclamation Schedule for the North Operations Area Project, including Actual Completed Reclamation[1,2,3]

		2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051-2080
Component	**COMPLETED**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36 to 64**
Plant Site Reclamation																																					
Contour/Regrade																																					
Growth Media Application																																					
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Well Abandonment																																					
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Closure																																					
Interim Fluid Management																																					
Mooney North HLF																																					
Mooney South HLF																																					
Mooney Deep South HLF																																					
BMM 2/3 Expansion HLF																																					
South Poker Flats HLF																																					
Fluid Inventory Reduction																																					
Mooney North HLF																																					
Recirculation and Active Evaporation																																					
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Recirculation and Active Evaporation																																					
ET Cells																																					
South Poker Flats HLF																																					
Recirculation and Active Evaporation																																					
ET Cells																																					
Monitoring																																					
Reclamation Monitoring																																					
Post-Closure Monitoring																																					

[1]This schedule is conceptual and subject to changes due to mining sequences that may affect the overall plan.
[2]The entirety of this conceptual reclamation schedule is based on reclamation activities for bonding purposes. The Poker Flats RDA Phase I reclamation, pursuant to the Area 6 Mule Deer Working Group Habitat Management Practices (Area 6 Plan) would be preformed simultaneously with reclamation activities for bonding purposes.
[3]The shaded areas indicate the potential timeframe when certain activities could occur, but do not imply an actual duration for this conceptual reclamation schedule.
Source: Barrick 2014b.

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Appendix B4

North and South Operations Area Facilities Reconfiguration Alternative - Conceptual Reclamation Schedule for the South Operations Area Project

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Appendix B4 North and South Operations Area Facilities Reconfiguration Alternative - Conceptual Reclamation Schedule for the South Operations Area Project[1,2]

Component	Year																																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39 to 68
Open Pit Reclamation																																							
Gator Pit																																							
Yankee Pit																																							
Vantage Pit																																							
Pit Safety Berm Reclamation																																							
Earthworks																																							
Seed																																							
Rock Disposal Area Reclamation																																							
Gator North and Gator South RDAs																																							
Contour/Regrade																																							
Growth Media Application																																							
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Luxe RDA																																							
Contour/Regrade																																							
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Yankee North RDA																																							
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Vantage RDA																																							
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Heap Leach Facility Earthwork																																							
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Support Facilities Reclamation																																							
Contour/Regrade																																							
Growth Media Application																																							
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Building Demolition and Reclamation																																							
Structure Removal																																							
Concrete Rubblizing																																							
Cover/Growth Media Application																																							
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Appendix B4 North and South Operations Area Facilities Reconfiguration Alternative - Conceptual Reclamation Schedule for the South Operations Area Project[1,2]

Component	Year																																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39 to 68
Haul Roads, Access Roads, Ancillary Facilities (Non-structure related) Reclamation																																								
Contour/Regrade																																								
Growth Media Application																																								
Seed																																								
Plant Site Reclamation																																								
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Recirculation and Active Evaporation																																								
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ET Cells																																								
Monitoring																																								
Reclamation Monitoring																																								
Post-Closure Monitoring																																								

1This schedule is conceptual and subject to changes due to mining sequences that may affect the overall plan.
2The shaded areas indicate the potential timeframe when certain activities could occur, but do not imply an actual duration for this conceptual reclamation schedule.
Source: Barrick 2014b.

Appendix B5

North and South Operations Area Facilities WRM Alternative – Conceptual Reclamation Schedule for the North Operations Area Project

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Appendix B5 North and South Operations Area Facilities WRM Alternative - Conceptual Reclamation Schedule for the North Operations Area Project[1,2]

Component	Year																																																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50 to 58
Open Pit Reclamation																																																		
Numbers Pit Complex																																																		
Poker Flats Pit																																																		
Redbird Pit																																																		
Duke Pit																																																		
Bida Pit																																																		
Saga Pit																																																		
Winrock Main, North, and South Pits																																																		
Top Pit Complex																																																		
Pit Safety Berm Reclamation																																																		
Earthworks																																																		
Seed																																																		
Rock Disposal Area Reclamation																																																		
Rat West RDA (Complete)																																																		
Contour/Regrade																																																		
Growth Media Application																																																		
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Poker Flats RDA[2]																																																		
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Contour/Regrade																																																		
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Growth Media Application																																																		
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Galaxy RDA																																																		
Contour/Regrade																																																		
Growth Media Application																																																		
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Horseshoe RDA (Complete)																																																		
Contour/Regrade																																																		
Growth Media Application																																																		
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Saga RDA																																																		
Contour/Regrade																																																		
Growth Media Application																																																		
Seed																																																		
Redbird RDA																																																		
Contour/Regrade																																																		

Appendix B5 North and South Operations Area Facilities WRM Alternative - Conceptual Reclamation Schedule for the North Operations Area Project[1,2]

Component	Year																																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50 to 58
Growth Media Application																																																		
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Duke RDA																																																		
Contour/Regrade																																																		
Growth Media Application																																																		
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South Duke RDA 1																																																		
Contour/Regrade																																																		
Growth Media Application																																																		
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Belmont RDA																																																		
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Belmont South RDA																																																		
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Growth Media Application																																																		
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Winrock North, West, and East RDAs																																																		
Contour/Regrade																																																		
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South Water Canyon RDA																																																		
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East Sage RDA																																																		
Contour/Regrade																																																		
Growth Media Application																																																		
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Sage Flat RDA																																																		
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Growth Media Application																																																		
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Heap Leach Facility Earthwork																																																		
Mooney North HLF																																																		
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Mooney South HLF																																																		
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Mooney Deep South HLF																																																		
Contour/Regrade																																																		
Growth Media Application																																																		
Seed																																																		
BMM 2/3 Expansion HLF																																																		

Appendix B5 North and South Operations Area Facilities WRM Alternative - Conceptual Reclamation Schedule for the North Operations Area Project[1,2]

Component	Year																																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50 to 58
Contour/Regrade																																																		
Growth Media Application																																																		
Seed																																																		
South Poker Flats HLF																																																		
Contour/Regrade																																																		
Growth Media Application																																																		
Seed																																																		
Process Ponds Reclamation																																																		
Backfill/Regrade																																																		
Cover/Growth Media Application																																																		
Seed																																																		
Support Facilities Reclamation																																																		
Contour/Regrade																																																		
Growth Media Application																																																		
Seed																																																		
Building Demolition and Reclamation																																																		
Structure Removal																																																		
Concrete Rubblizing																																																		
Cover/Growth Media Application																																																		
Seed																																																		
Plant Site Reclamation																																																		
Contour/Regrade																																																		
Growth Media Application																																																		
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Closure																																																		
Interim Fluid Management																																																		
Mooney North HLF																																																		
Mooney South HLF																																																		
Mooney Deep South HLF																																																		
BMM 2/3 Expansion HLF																																																		
South Poker Flats HLF																																																		
Fluid Inventory Reduction																																																		
Mooney North HLF																																																		
Recirculation and Active Evaporation																																																		
ET Cells																																																		
Mooney South HLF																																																		
Recirculation and Active Evaporation																																																		
ET Cells																																																		
Mooney Deep South HLF																																																		
Recirculation and Active Evaporation																																																		
ET Cells																																																		
BMM 2/3 Expansion HLF																																																		

Appendix B5 North and South Operations Area Facilities WRM Alternative - Conceptual Reclamation Schedule for the North Operations Area Project[1,2]

Component	Year																																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50 to 58
Recirculation and Active Evaporation																																																	
ET Cells																																																	
South Poker Flats HLF																																																	
Recirculation and Active Evaporation																																																	
ET Cells																																																	
Monitoring																																																	
Reclamation Monitoring																																																	
Post-Closure Monitoring																																																	

Appendix B6

North and South Operations Area Facilities WRM Alternative – Conceptual Reclamation Schedule for the South Operations Area Project

Same as the Reconfigurations Alternative, see Appendix B4 North and South Operations Area Facilities Reconfiguration Alternative - Conceptual Reclamation Schedule for the South Operations Area Project

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Appendix C

Water Quality

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Table C-1

Seep and Spring Inventory

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Table C-1 Seep and Spring Inventory

Basin Number	Hydrographic Basin	Spring Name	Elevation (Feet-AMSL)	Monitor Site	Data Source	Monitoring Period	Flow Range	Remarks	Acres Wetland (JBR 2011)
47	Huntington Valley	Mill Springs (Upper)	7,283	Yes	Tetra Tech 2012	03/2004 - 10/2012	ND - 1.5	No surface flow observed in 2012. Location JBR No. 3. in JBR 2011.	0.00
47	Huntington Valley	JBR No. 12	-	No	JBR 2011	-	-	In channel seep, surface water 0.25 inch deep, water table at 9 inches below ground surface (JBR 2011).	0.46
47	Huntington Valley	JBR No. 11	-	No	JBR 2011	-	-	In channel seep, surface water 0.25 inch deep, water table at 8 inches below ground surface (JBR 2011).	0.52
47	Huntington Valley	JBR No. 10	-	No	JBR 2011	-	-	In channel seep, saturated to 4 inches below ground surface (JBR 2011).	0.99
47	Huntington Valley	JBR No. 9	-	No	JBR 2011	-	-	In channel seep with water table 7 inches below ground (JBR 2011).	0.63
47	Huntington Valley	Mill Springs (Lower)	7,046	Yes	Tetra Tech 2012	11/2005 - 10/2012	ND - 65.9	Site often has insufficient flow to measure, and is periodically dry. Location JBR No. 6 in JBR 2011.	2.11
47	Huntington Valley	Mill Spring	7425	No	Geomega 2015; JBR 2011	-	-	Shown as Mill Spring on 7.5 min. USGS topo. Location JBR No. 13 in JBR 2011. Non-functional piped trough. Flowing water with saturation at the ground surface. Note: text indicated 1.98-acre which does not match with the 0 acre in Table 5 assumed to be a typo (JBR 2011).	1.98

Table C-1 Seep and Spring Inventory

Basin Number	Hydrographic Basin	Spring Name	Elevation (Feet-AMSL)	Monitor Site	Data Source	Monitoring Period	Flow Range	Remarks	Acres Wetland (JBR 2011)
154	Newark Valley	Water Canyon Spring	7,460	No	Geomega 2015, 2014b		-		
154	Newark Valley	JBR No. 14	7252	No	Geomega 2015; JBR 2011	03/2006 - 10/2012	ND	In channel seep, surface water 0.25 inch deep, saturated from surface to 6 inches below ground surface. Stockpond with cattails noted downstream of seep (JBR 2011).	13.68
154	Newark Valley	South Water Canyon Seep	7,275	Yes	Tetra Tech 2012	11/2005 - 10/2012	ND - 228	Typically flowing. Location JBR No. 4 in JBR 2011.	19.20
176	Ruby Valley	JBR No. 7	-	No	JBR 2011	-	-	Also known as East Sage Spring. Surface water ponded 0.5 inch captured by berms and unsaturated 4 inches below ground surface (JBR 2011).	0.00
176	Ruby Valley	Cherry Springs	7,515	Yes	Tetra Tech 2012	11/2005 - 10/2012	ND - 12.3	Well located at spring site. Location JBR No. 5 in JBR 2011. Stock pond collects runoff from drainage. Periodically dry.	0.00
47	Huntington Valley	Cracker Johnson Spring No. 2	6,782	Yes	Tetra Tech 2012	6/2006 - 10/2012	ND - 1.0	Small pool, periodically dry, flow estimated and not measured.	
47	Huntington Valley	Cracker Johnson Spring No. 1	6,884	Yes	Tetra Tech 2012	6/2006 - 10/2012	ND - 1.0	Large pool (perennial), flow estimated and not measured.	
47	Huntington Valley	JBR No. 1	-	No	JBR 2011	-	-		

Table C-1 Seep and Spring Inventory

Basin Number	Hydrographic Basin	Spring Name	Elevation (Feet-AMSL)	Monitor Site	Data Source	Monitoring Period	Flow Range	Remarks	Acres Wetland (JBR 2011)
47	Huntington Valley	JBR No. 15	-	No	JBR 2011	-	-	Hillside seep with flowing water. Unsaturated 5 inches below ground surface (JBR 2011).	1.28
175	Long Valley	Tognini Springs	7,049	Yes	Tetra Tech 2012	11/2005 - 10/2012	ND - 7.2	Consistent flow since 2007.	
175	Long Valley	Twin Springs	7,548	Yes	Tetra Tech 2012	10/2009 - 10/2012	ND	Dry to small flows (insufficient to measure).	
175	Long Valley	Willow Springs (NOA)	7,229	No	BLM 2009; Geomega 2015, 2014b	-	-		
175	Long Valley	Twin Trough	6,946	Yes	Tetra Tech 2012	06/2006 - 10/2012	ND - 3.4	Always flowing until October 2012 (dry).	
175	Long Valley	Mud Springs	7,062	Yes	Tetra Tech 2012	11/2005 - 10/2012	0.4 - 5.9	Always some flow.	
175	Long Valley	Woodchuck Springs	7,172	Yes	Tetra Tech 2012	11/2005 - 10/2012	ND - 6.4	Consistent flow from 11/2005 to 05/2012; dry in October 2012.	
175	Long Valley	Little Willow Springs	7,891	Yes	Tetra Tech 2012	11/2009 - 10/2012	ND - 1.4	Pool, flow often not measurable.	
175	Long Valley	Moss Spring	7,925	Yes	Tetra Tech 2012	09/2006 - 10/2012	ND	Shallow pond, flow not measurable.	
175	Long Valley	Willow Springs (SOA)	7,059	Yes	Tetra Tech 2012	11/2005 - 10/2012	ND - 5.0	Typically flowing.	
175	Long Valley	Cupper	8,599	No	BLM 2009; Tetra Tech 2007)		-		
154	Newark Valley	Bourne-Tunnel Springs	7,193	Yes	Tetra Tech 2012	05/2000 - 10/2012	ND - 8.0	Dry during both sampling events in 2012.	

Table C-1 Seep and Spring Inventory

Basin Number	Hydrographic Basin	Spring Name	Elevation (Feet-AMSL)	Monitor Site	Data Source	Monitoring Period	Flow Range	Remarks	Acres Wetland (JBR 2011)
154	Newark Valley	Warm Springs	5,922	Yes	Tetra Tech 2012	03/2006 - 10/2012	ND	Large perennial pond with fish (approximately 7 acres). Flow not measurable.	
154	Newark Valley	Minoletti Springs	5,870	Yes	Tetra Tech 2012	03/2006 - 10/2012	ND	Large pond (perennial), source flow cannot be measured.	
154	Newark Valley	Minoletti Springs	5,873	No	NAPP Imagery			Large spring apparent on aerial photos.	
154	Newark Valley	Goicoechea Springs	5,842	Yes	Tetra Tech 2012	03/2006 - 10/2012	ND - 898.6	Large pond (perennial), source flow is difficult to determine.	
154	Newark Valley	Spring No. 1	5,866	Yes	Tetra Tech 2012	11/2005 - 10/2012	ND - 229	Spring cheek channel (perennial) overgrown and difficult to measure.	
154	Newark Valley	Unnamed Spring	5,863	No	BLM 2009	-	-		
154	Newark Valley	Spring No. 2	5,864	Yes	Tetra Tech 2012	11/2005 - 10/2012	ND - 120.7	Spring cheek channel (perennial) with high velocity flows.	
154	Newark Valley	Unnamed Spring	-	No	NAPP Imagery	-	-	Large spring apparent on aerial photos.	
154	Newark Valley	Unnamed Spring	-	No	NAPP Imagery	-	-	Large spring apparent on aerial photos.	
154	Newark Valley	Cottonwood Springs	7,793	Yes	Tetra Tech 2012	05/2007 - 10/2012	ND - 15.3	Multiple seeps with immeasurable flow (perennial).	
154	Newark Valley	Moore Springs No. 1	7,171	Yes	Tetra Tech 2012	11/2005 - 10/2012	ND - 5.8	Wetted channel (perennial).	
154	Newark Valley	Moore Springs No. 2	7,348	Yes	Tetra Tech 2012	11/2005 - 10/2012	1.8 - 2.6	Pond fed by discharge pipe with consistent flow (perennial).	

Table C-1 Seep and Spring Inventory

Basin Number	Hydrographic Basin	Spring Name	Elevation (Feet-AMSL)	Monitor Site	Data Source	Monitoring Period	Flow Range	Remarks	Acres Wetland (JBR 2011)
154	Newark Valley	Moore Springs No. 3	7,455	Yes	Tetra Tech 2012	11/2005 - 10/2012	ND - 1.5	Perennial wet area, discharge rate can only be estimated during low flow conditions.	
154	Newark Valley	Spring No. 5	5,850	Yes	Tetra Tech 2012	11/2005 - 10/2012	ND - 1.0	Consistent flow (perennial). Flow is not measurable.	
154	Newark Valley	Spring No. 3	6,483	Yes	Tetra Tech 2012	11/2005 - 10/2012	10 - 579	Spring cheek channel with consistent perennial flow.	
154	Newark Valley	Spring No. 4 (Upper)	6,525	Yes	Tetra Tech 2012	11/2005 - 10/2012	0.7 - 236	Spring cheek channel with consistent perennial flow.	
154	Newark Valley	Rock Springs (Upper)	7,629	Yes	Tetra Tech 2012	11/2005 - 10/2012	ND - 1.0	Perennial flow, flow is dispersed and generally not measurable.	
154	Newark Valley	Beck Springs	6,695	Yes	Tetra Tech 2012	11/2005 - 10/2012	ND - 10.8	Flow supports pool (perennial). Pool often stagnant by fall.	

Source: Geomega 2015, 2014b, 2011a; JBR 2011a; Tetra Tech 2012.

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Table C-2

Water Rights Inventory

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Table C-2 Water Rights Inventory

MAP ID	Basin Number	Basin Name	Application	Change App	Certificate	Priority Date	Status	Source	Township	Range	Section	Diversion Rate (cfs)	Annual Duty (acre-feet per year)	Type of Use	Owner of Record
HV-155	47	Huntington Valley	48526		12991	5/14/1981	Certificate	UG	24N	56E	11	0.50	230.47	Mining/ Milling	Barrick Gold U.S. Inc.
HV-158	47	Huntington Valley	52909		0	2/7/1989	Permit	UG	24N	56E	14	1.95	296.77	Mining/ Milling	Barrick Gold U.S. Inc.
HV-168	47	Huntington Valley	78940		0	2/7/1989	Permit	UG	24N	56E	24	0.05	32.22	Mining/ Milling	Barrick Gold U.S. Inc. (Bald Mountain Mine)
LV-008	175	Long Valley	72369	69735	0	4/19/1985	Permit	UG	24N	58E	29	1.00	723.97	Mining/ Milling	Barrick Gold U.S. Inc.
LV-009	175	Long Valley	70239	56883	0	10/29/1991	Permit	UG	24N	58E	29	1.00	723.97	Mining/ Milling	Barrick Gold U.S. Inc.
LV-010	175	Long Valley	64061	56763	0	9/23/1991	Permit	UG	24N	58E	29	2.00	1448.52	Mining/ Milling	Barrick Gold U.S. Inc.
RV-601	176	Ruby Valley	56961		0	11/26/1991	Permit	UG	24N	58E	9	1.99	641.52	Mining/ Milling	Barrick Gold U.S. Inc.
RV-602	176	Ruby Valley	54243		0	12/18/1989	Permit	UG	24N	58E	16	0.83	536.29	Mining/ Milling	Barrick Gold U.S. Inc.
RV-605	176	Ruby Valley	84175T	56961	0	11/26/1991	Permit	UG	24N	58E	29	1.12	807.00	Mining/ Milling	Barrick Gold U.S. Inc.
HV-160	47	Huntington Valley	12937		3860	5/31/1949	Certificate	SPR	24N	57E	17	0.02	9.68	Stock	Barrick Gold U.S. Inc.
HV-164	47	Huntington Valley	R09310		0	4/17/1926	Reserved	SPR	24N	57E	17	0.00	0.00	Stock	BLM
HV-165	47	Huntington Valley	V01560		0		Vested	SPR	24N	57E	17	0.00	0.00	Stock	Moore, William A.

Table C-2 Water Rights Inventory

MAP ID	Basin Number	Basin Name	Application	Change App	Certificate	Priority Date	Status	Source	Township	Range	Section	Diversion Rate (cfs)	Annual Duty (acre-feet per year)	Type of Use	Owner of Record
HV-166	47	Huntington Valley	12936		3859	5/31/1949	Certificate	SPR	24N	57E	17	0.02	9.67	Stock	Barrick Gold U.S. Inc.
NV-001	154	Long Valley	12940		3861	5/31/1949	Certificate	SPR	24N	57E	21	0.02	9.79	Stock	Barrick Gold U.S. Inc.
NV-002	154	Newark Valley	5325		990	11/27/2018	Certificate	SPR	24N	57E	27	0.03	11.20	Stock	Barrick Gold U.S. Inc.
RV-603	176	Ruby Valley	83509T	64965	0	3/12/1999	Permit	UG	24N	58E	17	0.01	5.60	Stock	Barrick Gold Us Inc.
LV-023	175	Long Valley	55496	35965	0	10/3/1978	Permit	UG	22N	57E	35	1.50	1086.39	Mining/ Milling	Barrick Gold U.S. Inc.
LV-034	175	Long Valley	56035	52293	0	3/21/1991	Permit	UG	21N	57E	24	1.00	169.40	Mining/ Milling	Barrick Gold U.S. Inc.
LV-035	175	Long Valley	56034		0	3/21/1991	Permit	UG	21N	57E	24	1.00	304.13	Mining/ Milling	Barrick Gold U.S. Inc.
LV-036	175	Long Valley	56036	52294	0	3/21/1991	Permit	UG	21N	57E	24	1.00	169.40	Mining/ Milling	Barrick Gold U.S. Inc.
HV-149	47	Huntington Valley	62945		0	3/26/1997	Permit	UG	25N	55E	26	4.00	1680.00	Irrigation	Barrick Gold U.S. Inc.
HV-152	47	Huntington Valley	62946		0	3/26/1997	Permit	UG	25N	55E	35	2.00	600.00	Irrigation	Barrick Gold U.S. Inc.
LV-014	175	Long Valley	35797		11603	8/23/1978	Certificate	SPR	23N	58E	25	0.20	30.08	Irrigation	Barrick Gold U.S. Inc.
LV-016	175	Long Valley	62956		0	3/26/1997	Permit	UG	23N	58E	36	2.00	480.00	Irrigation	Barrick Gold U.S. Inc.
NV-007	154	Newark Valley	V01255		0		Vested	SPR	23N	55E	14	0.00	0.00	Irrigation	Barrick Gold U.S. Inc.

Table C-2 Water Rights Inventory

MAP ID	Basin Number	Basin Name	Application	Change App	Certificate	Priority Date	Status	Source	Township	Range	Section	Diversion Rate (cfs)	Annual Duty (acre-feet per year)	Type of Use	Owner of Record
NV-008	154	Newark Valley	80090		0	3/26/1997	Permit	UG	23N	55E	24	1.56	0.00	Irrigation	Barrick Gold U.S. Inc.
NV-009	154	Newark Valley	80089	62947	0	3/26/1997	Permit	UG	23N	55E	24	0.67	480.00	Irrigation	Barrick Gold U.S. Inc.
NV-010	154	Newark Valley	81962	23508	0	4/23/1963	Permit	UG	23N	55E	24	2.19	520.00	Irrigation	Barrick Gold U.S. Inc.
NV-011	154	Newark Valley	80525	62947	0	3/26/1997	Permit	UG	23N	55E	24	0.50	359.10	Irrigation	Barrick Gold U.S. Inc.
NV-012	154	Newark Valley	80528	62955	0	3/26/1997	Permit	UG	23N	55E	24	0.87	36.90	Irrigation	Barrick Gold U.S. Inc.
NV-013	154	Newark Valley	80024		0	3/26/1997	Permit	UG	23N	56E	19	1.50	0.00	Irrigation	Barrick Gold U.S. Inc.
NV-014	154	Newark Valley	80022	62947	0	3/26/1997	Permit	UG	23N	56E	19	0.73	520.00	Irrigation	Barrick Gold U.S. Inc.
NV-015	154	Newark Valley	80527	62955	0	3/26/1997	Permit	UG	23N	55E	24	0.25	104.28	Irrigation	Barrick Gold U.S. Inc.
NV-016	154	Newark Valley	80526	62954	0	3/26/1997	Permit	UG	23N	55E	24	1.24	132.12	Irrigation	Barrick Gold U.S. Inc.
NV-018	154	Newark Valley	80025		0	3/26/1997	Permit	UG	23N	56E	30	1.50	0.00	Irrigation	Barrick Gold U.S. Inc.
NV-019	154	Newark Valley	80023	62947	0	3/26/1997	Permit	UG	23N	56E	30	0.73	520.00	Irrigation	Barrick Gold U.S. Inc.
NV-020	154	Newark Valley	V01077		0		Decreed	SPR	23N	55E	26	5.40	5559.80	Irrigation	Barrick Gold U.S. Inc.
NV-021	154	Newark Valley	62947		0	3/26/1997	Permit	UG	23N	55E	26	1.68	1200.90	Irrigation	Barrick Gold U.S. Inc.

Table C-2 Water Rights Inventory

MAP ID	Basin Number	Basin Name	Application	Change App	Certificate	Priority Date	Status	Source	Township	Range	Section	Diversion Rate (cfs)	Annual Duty (acre-feet per year)	Type of Use	Owner of Record
NV-022	154	Newark Valley	62951		0	3/26/1997	Permit	UG	23N	56E	35	6.00	2400.00	Irrigation	Barrick Gold U.S. Inc.
NV-024	154	Newark Valley	62948		0	3/26/1997	Permit	UG	23N	55E	35	6.00	2640.00	Irrigation	Barrick Gold U.S. Inc.
NV-025	154	Newark Valley	34456		11622	10/27/1977	Certificate	SPR	23N	56E	36	14.80	6509.15	Irrigation	Barrick Gold U.S. Inc.
NV-026	154	Newark Valley	62952		0	3/26/1997	Permit	UG	22N	56E	1	6.00	2640.00	Irrigation	Barrick Gold U.S. Inc.
NV-027	154	Newark Valley	62949		0	3/26/1997	Permit	UG	22N	55E	2	3.00	1560.00	Irrigation	Barrick Gold U.S. Inc.
NV-028	154	Newark Valley	34455		11594	10/27/1977	Certificate	SPR	22N	55E	2	7.10	4457.20	Irrigation	Barrick Gold U.S. Inc.
NV-029	154	Newark Valley	34457		11595	10/27/1977	Certificate	SPR	22N	55E	11	5.80	4199.00	Irrigation	Barrick Gold U.S. Inc.
NV-031	154	Newark Valley	62950		0	3/26/1997	Permit	UG	22N	55E	11	4.00	2896.00	Irrigation	Barrick Gold U.S. Inc.
NV-032	154	Newark Valley	V01453		0		Vested	SPR	22N	55E	11	0.00	0.00	Irrigation	Barrick Gold U.S. Inc.
NV-033	154	Newark Valley	47735	34458	11601	10/27/1977	Certificate	SPR	22N	55E	11	5.60	4054.20	Irrigation	Barrick Gold U.S. Inc.
NV-035	154	Newark Valley	62954		0	3/26/1997	Permit	UG	22N	56E	15	0.08	54.00	Irrigation	Barrick Gold U.S. Inc.
NV-036	154	Newark Valley	34454		11621	10/27/1977	Certificate	SPR	22N	56E	16	0.18	72.00	Irrigation	Barrick Gold U.S. Inc.
NV-037	154	Newark Valley	34459		11596	10/27/1977	Certificate	SPR	22N	55E	14	0.20	144.79	Irrigation	Barrick Gold U.S. Inc.

Table C-2 Water Rights Inventory

MAP ID	Basin Number	Basin Name	Application	Change App	Certificate	Priority Date	Status	Source	Township	Range	Section	Diversion Rate (cfs)	Annual Duty (acre-feet per year)	Type of Use	Owner of Record
NV-039	154	Newark Valley	13611		4324	1/25/1951	Certificate	SPR	22N	55E	14	1.00	195.00	Irrigation	Barrick Gold U.S. Inc.
NV-041	154	Newark Valley	35796		11625	8/23/1978	Certificate	SPR	22N	56E	21	0.15	13.20	Irrigation	Barrick Gold U.S. Inc.
NV-042	154	Newark Valley	62953		0	3/26/1997	Permit	UG	22N	56E	21	0.04	9.90	Irrigation	Barrick Gold U.S. Inc.
NV-044	154	Newark Valley	V01561		0		Vested	SPR	22N	55E	34	0.00	0.00	Irrigation	Hooper, R.W.
NV-048	154	Newark Valley	35798		11626	8/23/1978	Certificate	SPR	21N	56E	5	0.20	59.20	Irrigation	Barrick Gold U.S. Inc.
NV-049	154	Newark Valley	18759		6570	4/27/1960	Certificate	SPR	21N	56E	10	0.42	303.54	Irrigation	Barrick Gold U.S. Inc.
NV-050	154	Newark Valley	V02453		0		Vested	SPR	21N	56E	9	2.00	400.00	Irrigation	Barrick Gold U.S. Inc.
NV-052	154	Newark Valley	62955		0	3/26/1997	Permit	UG	21N	56E	9	1.05	326.70	Irrigation	Barrick Gold U.S. Inc.
NV-053	154	Newark Valley	V01157		0		Vested	SPR	21N	55E	9	0.00	0.00	Irrigation	Smith, Wm. H.
NV-054	154	Newark Valley	V02454		0		Vested	SPR	21N	56E	22	2.00	400.00	Irrigation	Barrick Gold U.S. Inc.
NV-057	154	Newark Valley	V02886		0		Vested	SPR	21N	55E	27	0.84	150.00	Irrigation	Goicoechea, Peter J And Gladys P
NV-060	154	Newark Valley	V02885		0		Vested	SPR	21N	55E	33	0.76	225.00	Irrigation	Held, Chloe Trust, U/W Paul R. Held

Table C-2 Water Rights Inventory

MAP ID	Basin Number	Basin Name	Application	Change App	Certificate	Priority Date	Status	Source	Township	Range	Section	Diversion Rate (cfs)	Annual Duty (acre-feet per year)	Type of Use	Owner of Record
NV-061	154	Newark Valley	7226		1509	10/6/2024	Certificate	SPR	21N	55E	34	0.29	120.20	Irrigation	Goicoechea, Peter J And Gladys P
NV-062	154	Newark Valley	7227		1642	10/6/2024	Certificate	SPR	20N	55E	3	0.37	181.00	Irrigation	Goicoechea, Peter J And Gladys P
NV-066	154	Newark Valley	V01751		0		Vested	SPR	20N	55E	8	0.00	0.00	Irrigation	Chloe Held Trust
NV-017	154	Newark Valley	48723		13038	1/16/1985	Certificate	UG	23N	55E	23	0.01	8.01	Quasi-Municipal	Barrick Gold U.S. Inc.
HV-144	47	Huntington Valley	R09395		0	7/25/2003	Reserved	SPR	25N	55E	20	0.00	0.00	Stock	BLM
HV-145	47	Huntington Valley	1879		69	11/14/1910	Certificate	SPR	25N	55E	20	0.01	2.75	Stock	Paris Family Trust
HV-146	47	Huntington Valley	12938		3838	5/31/1949	Certificate	SPR	25N	57E	29	0.02	9.68	Stock	Barrick Gold U.S. Inc.
HV-148	47	Huntington Valley	8964		2962	6/20/1929	Certificate	SPR	25N	55E	25	0.03	17.92	Stock	Brown, Arthur H.
HV-150	47	Huntington Valley	12939		3930	5/31/1949	Certificate	SPR	25N	57E	32	0.02	9.68	Stock	Barrick Gold U.S. Inc.
HV-151	47	Huntington Valley	9311		2963	8/7/1930	Certificate	SPR	25N	55E	35	0.03	17.92	Stock	Browne, Arthur D.
HV-153	47	Huntington Valley	8859		2958	4/6/1929	Certificate	SPR	24N	55E	10	0.03	17.92	Stock	Brown, Arthur H.
HV-157	47	Huntington Valley	8970		2966	6/26/1929	Certificate	SPR	24N	55E	17	0.03	17.92	Stock	Brown, Arthur H.

Table C-2 Water Rights Inventory

MAP ID	Basin Number	Basin Name	Application	Change App	Certificate	Priority Date	Status	Source	Township	Range	Section	Diversion Rate (cfs)	Annual Duty (acre-feet per year)	Type of Use	Owner of Record
HV-159	47	Huntington Valley	8969		2965	6/26/1929	Certificate	SPR	24N	55E	15	0.03	17.92	Stock	Brown, Arthur H.
HV-161	47	Huntington Valley	46033		14502	9/13/1993	Certificate	SPR	24N	55E	16	0.01	7.96	Stock	Barrick Gold U.S. Inc.
HV-162	47	Huntington Valley	46034		14503	9/13/1993	Certificate	SPR	24N	55E	16	0.01	9.70	Stock	Barrick Gold U.S. Inc.
HV-163	47	Huntington Valley	46035		14504	9/13/1993	Certificate	SPR	24N	55E	16	0.01	9.70	Stock	Barrick Gold U.S. Inc.
HV-167	47	Huntington Valley	46036		14505	9/13/1993	Certificate	SPR	24N	55E	16	0.02	11.29	Stock	Barrick Gold U.S. Inc.
HV-169	47	Huntington Valley	1820		51	9/14/1910	Certificate	SPR	24N	55E	21	0.01	3.55	Stock	Paris Family Trust
HV-170	47	Huntington Valley	8971		2967	6/26/1929	Certificate	SPR	24N	55E	21	0.03	17.92	Stock	Brown, Arthur H.
HV-172	47	Huntington Valley	1824		55	9/14/1910	Certificate	SPR	24N	55E	20	0.01	3.55	Stock	Paris Family Trust
HV-173	47	Huntington Valley	46037		14506	9/13/1993	Certificate	SPR	24N	55E	27	0.01	6.44	Stock	Barrick Gold U.S. Inc.
HV-174	47	Huntington Valley	46038		14507	9/13/1993	Certificate	SPR	24N	55E	27	0.01	6.72	Stock	Barrick Gold U.S. Inc.
HV-176	47	Huntington Valley	46040		14509	9/13/1993	Certificate	SPR	24N	55E	33	0.02	7.84	Stock	Barrick Gold U.S. Inc.
HV-177	47	Huntington Valley	46039		14508	9/13/1993	Certificate	SPR	24N	55E	33	0.01	7.84	Stock	Barrick Gold U.S. Inc.
HV-178	47	Huntington Valley	1821		52	9/14/1910	Certificate	SPR	24N	55E	33	0.01	3.55	Stock	Paris Family Trust

Table C-2 Water Rights Inventory

MAP ID	Basin Number	Basin Name	Application	Change App	Certificate	Priority Date	Status	Source	Township	Range	Section	Diversion Rate (cfs)	Annual Duty (acre-feet per year)	Type of Use	Owner of Record
LV-006	175	Huntington Valley	11638		3507	7/22/1946	Certificate	SPR	24N	58E	22	0.00	1.32	Stock	Rosenlund, Raymond G.
LV-007	175	Long Valley	5529		646	6/7/2019	Certificate	SPR	24N	58E	22	0.01	4.33	Stock	Rosenlund, Raymond G.
LV-011	175	Long Valley	3030		384	7/8/2014	Certificate	SPR	24N	58E	32	0.01	7.24	Stock	Goichechea, Julian
LV-018	175	Long Valley	9430		2919	3/18/1931	Certificate	UG	22N	58E	21	0.03	22.40	Stock	Barrick Gold U.S. Inc.
LV-020	175	Long Valley	5327		992	11/27/2018	Certificate	SPR	22N	57E	29	0.03	14.58	Stock	Barrick Gold U.S. Inc.
LV-021	175	Long Valley	43695		11212	5/8/1981	Certificate	UG	22N	58E	34	0.03	22.43	Stock	Barrick Gold U.S. Inc.
LV-022	175	Long Valley	5324		989	11/27/2018	Certificate	SPR	22N	57E	32	0.03	14.58	Stock	Barrick Gold U.S. Inc.
LV-024	175	Long Valley	2339		123	2/15/2012	Certificate	SPR	22N	57E	32	0.03	18.11	Stock	Barrick Gold U.S. Inc.
LV-025	175	Long Valley	5326		991	11/27/2018	Certificate	SPR	22N	57E	33	0.03	14.58	Stock	Barrick Gold U.S. Inc.
LV-026	175	Long Valley	5323		988	11/27/2018	Certificate	SPR	21N	57E	5	0.03	14.58	Stock	Barrick Gold U.S. Inc.
LV-027	175	Long Valley	2338		122	2/15/2012	Certificate	SPR	21N	57E	6	0.03	10.04	Stock	Barrick Gold U.S. Inc.
LV-028	175	Long Valley	43696		11213	5/8/1981	Certificate	UG	21N	59E	5	0.03	22.43	Stock	Barrick Gold U.S. Inc.
LV-029	175	Long Valley	2340		124	2/15/2012	Certificate	SPR	21N	56E	1	0.03	9.70	Stock	Barrick Gold U.S. Inc.

Table C-2 Water Rights Inventory

MAP ID	Basin Number	Basin Name	Application	Change App	Certificate	Priority Date	Status	Source	Township	Range	Section	Diversion Rate (cfs)	Annual Duty (acre-feet per year)	Type of Use	Owner of Record
LV-030	175	Long Valley	2337		121	2/15/2012	Certificate	SPR	21N	57E	8	0.03	9.76	Stock	Barrick Gold U.S. Inc.
LV-031	175	Long Valley	9350		4242	10/12/1930	Certificate	UG	21N	58E	10	0.03	22.40	Stock	Barrick Gold U.S. Inc.
LV-032	175	Long Valley	7019		1704	12/12/2023	Certificate	UG	21N	58E	7	0.03	22.40	Stock	Barrick Gold U.S. Inc.
LV-033	175	Long Valley	7927		1705	11/10/2026	Certificate	UG	21N	59E	18	0.05	23.94	Stock	Barrick Gold U.S. Inc.
LV-037	175	Long Valley	7928		1706	11/10/2026	Certificate	UG	21N	58E	35	0.03	15.96	Stock	Barrick Gold U.S. Inc.
LV-038	175	Long Valley	14618		4452	11/12/1952	Certificate	UG	21N	59E	31	0.03	3.81	Stock	Barrick Gold U.S. Inc.
LV-039	175	Long Valley	9368		3904	11/5/1930	Certificate	UG	21N	58E	32	0.03	8.44	Stock	Barrick Gold U.S. Inc.
LV-040	175	Long Valley	9369		2579	11/6/1930	Certificate	UG	20N	58E	8	0.03	22.40	Stock	Barrick Gold U.S. Inc.
LV-041	175	Long Valley	9386		2578	11/25/1930	Certificate	UG	20N	58E	14	0.03	22.40	Stock	Barrick Gold U.S. Inc.
NV-003	154	Newark Valley	5322		987	11/27/2018	Certificate	OGW	24N	57E	31	0.03	6.94	Stock	Barrick Gold U.S. Inc.
NV-004	154	Newark Valley	6964		1454	8/30/2023	Certificate	SPR	23N	55E	3	0.03	8.96	Stock	Barrick Gold U.S. Inc.
NV-005	154	Newark Valley	64409		16107	8/21/1998	Certificate	UG	23N	56E	11	0.02	11.20	Stock	Barrick Gold U.S. Inc.
NV-023	154	Newark Valley	3522		1468	7/23/2015	Certificate	SPR	23N	55E	33	0.03	13.56	Stock	Barrick Gold U.S. Inc.

Table C-2 Water Rights Inventory

MAP ID	Basin Number	Basin Name	Application	Change App	Certificate	Priority Date	Status	Source	Township	Range	Section	Diversion Rate (cfs)	Annual Duty (acre-feet per year)	Type of Use	Owner of Record
NV-030	154	Newark Valley	2341		125	2/15/2012	Certificate	SPR	22N	55E	9	0.03	10.04	Stock	Barrick Gold U.S. Inc.
NV-034	154	Newark Valley	V01242		0		Vested	SPR	22N	55E	11	0.01	0.00	Stock	Barrick Gold U.S. Inc.
NV-038	154	Newark Valley	2520		294	10/5/2012	Certificate	SPR	22N	55E	15	0.03	14.56	Stock	Barrick Gold U.S. Inc.
NV-040	154	Newark Valley	16863		4809	2/16/1956	Certificate	UG	22N	55E	15	0.02	11.20	Stock	Barrick Gold U.S. Inc.
NV-043	154	Newark Valley	V01306		0		Vested	SPR	22N	57E	30	0.03	0.00	Stock	Barrick Gold U.S. Inc.
NV-045	154	Newark Valley	4789		993	12/17/2017	Certificate	SPR	22N	56E	35	0.03	18.11	Stock	Barrick Gold U.S. Inc.
NV-047	154	Newark Valley	4790		994	12/17/2017	Certificate	SPR	22N	56E	36	0.03	18.11	Stock	Barrick Gold U.S. Inc.
NV-051	154	Newark Valley	V01158		0		Vested	SPR	21N	55E	10	0.01	0.00	Stock	Smith, Wm. H.
NV-055	154	Newark Valley	8412		2315	12/27/2027	Certificate	SPR	21N	55E	22	0.01	3.77	Stock	Smith, Kate P.
NV-056	154	Newark Valley	V01159		0		Vested	SPR	21N	55E	22	0.00	0.00	Stock	Smith, Wm. H.
NV-058	154	Newark Valley	2315		150	1/15/2012	Certificate	SPR	21N	56E	36	0.03	18.11	Stock	Goicoechea, Peter J And Gladys P
NV-059	154	Newark Valley	V02892		0		Vested	SPR	21N	55E	34	0.00	0.00	Stock	Goicoechea, Peter J And Gladys P

Table C-2 Water Rights Inventory

MAP ID	Basin Number	Basin Name	Application	Change App	Certificate	Priority Date	Status	Source	Township	Range	Section	Diversion Rate (cfs)	Annual Duty (acre-feet per year)	Type of Use	Owner of Record
NV-063	154	Newark Valley	V02891		0		Vested	SPR	20N	57E	6	0.00	0.00	Stock	Goicoechea, Peter J And Gladys P
NV-065	154	Newark Valley	V02902		0		Vested	SPR	20N	55E	9	0.00	0.00	Stock	Goicoechea, Peter J And Gladys P
NV-067	154	Newark Valley	V02896		0		Vested	SPR	20N	56E	10	0.00	0.00	Stock	Goicoechea, Peter J And Gladys P
RV-599	176	Newark Valley	4138		1572	8/30/2016	Certificate	SPR	25N	59E	28	0.02	10.74	Stock	Rosenlund, Raymond G.
RV-600	176	Ruby Valley	64965		0	3/12/1999	Permit	UG	24N	58E	6	0.01	5.60	Stock	Barrick Gold U.S. Inc.
RV-604	176	Ruby Valley	5530		647	6/7/2019	Certificate	SPR	24N	58E	16	0.01	4.27	Stock	Rosenlund, Raymond G.
NV-006	154	Newark Valley	64645		16178	11/30/1998	Certificate	UG	23N	56E	11	0.01	2.00	Wildlife	BLM

SPR = Spring.

UG = Underground (i.e., groundwater).

OGW = Other groundwater.

Source: NDWR 2014.

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Table C-3

Values for General Water Quality Constituents at Monitored Locations

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Table C-3 Values for General Water Quality Constituents at Monitored Locations[1]

Site	Bicarbonate	Calcium	Chloride	pH	Sodium	Sulfate	TDS
Huntington Valley Seeps and Springs							
Cracker Johnson Spring No. 1	212 - 325	37.3 - 61.0	24.0 - 41.0	7.58 - 8.57	27.0 - 46.1	29.0 - 71.0	326 - 480
Cracker Johnson Spring No. 2	280 - 573	24.9 - 390	40.7 - 105	7.77 - 8.74	66.7 - 141	38.0 - 177	468 - ***1,110*** [2]
Mill Springs Lower	223 - 326	74.4 - 108	12.6 - 26	7.2 - 8.17	12.8 - 19.0	19.3 - 25.0	294 - 437
Mill Springs Upper	214 - 270	73.9 - 91	9.1 - 63	8.02 - 8.14	16.0 - 18.7	21.0 - 27.0	348
Long Valley Seeps and Springs							
Little Willow Spring	91.1 - 142	33.0 - 41.7	8.0 - 9.0	7.78 -8.37	8.0 - 9.7	13.5 - 24.0	136 - 500
Moss Spring	96.4 - 128	31.0 - 34.0	2.0 - 3.29	7.78 - 8.61	5.0 - 7.0	5.0 - 10.0	112 - 228
Mud Spring	314- 410	110 - 140	26.0 - 33.0	7.36 - 8.21	33.0 - 42.2	73.0 - 101	444 - ***540*** [2]
Tognini Spring	187 - 236	65.5 - 79.5	8.0 - 11.0	7.35 - 8.09	12.0- 14.1	19.0 - 28.0	234 - 294
Twin Spring	63.5 - 97.2	14.2 - 20.0	4.73 - 6.51	7.14 - 7.67	11.2 - 14.3	6.91 - 8.72	135 - 258
Twin Trough	78.1 - 105	17.0 - 24.6	2.0 - 6.01	6.53 - 7.78	12.0 - 17.7	8.26 - 18.0	128 - 165
Willow Spring	316 - 396	92.1 - 118	12.0 - 20.5	7.26 - 8.06	17.0 - 26.7	28.8 - 47.3	336 - 484
Woodchuck Spring	273 - 372	101 - 127	16.0 - 24.0	7.23 - 7.95	25.0 - 29.8	67.0 - 91.7	390 - 500
Newark Valley Seeps and Springs							
Beck Spring	116-239	37.1 - 69	14 - 18	7.53 - 8.5	18 - 19.2	22.1 - 26	181 - 274
Bourne Tunnel Spring	267 - 283	74.5 - 76.3	3.03 - 3.49	7.82 - 7.99	5.32 - 5.72	10.6 - 11.3	279 - 318
Cottonwood Spring	59.1 - 76	15 - 17.7	2 - 4.06	7.85 - 8.23	5 - 7.42	6 - 10	86 - 144
Goicoechea Spring	85 - 288	40.6 -76	1.97 - 4	7.17 - 8.5	4.67 - 8.2	13.3 - 28	142 - 289
Minoletti Spring	140 - 212	31 - 91.9	3 - 6	7.58 - 8.84	6.9 - 10.6	8 - 26	152 - 238
Moore Spring No. 1	153 - 189	46.7 - 54.5	5 - 9	7.82 - 8.45	5.4 - 6.5	<1 - 19	170 - 233
Moore Spring No. 2	104 - 132	29.4 - 34.9	<1 - 6	7.78 - 8.48	9 - 10	10 -14	144 - 202
Moore Spring No. 3	134 - 187	39.4 -49.1	6 - 8.07	7.29 - 8.11	13.4 - 15.6	13 - 30	172 - 237

Table C-3 Values for General Water Quality Constituents at Monitored Locations[1]

Site	Bicarbonate	Calcium	Chloride	pH	Sodium	Sulfate	TDS
Rock Spring (Lower)	165 - 200	50.9 - 55	8 - 10	7.88 - 8.2	9.5 - 10	18	174 - 232
Rock Spring (Upper)	158 - 219	12.3 - 22	6.76 - 10	7.39 - 8.34	9.7 - 11	12.3 - 22	180 - 256
South Water Canyon Seep	<1 - 214	47.3 - 70	5 - 34	2.41 - 8.3	10.7 - 17	11.3 - ***725*** [2]	192 - 410
Spring No. 1	206 - 263	45 - 53.9	5 - 9	7.61 - 8.1	16.2 - 20.4	7 - 32	242 - 292
Spring No. 2	204 - 256	39 - 49.4	6 - 7.92	7.86 - 8.4	18.8 - 24.4	29 - 34	226 - 280
Spring No. 3	135 - 171	40.2 - 48.2	5 - 6.7	7.75 - 8.41	7 - 8.3	12 - 23	144 - 185
Spring No. 4 (upper)	173 -342	53.4 - 93.8	6 - 9	8.07 - 8.59	8.7 - 16.6	14 - 27	192 - 337
Spring No. 5	137 -187	40.5 - 48.2	6 - 6.55	7.85 - 8.41	9 - 10.4	13 - 33	152 - 194
Warm Spring	249 - 320	56.8 - 69.4	5 - 7.29	7.57 - 8.69	16.9 - 21	0.1 - 0.208	276 - 326
Ruby Valley Springs and Seeps							
Cherry Spring	49.5 - 315	10.6 - 41	3 - 20	7.29 - 8.11	8.54 - 20.4	0.59 - 31	81 - 252

[1] Concentrations are in milligrams per liter.

[2] ***Bold italicized values*** are discussed in the text.

[3] Sample from well adjacent to spring site.

Source: Tetra Tech 2011.

Table C-4

Total Metals Ranges at Monitored Locations

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Table C-4 Total Metals Ranges at Monitored Locations[1]

Site	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Selenium	Zinc
Livestock Watering Standards [2]	0.2	0.05	1.0	0.5	0.10	0.01	0.05	25
Huntington Valley Seeps and Springs								
Cracker Johnson Spring No. 1	0.0097 - ***0.34*** [3]	ND	ND - 0.0106	ND	ND - 0.008	ND	ND	ND - 0.06
Cracker Johnson Spring No. 2	0.087 - 0.192	ND	0.0101 - 0.071	0.02 - 0.098	0.00413 - 0.066	ND - 0.0005	ND - 0.00563	0.0401 - 0.46
Mill Springs Lower	0.011 - 0.0443	ND	ND	ND - 0.011	ND - 0.00423	ND	ND	ND - 0.0217
Mill Springs Upper	0.007	ND	ND	ND	ND	ND	ND	0.04
South Water Canyon Seep	0.0195 - 0.0396	ND	ND	ND	ND - 0.002	ND - 0.0008	ND	ND - 0.03
Long Valley Seeps and Springs								
Little Willow Spring	ND - 0.0089	ND	ND - 0.0099	ND - 0.01	ND - 0.00442	ND	ND	ND - 0.0383
Moss Spring	ND	ND		ND - 0.002	ND	ND	ND	ND
Mud Spring	ND	ND	ND	ND	ND	ND	ND - 0.0107	ND
Tognini Spring	ND - 0.002	ND	ND	ND	ND	ND	ND - 0.001	ND
Twin Spring	ND - 0.00812	ND	ND - 0.0144	ND - 0.02	ND - 0.0173	ND	ND	ND - 0.129
Twin Trough	ND - 0.001	ND	ND	ND	ND	ND	ND	ND
Willow Spring	ND - 0.00331	ND	ND - 0.002	ND	ND	ND	ND - 0.001	ND - 0.0214
Woodchuck Spring	ND	ND	ND - 0.001	ND	ND	ND	ND - 0.00642	ND
Newark Valley Seeps and Springs								
Beck Spring	ND - 0.00403	ND	ND - 0.0066	ND	ND	ND	ND	ND 0.0131
Bourne Tunnel Spring	ND	ND	ND	ND	ND	ND	ND	ND
Cottonwood Spring	ND	ND	ND	ND	ND	ND	ND	ND
Goicoechea Spring	ND - 0.011	ND	ND	ND - 0.162	ND - 0.048	ND - 0.0031	ND - 0.005	ND - 0.0407

Table C-4 Total Metals Ranges at Monitored Locations[1]

Site	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Selenium	Zinc
Minoletti Spring	ND - 0.01	ND	ND - 0.004	ND - 0.004	ND - 0.003	ND - 0.002	ND - 0.03	ND - 0.06
Moore Spring No. 1	ND - 0.01	ND	ND	ND	ND - 0.002	ND	ND - 0.002	ND
Moore Spring No. 2	ND - 0.009	ND	ND	ND	ND	ND	ND - 0.001	ND
Moore Spring No. 3	ND	ND	ND	ND	ND - 0.001	ND - 0.0008	ND - 0.002	ND - 0.03
Rock Spring (Lower)	ND	ND	ND	0.002	ND	ND	ND	ND
Rock Spring (Upper)	ND - 0.002	ND	ND	ND - 0.001	ND	ND	ND	ND - 0.02
Spring No. 1	0.0084 - 0.016	ND	ND	ND - 0.002	ND - 0.002	ND	ND	ND - 0.06
Spring No. 2	0.0072 - 0.02	ND	ND - 0.005	ND - 0.002	ND - 0.001	ND - 0.0007	ND - 0.02	ND - 0.04
Spring No. 3	ND - 0.006	ND - 0.004	ND - 0.004	ND - 0.002	ND	ND - 0.001	ND - 0.003	ND - 0.03
Spring No. 4 (upper)	ND - 0.006	ND	ND - 0.006	ND - 0.003	ND - 0.001	ND - 0.0005	ND - 0.002	ND - 0.04
Spring No. 5	0.00344 - 0.014	ND	ND - 0.005	ND	ND - 0.002	ND - 0.0011	ND - 0.002	ND - 0.05
Warm Spring	0.0113 - 0.022	ND	ND	ND - 0.006	ND - 0.001	ND	ND	ND - 0.06
Ruby Valley Springs and Seeps								
Cherry Spring[4]	0.0089 - 0.0603	ND	ND	ND	ND	ND	ND - 0.001	ND - 0.012

[1] ND: not detected. Values are expressed as total recoverable concentrations.

[2] NAC 445A-1236, in milligrams per liter.

[3] ***Bold italicize***d values are discussed in the text.

[4] Sample from well at spring site.

Source: Tetra Tech 2011.

Table C-5

Summary of Humidity Cell Test Results

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Table C-5 Summary of Humidity Cell Test Results

Humidity Cell	Sample	Duration (weeks)	Rock Unit	Pit	ANP kg/t as $CaCO_3$	AGP kg/t as $CaCO_4$	NNP kg/t as $CaCO_5$	Last 5-week pH	Last 5-week Sulfate mg/kg	Cumulative Sulfate (mg/kg)	Cumulative SO_4-S / Total S (%)
Quarterly Composite Samples											
	Saga 6975	20	not reported	Saga	#N/A	#N/A	#N/A	7.40	3.90	57	#N/A
	Bida BWF Sed Ox	20	not reported	Bida	1.5	2.8	-1.3	7.93	1.60	28	18%
	Bida BWF Int Ox	22	not reported	Bida	0.3	4.1	-4.1	7.89	0.13	9	6%
	SWF-Sed-Ox 1st Qtr 2008	20	not reported	Saga	0.3	8.5	-8.5	8.04	3.82	89	32%
	SG-1054 195'-220'	117	not reported	Saga	5.8	10.1	-4.29	6.92	1.09	236	45%
	SG-1054 355'-380'	117	not reported	Saga	4.2	16.2	-12	6.14	0.43	53	8%
	SG-1009 50-100	115	not reported	Saga	7.3	5.78	1.52	8.01	0.55	86	70%
	SG-1043, 40-80	115	not reported	Saga	6.8	7.41	-0.61	7.24	0.47	84	29%
	B3WF-INT-OX	98	not reported	Bida	1.5	12.3	-10.8	6.99	0.54	118	46%
	SWF-SED-OX	98	not reported	Saga	3.5	3.94	-0.44	7.22	0.91	136	93%
	BWF_SED_OX (3rd 09)	73	not reported	Bida	509	0.3	508.7	8.57	1.60	65	100%
	BWF_INT_OX (4th 09)	57	not reported	Bida	4.4	5.3	-0.9	6.42	0.46	47	88%
	TWA1F_Sed_Ox	47	not reported	Top	3.9	5.2	-1.3	6.79	0.60	57	115%
	SA4_Sed_Ox (April 2011)	on-going	not reported	Sage	0.3	0.3	0	8.02	3.14	206	100%
Top Pit Samples											
3482-1	DT 05-01, 1000-1020	62		Top	1030	<0.3	1029.7	7.95	1	33	11%
3482-2	DT 05-01, 1020-1040	62		Top	1030	<0.3	1029.7	7.83	1	34	11%
3482-3	DT 05-03, 1144-1164	62		Top	811	<0.3	810.7	7.91	1	35	12%
3482-4	PZ-1007, 520-540	62		Top	542	<0.3	541.7	7.87	1	30	10%

Table C-5 Summary of Humidity Cell Test Results

Humidity Cell	Sample	Duration (weeks)	Rock Unit	Pit	ANP kg/t as $CaCO_3$	AGP kg/t as $CaCO_4$	NNP kg/t as $CaCO_5$	Last 5-week pH	Last 5-week Sulfate mg/kg	Cumulative Sulfate (mg/kg)	Cumulative SO_4-S / Total S (%)
3482-5	PZ-1008, 140-160	62		Top	518	<0.3	517.7	8.01	1	45	15%
3482-6	PZ-1008, 160-180	62		Top	721	<0.3	720.7	7.965	1	38	13%
3482-7	PZ-1008, 180-200	62		Top	947	<0.3	946.7	7.875	1	27	9%
3482-8	SF-1171, 20-40	62		Top	6.8	1.6	5.2	7.375	1.4	125	4%
3482-9	SF-1171, 80-100	62		Top	679	<0.3	678.7	7.58	1	65	4%
3482-10	SF-1171, 160-180	62		Top	929	<0.3	928.7	8.03	1	51	17%
3482-11	TD-1012, 63-83	62		Top	284	<0.3	283.7	7.995	1	52	17%
3482-12	TD-1012, 278-298	62		Top	837	<0.3	837	7.94	1	32	11%
3482-13	TD-1016, 262-282	62		Top	555	<0.3	555	8.035	1	30	10%
3482-14	TD-1016, 282-302	62		Top	153	<0.3	153	7.82	1	39	13%
3482-15	TD-1016, 302-322	62		Top	97.4	<0.3	97.4	7.77	1	57	10%
3482-16	TD-1082, 30-40	62		Top	658	<0.3	658	8.035	1	31	10%
3482-17	TD-1082, 40-50	62		Top	800	<0.3	800	7.75	1	37	12%
3482-18	TD-1175, 100-120	62		Top	437	<0.3	437	8.01	1	35	12%
3482-19	TOP PIT ALLUVIUM-1	62		Top	287	<0.3	287	7.97	1	43	7%
3482-20	TOP PIT ALLUVIUM-2	62		Top	263	<0.3	263	7.98	1	104	17%
3482-21	TOP PIT LAKE TOWN-1	62		Top	1030	<0.3	1030	7.495	1	26	9%
3482-22	TOP PIT LAKE TOWN-2	62		Top	1050	<0.3	1050	7.74	1	25	8%

Table C-5 Summary of Humidity Cell Test Results

Humidity Cell	Sample	Duration (weeks)	Rock Unit	Pit	ANP kg/t as $CaCO_3$	AGP kg/t as $CaCO_4$	NNP kg/t as $CaCO_5$	Last 5-week pH	Last 5-week Sulfate mg/kg	Cumulative Sulfate (mg/kg)	Cumulative SO_4-S / Total S (%)
Dominant Rock Units											
726-1	GX 1033 780-800	29	Pilot Shale	Galaxy	386.6	57.2	329.0	7.844	124.6	5,845	11%
726-2	GX 1033 800-820/960-980	29	Pilot Shale	Galaxy	476.8	35.4	441.0	7.622	196.2	7,538	22%
726-3	GX 1033 980-1000	29	Pilot Shale	Galaxy	510.3	35.2	475.0	9.106	36.4	2,912	9%
726-4	GX 1035 200-220	29	Pilot Shale	Galaxy	378.9	9.6	369.0	7.958	29.8	3,539	38%
726-5	GX 1035 640-660	29	Devils Gate/Guilmette LS	Galaxy	590.2	3.8	586.0	9.032	21.2	1,157	32%
726-6	GXD 1046 340-360	29	Pilot Shale	Galaxy	520.7	<0.3	521.0	8.036	12	1,473	100%
726-7	PZ 1013 200-220	29	Diamond Peak	Gator	5.7	17.4	-11.8	7.596	62.6	2,569	15%
726-8	PZ 1013 360-380	29	Diamond Peak	Gator	5.2	56.6	-51.4	2.72	248	10,664	20%
726-9	PZ 1013 680-700	29	Diamond Peak	Gator	213.9	22.7	191.0	8.046	39	2,021	9%
726-10	PZ 1016 200-220	29	Pilot Shale	Yankee	6.2	16.8	-10.6	7.722	9.8	345	2%
726-11	PZ 1016 380-400	29	Pilot Shale	Yankee	693.3	16	677.0	8.52	59.4	3,679	24%
726-38	VD05-09 320-340	29	Pilot Shale	Vantage	<0.3	33.4	-33.4	2.59	290	28,020	87%
726-39	VD06-13 800-815	29	Devils Gate/Guilmette LS	Vantage	234.5	11	224.0	7.906	76.4	5,247	50%

Table C-5 Summary of Humidity Cell Test Results

Humidity Cell	Sample	Duration (weeks)	Rock Unit	Pit	ANP kg/t as $CaCO_3$	AGP kg/t as $CaCO_4$	NNP kg/t as $CaCO_5$	Last 5-week pH	Last 5-week Sulfate mg/kg	Cumulative Sulfate (mg/kg)	Cumulative SO_4-S / Total S (%)
726-40	VD06-13 815-835	29	Devils Gate/Guilmette LS	Vantage	247.4	32.1	215.0	7.832	88	4,964	16%
Redbird Samples											
726-12	PZ-1004 640-660	29	Pogonip	Red Bird	40.2	1.5	38.7	8.372	15	2,054	100%
726-13	PZ-1004 660-680	29	Pogonip	Red Bird	39.7	0.5	39.2	8.344	13	566	94%
726-14	PZ-1004 680-700	29	Pogonip	Red Bird	22.7	0.7	22.0	8.072	13.6	1,182	100%
726-15	PZ-1004 700-720	29	Pogonip	Red Bird	36.1	2	34.1	8.202	15.8	895	50%
726-16	PZ-1004 720-740	29	Pogonip	Red Bird	18	2.8	15.2	7.84	16.6	596	22%
726-17	PZ-1004 740-760	29	Jurassic	Red Bird	112.1	2.4	110.0	8.344	12.2	1,108	46%
726-18	RBD-1054 830-834	29	Pogonip	Red Bird	6.7	0.6	6.1	7.706	5	424	71%
726-19	RBD-1054 839-844	29	Jurassic	Red Bird	7.2	0.9	6.4	7.726	76	2,259	100%
726-20	RBD-1071 1020-1040	29	Jurassic	Red Bird	2.1	<0.3	2.1	7.772	7.8	830	100%
726-21	RBD-1078 180-200	29	Chainman	Red Bird	<0.3	16.9	-16.9	7.85	16.2	388	2%
726-22	RBD-1078 280-300	29	Chainman	Red Bird	0.5	5.3	-4.8	7.902	26.8	611	12%
726-23	RBD-1078 360-380	29	Chainman	Red Bird	0.5	2.3	-1.8	7.898	9.2	1,062	51%
726-24	RBD-1088 1100-1120	29	Pogonip	Red Bird	3.6	<0.3	3.6	7.662	8.2	1,597	100%

Table C-5 Summary of Humidity Cell Test Results

Humidity Cell	Sample	Duration (weeks)	Rock Unit	Pit	ANP kg/t as $CaCO_3$	AGP kg/t as $CaCO_4$	NNP kg/t as $CaCO_5$	Last 5-week pH	Last 5-week Sulfate mg/kg	Cumulative Sulfate (mg/kg)	Cumulative SO_4-S / Total S (%)
726-25	RBD-1091 860-880	29	Jurassic	Red Bird	386.6	<0.3	387.0	8.026	3.2	241	80%
726-26	RBD-1092 500-520	29	Jurassic	Red Bird	1	1	0.3	7.554	8.6	841	93%
726-27	RBD-1092 600-620	29	Pogonip	Red Bird	791.3	<0.3	791.0	8.422	0.4	80	27%
726-28	RBD-1092 640-660	29	Pogonip	Red Bird	415	<0.3	415.0	8.244	1.4	97	32%
726-29	RBD-1107 800-820	29	Jurassic	Red Bird	505.2	<0.3	505.0	8.244	3.4	190	63%
726-30	RBD-1110 980-995	29	Jurassic	Red Bird	4.1	<0.3	4.0	7.658	7.2	454	100%
726-31	RBD-1120 385-387	29	Alluvium	Red Bird	42.8	0.4	42.4	8.02	1.8	197	66%
726-32	RBD-1131 580-595	29	Chainman	Red Bird	<0.3	80.5	-80.5	2.468	322	18,841	24%
726-33	RBD-1131 660-680	29	Chainman	Red Bird	<0.3	59	-59.0	2.602	290	16,957	30%
726-34	RBD-1131 780-795	29	Chainman	Red Bird	0.5	3.6	-3.1	7.092	4.2	274	8%
726-35	RBM OVBN-1	29	Alluvium	Red Bird	306.7	-0.8	308.0	8.154	7.4	516	57%
726-36	RBM OVBN-2	29	Alluvium	Red Bird	95.4	1.8	93.6	7.968	7.4	763	42%
726-37	RBM OVBN-3	29	Alluvium	Red Bird	358.3	-0.8	359.0	8.296	4.4	427	47%

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Table C-6

Additional Water Quality Tables

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SYS_LOC_	SAMPLE_DATE	SAMPLEDATE	CAS_RN	CHEMICAL_NAME	REPORT_RESULT_TEX	REPORT_RESULT_UNIT
ARW	5/17/2011	17 May 2011	BICARBONATE	Alkalinity Bicarbonate	245	mg CaCO3/L
ARW	5/9/2012	09 May 2012	BICARBONATE	Alkalinity Bicarbonate	239	mg CaCO3/L
ARW	5/10/2010	10 May 2010	BICARBONATE	Alkalinity Bicarbonate	242	mg CaCO3/L
ARW	3/23/2015	23 Mar 2015	BICARBONATE	Alkalinity Bicarbonate	240	mg CaCO3/L
ARW	6/17/2015	17 Jun 2015	BICARBONATE	Alkalinity Bicarbonate	240	mg CaCO3/L
ARW	7/29/2015	29 Jul 2015	BICARBONATE	Alkalinity Bicarbonate	240	mg CaCO3/L
ARW	5/17/2011	17 May 2011	ALKALINITY	Total Alkalinity	245	mg CaCO3/L
ARW	5/9/2012	09 May 2012	ALKALINITY	Total Alkalinity	239	mg CaCO3/L
ARW	5/10/2010	10 May 2010	ALKALINITY	Total Alkalinity	242	mg CaCO3/L
ARW	3/23/2015	23 Mar 2015	ALKALINITY	Total Alkalinity	240	mg CaCO3/L
ARW	6/17/2015	17 Jun 2015	ALKALINITY	Total Alkalinity	240	mg CaCO3/L
ARW	7/29/2015	29 Jul 2015	ALKALINITY	Total Alkalinity	240	mg CaCO3/L
ARW	5/17/2011	17 May 2011	7429-90-5	Aluminum	< 0.080	mg/L
ARW	5/17/2011	17 May 2011	7429-90-5	Aluminum	< 0.080	mg/L
ARW	5/9/2012	09 May 2012	7429-90-5	Aluminum	< 0.080	mg/L
ARW	5/9/2012	09 May 2012	7429-90-5	Aluminum	< 0.080	mg/L
ARW	5/10/2010	10 May 2010	7429-90-5	Aluminum	< 0.080	mg/L
ARW	5/10/2010	10 May 2010	7429-90-5	Aluminum	< 0.080	mg/L
ARW	3/23/2015	23 Mar 2015	7429-90-5	Aluminum	< 0.045	mg/L
ARW	6/17/2015	17 Jun 2015	7429-90-5	Aluminum	< 0.045	mg/L
ARW	7/29/2015	29 Jul 2015	7429-90-5	Aluminum	< 0.045	mg/L
ARW	5/17/2011	17 May 2011	7440-36-0	Antimony	< 0.00300	mg/L
ARW	5/17/2011	17 May 2011	7440-36-0	Antimony	< 0.00300	mg/L
ARW	5/9/2012	09 May 2012	7440-36-0	Antimony	< 0.00300	mg/L
ARW	5/9/2012	09 May 2012	7440-36-0	Antimony	< 0.00300	mg/L
ARW	5/10/2010	10 May 2010	7440-36-0	Antimony	< 0.00300	mg/L
ARW	5/10/2010	10 May 2010	7440-36-0	Antimony	< 0.00300	mg/L
ARW	3/23/2015	23 Mar 2015	7440-36-0	Antimony	< 0.0025	mg/L
ARW	6/17/2015	17 Jun 2015	7440-36-0	Antimony	< 0.0025	mg/L
ARW	7/29/2015	29 Jul 2015	7440-36-0	Antimony	< 0.0025	mg/L
ARW	5/17/2011	17 May 2011	7440-38-2	Arsenic	0.0213	mg/L
ARW	5/17/2011	17 May 2011	7440-38-2	Arsenic	0.0216	mg/L
ARW	5/9/2012	09 May 2012	7440-38-2	Arsenic	0.0180	mg/L
ARW	5/9/2012	09 May 2012	7440-38-2	Arsenic	0.0212	mg/L
ARW	5/10/2010	10 May 2010	7440-38-2	Arsenic	0.0194	mg/L
ARW	5/10/2010	10 May 2010	7440-38-2	Arsenic	0.0170	mg/L
ARW	3/23/2015	23 Mar 2015	7440-38-2	Arsenic	0.045	mg/L
ARW	6/17/2015	17 Jun 2015	7440-38-2	Arsenic	0.015	mg/L
ARW	7/29/2015	29 Jul 2015	7440-38-2	Arsenic	0.015	mg/L
ARW	5/17/2011	17 May 2011	7440-39-3	Barium	0.163	mg/L
ARW	5/17/2011	17 May 2011	7440-39-3	Barium	0.172	mg/L
ARW	5/9/2012	09 May 2012	7440-39-3	Barium	0.174	mg/L
ARW	5/9/2012	09 May 2012	7440-39-3	Barium	0.170	mg/L
ARW	5/10/2010	10 May 2010	7440-39-3	Barium	0.165	mg/L
ARW	5/10/2010	10 May 2010	7440-39-3	Barium	0.167	mg/L
ARW	3/23/2015	23 Mar 2015	7440-39-3	Barium	0.18	mg/L
ARW	6/17/2015	17 Jun 2015	7440-39-3	Barium	0.18	mg/L
ARW	7/29/2015	29 Jul 2015	7440-39-3	Barium	0.17	mg/L
ARW	5/17/2011	17 May 2011	7440-41-7	Beryllium	< 0.0020	mg/L
ARW	5/17/2011	17 May 2011	7440-41-7	Beryllium	< 0.0020	mg/L
ARW	5/9/2012	09 May 2012	7440-41-7	Beryllium	< 0.0020	mg/L
ARW	5/9/2012	09 May 2012	7440-41-7	Beryllium	< 0.0020	mg/L
ARW	7/29/2015	29 Jul 2015	7440-41-7	Beryllium	< 0.0010	mg/L
ARW	5/10/2010	10 May 2010	7440-41-7	Beryllium	< 0.00200	mg/L
ARW	5/10/2010	10 May 2010	7440-41-7	Beryllium	< 0.00200	mg/L
ARW	3/23/2015	23 Mar 2015	7440-41-7	Beryllium	< 0.0010	mg/L
ARW	6/17/2015	17 Jun 2015	7440-41-7	Beryllium	< 0.0010	mg/L
ARW	5/17/2011	17 May 2011	7440-43-9	Cadmium	< 0.0020	mg/L
ARW	5/17/2011	17 May 2011	7440-43-9	Cadmium	< 0.0020	mg/L
ARW	5/9/2012	09 May 2012	7440-43-9	Cadmium	< 0.0020	mg/L

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SYS_LOC_	SAMPLE_DATE	SAMPLEDATE	CAS_RN	CHEMICAL_NAME	REPORT_RESULT_TEX	REPORT_RESULT_UNIT
ARW	5/9/2012	09 May 2012	7440-43-9	Cadmium	< 0.0020	mg/L
ARW	5/10/2010	10 May 2010	7440-43-9	Cadmium	< 0.0020	mg/L
ARW	5/10/2010	10 May 2010	7440-43-9	Cadmium	< 0.0020	mg/L
ARW	3/23/2015	23 Mar 2015	7440-43-9	Cadmium	< 0.0010	mg/L
ARW	6/17/2015	17 Jun 2015	7440-43-9	Cadmium	< 0.0010	mg/L
ARW	7/29/2015	29 Jul 2015	7440-43-9	Cadmium	< 0.0010	mg/L
ARW	5/17/2011	17 May 2011	7440-70-2	Calcium	60.4	mg/L
ARW	5/17/2011	17 May 2011	7440-70-2	Calcium	64.2	mg/L
ARW	5/9/2012	09 May 2012	7440-70-2	Calcium	61.5	mg/L
ARW	5/9/2012	09 May 2012	7440-70-2	Calcium	59.2	mg/L
ARW	5/10/2010	10 May 2010	7440-70-2	Calcium	60.7	mg/L
ARW	5/10/2010	10 May 2010	7440-70-2	Calcium	58.0	mg/L
ARW	3/23/2015	23 Mar 2015	7440-70-2	Calcium	63	mg/L
ARW	6/17/2015	17 Jun 2015	7440-70-2	Calcium	62	mg/L
ARW	7/29/2015	29 Jul 2015	7440-70-2	Calcium	62	mg/L
ARW	5/17/2011	17 May 2011	16887-00-6	Chloride	6.33	mg/L
ARW	5/9/2012	09 May 2012	16887-00-6	Chloride	6.52	mg/L
ARW	5/10/2010	10 May 2010	16887-00-6	Chloride	6.84	mg/L
ARW	3/23/2015	23 Mar 2015	16887-00-6	Chloride	5.7	mg/L
ARW	6/17/2015	17 Jun 2015	16887-00-6	Chloride	6.2	mg/L
ARW	7/29/2015	29 Jul 2015	16887-00-6	Chloride	6.0	mg/L
ARW	5/17/2011	17 May 2011	7440-47-3	Chromium	< 0.0060	mg/L
ARW	5/17/2011	17 May 2011	7440-47-3	Chromium	< 0.0060	mg/L
ARW	5/9/2012	09 May 2012	7440-47-3	Chromium	< 0.0060	mg/L
ARW	5/9/2012	09 May 2012	7440-47-3	Chromium	< 0.0060	mg/L
ARW	5/10/2010	10 May 2010	7440-47-3	Chromium	< 0.0060	mg/L
ARW	5/10/2010	10 May 2010	7440-47-3	Chromium	< 0.0060	mg/L
ARW	3/23/2015	23 Mar 2015	7440-47-3	Chromium	< 0.0050	mg/L
ARW	6/17/2015	17 Jun 2015	7440-47-3	Chromium	< 0.0050	mg/L
ARW	7/29/2015	29 Jul 2015	7440-47-3	Chromium	< 0.0050	mg/L
ARW	5/17/2011	17 May 2011	7440-50-8	Copper	< 0.010	mg/L
ARW	5/17/2011	17 May 2011	7440-50-8	Copper	< 0.010	mg/L
ARW	5/9/2012	09 May 2012	7440-50-8	Copper	< 0.010	mg/L
ARW	5/9/2012	09 May 2012	7440-50-8	Copper	< 0.010	mg/L
ARW	5/10/2010	10 May 2010	7440-50-8	Copper	< 0.010	mg/L
ARW	5/10/2010	10 May 2010	7440-50-8	Copper	< 0.010	mg/L
ARW	3/23/2015	23 Mar 2015	7440-50-8	Copper	< 0.050	mg/L
ARW	6/17/2015	17 Jun 2015	7440-50-8	Copper	< 0.050	mg/L
ARW	7/29/2015	29 Jul 2015	7440-50-8	Copper	< 0.050	mg/L
ARW	5/17/2011	17 May 2011	16984-48-8	Fluoride	0.76	mg/L
ARW	5/9/2012	09 May 2012	16984-48-8	Fluoride	0.80	mg/L
ARW	5/10/2010	10 May 2010	16984-48-8	Fluoride	0.807	mg/L
ARW	3/23/2015	23 Mar 2015	16984-48-8	Fluoride	0.60	mg/L
ARW	6/17/2015	17 Jun 2015	16984-48-8	Fluoride	0.80	mg/L
ARW	7/29/2015	29 Jul 2015	16984-48-8	Fluoride	0.74	mg/L
ARW	5/17/2011	17 May 2011	7439-89-6	Iron	< 0.060	mg/L
ARW	5/17/2011	17 May 2011	7439-89-6	Iron	< 0.060	mg/L
ARW	5/9/2012	09 May 2012	7439-89-6	Iron	< 0.060	mg/L
ARW	5/9/2012	09 May 2012	7439-89-6	Iron	< 0.060	mg/L
ARW	5/10/2010	10 May 2010	7439-89-6	Iron	0.073	mg/L
ARW	5/10/2010	10 May 2010	7439-89-6	Iron	< 0.060	mg/L
ARW	3/23/2015	23 Mar 2015	7439-89-6	Iron	< 0.010	mg/L
ARW	6/17/2015	17 Jun 2015	7439-89-6	Iron	0.050	mg/L
ARW	7/29/2015	29 Jul 2015	7439-89-6	Iron	0.029	mg/L
ARW	5/17/2011	17 May 2011	7439-92-1	Lead	< 0.00300	mg/L
ARW	5/17/2011	17 May 2011	7439-92-1	Lead	< 0.00300	mg/L
ARW	5/9/2012	09 May 2012	7439-92-1	Lead	< 0.00300	mg/L
ARW	5/9/2012	09 May 2012	7439-92-1	Lead	< 0.00300	mg/L

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SYS_LOC_	SAMPLE_DATE	SAMPLEDATE	CAS_RN	CHEMICAL_NAME	REPORT_RESULT_TEX	REPORT_RESULT_UNIT
ARW	5/10/2010	10 May 2010	7439-92-1	Lead	< 0.00300	mg/L
ARW	5/10/2010	10 May 2010	7439-92-1	Lead	< 0.00300	mg/L
ARW	3/23/2015	23 Mar 2015	7439-92-1	Lead	< 0.0025	mg/L
ARW	6/17/2015	17 Jun 2015	7439-92-1	Lead	< 0.0025	mg/L
ARW	7/29/2015	29 Jul 2015	7439-92-1	Lead	< 0.0025	mg/L
ARW	5/17/2011	17 May 2011	7439-95-4	Magnesium	21.2	mg/L
ARW	5/17/2011	17 May 2011	7439-95-4	Magnesium	21.9	mg/L
ARW	5/9/2012	09 May 2012	7439-95-4	Magnesium	20.2	mg/L
ARW	5/9/2012	09 May 2012	7439-95-4	Magnesium	20.6	mg/L
ARW	5/10/2010	10 May 2010	7439-95-4	Magnesium	21.3	mg/L
ARW	5/10/2010	10 May 2010	7439-95-4	Magnesium	20.6	mg/L
ARW	3/23/2015	23 Mar 2015	7439-95-4	Magnesium	23	mg/L
ARW	6/17/2015	17 Jun 2015	7439-95-4	Magnesium	21	mg/L
ARW	7/29/2015	29 Jul 2015	7439-95-4	Magnesium	22	mg/L
ARW	5/17/2011	17 May 2011	7439-96-5	Manganese	0.0056	mg/L
ARW	5/17/2011	17 May 2011	7439-96-5	Manganese	< 0.0040	mg/L
ARW	5/9/2012	09 May 2012	7439-96-5	Manganese	< 0.0040	mg/L
ARW	5/9/2012	09 May 2012	7439-96-5	Manganese	< 0.0040	mg/L
ARW	5/10/2010	10 May 2010	7439-96-5	Manganese	0.0041	mg/L
ARW	5/10/2010	10 May 2010	7439-96-5	Manganese	0.0053	mg/L
ARW	3/23/2015	23 Mar 2015	7439-96-5	Manganese	< 0.0050	mg/L
ARW	6/17/2015	17 Jun 2015	7439-96-5	Manganese	< 0.0050	mg/L
ARW	7/29/2015	29 Jul 2015	7439-96-5	Manganese	< 0.0050	mg/L
ARW	5/17/2011	17 May 2011	7439-97-6	Mercury	< 0.00020	mg/L
ARW	5/17/2011	17 May 2011	7439-97-6	Mercury	< 0.00020	mg/L
ARW	5/9/2012	09 May 2012	7439-97-6	Mercury	< 0.00020	mg/L
ARW	5/9/2012	09 May 2012	7439-97-6	Mercury	< 0.00020	mg/L
ARW	5/10/2010	10 May 2010	7439-97-6	Mercury	< 0.00020	mg/L
ARW	5/10/2010	10 May 2010	7439-97-6	Mercury	< 0.00020	mg/L
ARW	3/23/2015	23 Mar 2015	7439-97-6	Mercury	< 0.00010	mg/L
ARW	6/17/2015	17 Jun 2015	7439-97-6	Mercury	< 0.00010	mg/L
ARW	7/29/2015	29 Jul 2015	7439-97-6	Mercury	< 0.00010	mg/L
ARW	5/17/2011	17 May 2011	7440-02-0	Nickel	< 0.010	mg/L
ARW	5/17/2011	17 May 2011	7440-02-0	Nickel	< 0.010	mg/L
ARW	5/9/2012	09 May 2012	7440-02-0	Nickel	< 0.010	mg/L
ARW	5/9/2012	09 May 2012	7440-02-0	Nickel	< 0.010	mg/L
ARW	5/10/2010	10 May 2010	7440-02-0	Nickel	< 0.010	mg/L
ARW	5/10/2010	10 May 2010	7440-02-0	Nickel	< 0.010	mg/L
ARW	3/23/2015	23 Mar 2015	7440-02-0	Nickel	< 0.010	mg/L
ARW	6/17/2015	17 Jun 2015	7440-02-0	Nickel	< 0.010	mg/L
ARW	7/29/2015	29 Jul 2015	7440-02-0	Nickel	< 0.010	mg/L
ARW	5/17/2011	17 May 2011	E-10128	Nitrate/Nitrite as N	0.074	mg/L
ARW	5/9/2012	09 May 2012	E-10128	Nitrate/Nitrite as N	0.066	mg/L
ARW	5/10/2010	10 May 2010	E-10128	Nitrate/Nitrite as N	0.0776	mg/L
ARW	3/23/2015	23 Mar 2015	E-10128	Nitrate/Nitrite as N	< 0.050	mg/L
ARW	6/17/2015	17 Jun 2015	E-10128	Nitrate/Nitrite as N	< 0.10	mg/L
ARW	7/29/2015	29 Jul 2015	E-10128	Nitrate/Nitrite as N	< 0.10	mg/L
ARW	11/11/2015	11 Nov 2015	E-10128	Nitrate/Nitrite as N	< 0.10	mg/L
ARW	5/9/2012	09 May 2012	TOT_N	Nitrogen Total as N	< 0.55	mg/L
ARW	3/23/2015	23 Mar 2015	TOT_N	Nitrogen Total as N	< 0.25	mg/L
ARW	6/17/2015	17 Jun 2015	TOT_N	Nitrogen Total as N	< 0.30	mg/L
ARW	7/29/2015	29 Jul 2015	TOT_N	Nitrogen Total as N	< 0.30	mg/L
ARW	11/11/2015	11 Nov 2015	TOT_N	Nitrogen Total as N	< 0.50	mg/L
ARW	5/17/2011	17 May 2011	7440-09-7	Potassium	6.18	mg/L
ARW	5/17/2011	17 May 2011	7440-09-7	Potassium	6.76	mg/L
ARW	5/9/2012	09 May 2012	7440-09-7	Potassium	6.44	mg/L
ARW	5/9/2012	09 May 2012	7440-09-7	Potassium	6.38	mg/L
ARW	5/10/2010	10 May 2010	7440-09-7	Potassium	6.47	mg/L

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SYS_LOC_	SAMPLE_DATE	SAMPLEDATE	CAS_RN	CHEMICAL_NAME	REPORT_RESULT_TEX	REPORT_RESULT_UNIT
ARW	5/10/2010	10 May 2010	7440-09-7	Potassium	6.43	mg/L
ARW	3/23/2015	23 Mar 2015	7440-09-7	Potassium	6.5	mg/L
ARW	6/17/2015	17 Jun 2015	7440-09-7	Potassium	6.3	mg/L
ARW	7/29/2015	29 Jul 2015	7440-09-7	Potassium	6.6	mg/L
ARW	5/17/2011	17 May 2011	7782-49-2	Selenium	< 0.00300	mg/L
ARW	5/17/2011	17 May 2011	7782-49-2	Selenium	< 0.00300	mg/L
ARW	5/9/2012	09 May 2012	7782-49-2	Selenium	< 0.00250	mg/L
ARW	5/9/2012	09 May 2012	7782-49-2	Selenium	< 0.00300	mg/L
ARW	5/10/2010	10 May 2010	7782-49-2	Selenium	< 0.00300	mg/L
ARW	5/10/2010	10 May 2010	7782-49-2	Selenium	< 0.00300	mg/L
ARW	3/23/2015	23 Mar 2015	7782-49-2	Selenium	< 0.0050	mg/L
ARW	6/17/2015	17 Jun 2015	7782-49-2	Selenium	< 0.0050	mg/L
ARW	7/29/2015	29 Jul 2015	7782-49-2	Selenium	0.0084	mg/L
ARW	5/17/2011	17 May 2011	7440-22-4	Silver	< 0.0050	mg/L
ARW	5/17/2011	17 May 2011	7440-22-4	Silver	< 0.0050	mg/L
ARW	5/9/2012	09 May 2012	7440-22-4	Silver	< 0.0050	mg/L
ARW	5/9/2012	09 May 2012	7440-22-4	Silver	< 0.0050	mg/L
ARW	5/10/2010	10 May 2010	7440-22-4	Silver	< 0.0050	mg/L
ARW	5/10/2010	10 May 2010	7440-22-4	Silver	< 0.0050	mg/L
ARW	3/23/2015	23 Mar 2015	7440-22-4	Silver	< 0.0050	mg/L
ARW	6/17/2015	17 Jun 2015	7440-22-4	Silver	< 0.0050	mg/L
ARW	7/29/2015	29 Jul 2015	7440-22-4	Silver	< 0.0050	mg/L
ARW	5/17/2011	17 May 2011	7440-23-5	Sodium	17.7	mg/L
ARW	5/17/2011	17 May 2011	7440-23-5	Sodium	19.7	mg/L
ARW	5/9/2012	09 May 2012	7440-23-5	Sodium	17.8	mg/L
ARW	5/9/2012	09 May 2012	7440-23-5	Sodium	18.4	mg/L
ARW	5/10/2010	10 May 2010	7440-23-5	Sodium	18.5	mg/L
ARW	5/10/2010	10 May 2010	7440-23-5	Sodium	18.1	mg/L
ARW	3/23/2015	23 Mar 2015	7440-23-5	Sodium	20	mg/L
ARW	6/17/2015	17 Jun 2015	7440-23-5	Sodium	20	mg/L
ARW	7/29/2015	29 Jul 2015	7440-23-5	Sodium	21	mg/L
ARW	5/17/2011	17 May 2011	14808-79-8	Sulfate as SO4	37.1	mg/L
ARW	5/9/2012	09 May 2012	14808-79-8	Sulfate as SO4	40.3	mg/L
ARW	6/17/2015	17 Jun 2015	14808-79-8	Sulfate as SO4	34	mg/L
ARW	7/29/2015	29 Jul 2015	14808-79-8	Sulfate as SO4	38	mg/L
ARW	5/10/2010	10 May 2010	14808-79-8	Sulfate as SO4	39.5	mg/L
ARW	3/23/2015	23 Mar 2015	14808-79-8	Sulfate as SO4	35	mg/L
ARW	5/17/2011	17 May 2011	7440-28-0	Thallium	< 0.00100	mg/L
ARW	5/17/2011	17 May 2011	7440-28-0	Thallium	< 0.00100	mg/L
ARW	5/9/2012	09 May 2012	7440-28-0	Thallium	< 0.00100	mg/L
ARW	5/9/2012	09 May 2012	7440-28-0	Thallium	< 0.00100	mg/L
ARW	5/10/2010	10 May 2010	7440-28-0	Thallium	< 0.00100	mg/L
ARW	5/10/2010	10 May 2010	7440-28-0	Thallium	< 0.00100	mg/L
ARW	3/23/2015	23 Mar 2015	7440-28-0	Thallium	< 0.0010	mg/L
ARW	6/17/2015	17 Jun 2015	7440-28-0	Thallium	< 0.0010	mg/L
ARW	7/29/2015	29 Jul 2015	7440-28-0	Thallium	< 0.0010	mg/L
ARW	5/17/2011	17 May 2011	TDS_LAB	Total Dissolved Solids	343	mg/L
ARW	5/9/2012	09 May 2012	TDS_LAB	Total Dissolved Solids	313	mg/L
ARW	5/10/2010	10 May 2010	TDS_LAB	Total Dissolved Solids	347	mg/L
ARW	3/23/2015	23 Mar 2015	TDS_LAB	Total Dissolved Solids	280	mg/L
ARW	6/17/2015	17 Jun 2015	TDS_LAB	Total Dissolved Solids	300	mg/L
ARW	7/29/2015	29 Jul 2015	TDS_LAB	Total Dissolved Solids	300	mg/L
ARW	5/17/2011	17 May 2011	57-12-5W	Cyanide (WAD)	< 0.0100	mg/L
ARW	5/9/2012	09 May 2012	57-12-5W	Cyanide (WAD)	< 0.0100	mg/L
ARW	5/10/2010	10 May 2010	57-12-5W	Cyanide (WAD)	< 0.010	mg/L
ARW	3/23/2015	23 Mar 2015	57-12-5W	Cyanide (WAD)	< 0.010	mg/L
ARW	6/17/2015	17 Jun 2015	57-12-5W	Cyanide (WAD)	< 0.010	mg/L
ARW	7/29/2015	29 Jul 2015	57-12-5W	Cyanide (WAD)	< 0.010	mg/L

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SYS_LOC_	SAMPLE_DATE	SAMPLEDATE	CAS_RN	CHEMICAL_NAME	REPORT_RESULT_TEX	REPORT_RESULT_UNIT
ARW	5/17/2011	17 May 2011	7440-66-6	Zinc	0.298	mg/L
ARW	5/17/2011	17 May 2011	7440-66-6	Zinc	0.295	mg/L
ARW	5/9/2012	09 May 2012	7440-66-6	Zinc	0.441	mg/L
ARW	5/9/2012	09 May 2012	7440-66-6	Zinc	0.396	mg/L
ARW	5/10/2010	10 May 2010	7440-66-6	Zinc	0.350	mg/L
ARW	5/10/2010	10 May 2010	7440-66-6	Zinc	0.336	mg/L
ARW	3/23/2015	23 Mar 2015	7440-66-6	Zinc	< 0.010	mg/L
ARW	6/17/2015	17 Jun 2015	7440-66-6	Zinc	0.57	mg/L
ARW	7/29/2015	29 Jul 2015	7440-66-6	Zinc	< 0.010	mg/L
ARW	3/23/2015	23 Mar 2015	PH_FIELD	pH-Field	6.81	SU
ARW	6/17/2015	17 Jun 2015	PH_FIELD	pH-Field	6.84	SU
ARW	7/29/2015	29 Jul 2015	PH_FIELD	pH-Field	7.11	SU
ARW	10/22/2015	22 Oct 2015	PH_FIELD	pH-Field	6.75	SU

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Permit No.:						
Station Name			**BMM WELL 1**	**BMM WELL 1**	**BMM WELL 1**	**BMM WELL 1**
Station Code			**WELL_1**	**WELL_1**	**WELL_1**	**WELL_1**
Sampling Session			**1st QTR 2012**	**4th QTR 2012**	**4th QTR 2013**	**4th QTR 2014**
Collect Date			**February 09, 2012**	**October 04, 2012**	**November 05, 2013**	**November 06, 2014**
Lab Name			**WET**	**SVL**	**SVL**	**WET**
Lab Test Date			**February 10, 2012**	**October 12, 2012**	**November 11, 2013**	**November 11, 2014**
Lab Reference Number			**1202191-001**	**W2J0261-01**	**W3K0166-01**	**1411199-001**
Constituent		**Standards***	**1st QTR 2012**	**4th QTR 2012**	**4th QTR 2013**	**4th QTR 2014**
Alkalinity Bicarbonate	mg/l		130	114	107	100
Aluminum-Dissolved	mg/L	0.2	0.082	< 0.080	< 0.040	< 0.045
Antimony-Dissolved	mg/L	0.006	< 0.0010	< 0.00300	< 0.00300	< 0.0025
Arsenic-Dissolved	mg/L	0.01	0.012	0.014	0.0162	0.01
Barium-Dissolved	mg/L	2	0.37	0.394	0.368	0.25
Beryllium-Dissolved	mg/L	0.004	< 0.0010	< 0.0020	< 0.0010	< 0.0010
Cadmium-Dissolved	mg/L	0.005	< 0.0010	< 0.0020	< 0.0010	< 0.0010
Calcium-Dissolved	mg/L		26	29.4	27	31
Chloride	mg/L	400	33	30.4	32.2	34
Chromium-Dissolved	mg/L	0.1	< 0.0050	< 0.0060	< 0.0030	< 0.0050
Copper-Dissolved	mg/L	1	< 0.050	< 0.010	0.009	< 0.050
Cyanide (WAD)	mg/L	0.2	< 0.010	< 0.0100	< 0.0100	< 0.010
Fluoride	mg/L	4	0.14	0.2	0.25	0.15
Iron-Dissolved	mg/L	0.6	0.46	< 0.060	< 0.030	0.31
Lead-Dissolved	mg/L	0.015	0.033	< 0.00300	< 0.00300	< 0.0025
Magnesium-Dissolved	mg/L	150	17	18.5	17.1	21
Manganese-Dissolved	mg/L	0.1	0.012	< 0.0040	< 0.0020	0.016
Mercury-Dissolved	mg/L	0.002	< 0.00010	< 0.00020	< 0.00020	< 0.00010
Nickel-Dissolved	mg/L	0.1	< 0.010	< 0.010	< 0.005	< 0.010
Nitrate/Nitrite as N	mg/L	10	2.7	2.95	2.84	1.8
Nitrogen Total as N	mg/L	10	2.7	2.95	2.84	1.8
pH-Field	pH unit	6.5-8.5		7.75	7.91	7.12
Potassium-Dissolved	mg/L		5.7	6.02	5.98	4.7
Selenium-Dissolved	mg/L	0.05	< 0.0050	0.00259	< 0.00250	< 0.0050
Silver-Dissolved	mg/L	0.1	< 0.0050	< 0.0050	< 0.0025	< 0.0050
Sodium-Dissolved	mg/L		10	10.8	10.9	11
Sulfate as SO4	mg/L	500	8.7	10.1	10.2	9.3
Thallium-Dissolved	mg/L	0.002	< 0.0010	< 0.00100	< 0.00100	< 0.0010
Total Alkalinity	mg/l		110	114	107	100
Total Dissolved Solids-Lab	mg/L	1000	230	232	220	240
Zinc-Dissolved	mg/L	5	0.04	< 0.0100	< 0.0050	0.042
Drinking Water Standards (For reference purposes only)						

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Permit No.:								
Station Name			**BMM WELL 1**	**BMM WELL 1**	**BMM WELL 1**	**BMM WELL 1**	**BMM WELL 1**	**BMM WELL 1**
Station Code			**WELL_1**	**WELL_1**	**WELL_1**	**WELL_1**	**WELL_1**	**WELL_1**
Sampling Session			**2nd QTR 2010**	**4th QTR 2010**	**1st QTR 2012**	**4th QTR 2012**	**4th QTR 2013**	**4th QTR 2014**
Collect Date			**May 10, 2010**	**October 21, 2010**	**February 09, 2012**	**October 04, 2012**	**November 05, 2013**	**November 06, 2014**
Lab Name			**SVL**	**SVL**	**WET**	**SVL**	**SVL**	**WET**
Lab Test Date			**May 18, 2010**	**October 27, 2010**	**February 10, 2012**	**October 12, 2012**	**November 11, 2013**	**November 11, 2014**
Lab Reference Number			**W0E0290-03**	**W0J0646-17**	**1202191-001**	**W2J0261-01**	**W3K0166-01**	**1411199-001**
Constituent		**Standards***	**2nd QTR 2010**	**4th QTR 2010**	**1st QTR 2012**	**4th QTR 2012**	**4th QTR 2013**	**4th QTR 2014**
Alkalinity Bicarbonate	mg/l		105	103	130	114	107	100
Aluminum-Dissolved	mg/L	0.2	< 0.080	< 0.080	0.082	< 0.080	< 0.040	< 0.045
Antimony-Dissolved	mg/L	0.006	< 0.00300	< 0.00300	< 0.0010	< 0.00300	< 0.00300	< 0.0025
Arsenic-Dissolved	mg/L	0.01	0.0136	0.0076	0.012	0.014	0.0162	0.01
Barium-Dissolved	mg/L	2	0.348	0.362	0.37	0.394	0.368	0.25
Beryllium-Dissolved	mg/L	0.004	< 0.00200	< 0.00200	< 0.0010	< 0.0020	< 0.0010	< 0.0010
Cadmium-Dissolved	mg/L	0.005	< 0.0020	< 0.0020	< 0.0010	< 0.0020	< 0.0010	< 0.0010
Calcium-Dissolved	mg/L		26.2	26.7	26	29.4	27	31
Chloride	mg/L	400	32.5	33.7	33	30.4	32.2	34
Chromium-Dissolved	mg/L	0.1	< 0.0060	< 0.0060	< 0.0050	< 0.0060	< 0.0030	< 0.0050
Copper-Dissolved	mg/L	1	< 0.010	< 0.010	< 0.050	< 0.010	0.009	< 0.050
Cyanide (WAD)	mg/L	0.2	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.0100	< 0.010
Fluoride	mg/L	4	0.222	0.198	0.14	0.2	0.25	0.15
Iron-Dissolved	mg/L	0.6	0.104	0.47	0.46	< 0.060	< 0.030	0.31
Lead-Dissolved	mg/L	0.015	< 0.00300	< 0.00300	0.033	< 0.00300	< 0.00300	< 0.0025
Magnesium-Dissolved	mg/L	150	16.8	16.1	17	18.5	17.1	21
Manganese-Dissolved	mg/L	0.1	0.0182	0.0463	0.012	< 0.0040	< 0.0020	0.016
Mercury-Dissolved	mg/L	0.002	< 0.00020	< 0.00020	< 0.00010	< 0.00020	< 0.00020	< 0.00010
Nickel-Dissolved	mg/L	0.1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.005	< 0.010
Nitrate/Nitrite as N	mg/L	10	2.59	2.35	2.7	2.95	2.84	1.8
Nitrogen Total as N	mg/L	10			2.7	2.95	2.84	1.8
pH-Field	pH unit	6.5-8.5				7.75	7.91	7.12
Potassium-Dissolved	mg/L		5.21	5.33	5.7	6.02	5.98	4.7
Selenium-Dissolved	mg/L	0.05	< 0.00300	< 0.00300	< 0.0050	0.00259	< 0.00250	< 0.0050
Silver-Dissolved	mg/L	0.1	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0025	< 0.0050
Sodium-Dissolved	mg/L		9.7	9.96	10	10.8	10.9	11
Sulfate as SO4	mg/L	500	10.1	9.59	8.7	10.1	10.2	9.3
Thallium-Dissolved	mg/L	0.002	< 0.00100	< 0.00100	< 0.0010	< 0.00100	< 0.00100	< 0.0010
Total Alkalinity	mg/l		105	103	110	114	107	100
Total Dissolved Solids-Lab	mg/L	1000	242	225	230	232	220	240
Zinc-Dissolved	mg/L	5	< 0.0100	< 0.0100	0.04	< 0.0100	< 0.0050	0.042
Drinking Water Standards (For reference purposes only)								

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Permit No.:						
Station Name			**BMM WELL 2**	**BMM WELL 2**	**BMM WELL 2**	**BMM WELL 2**
Station Code			**WELL_2**	**WELL_2**	**WELL_2**	**WELL_2**
Sampling Session			**1st QTR 2012**	**4th QTR 2012**	**4th QTR 2013**	**4th QTR 2014**
Collect Date			**February 09, 2012**	**October 04, 2012**	**November 05, 2013**	**November 06, 2014**
Lab Name			**WET**	**SVL**	**SVL**	**WET**
Lab Test Date			**February 10, 2012**	**October 12, 2012**	**November 11, 2013**	**November 11, 2014**
Lab Reference Number			**1202191-002**	**W2J0261-02**	**W3K0166-02**	**1411199-002**
Constituent		**Standards***	**1st QTR 2012**	**4th QTR 2012**	**4th QTR 2013**	**4th QTR 2014**
Alkalinity Bicarbonate	mg/l		120	102	99.5	99
Aluminum-Dissolved	mg/L	0.2	< 0.045	< 0.080	< 0.040	< 0.045
Antimony-Dissolved	mg/L	0.006	0.0011	< 0.00300	< 0.00300	< 0.0025
Arsenic-Dissolved	mg/L	0.01	0.045	0.0251	0.0286	0.042
Barium-Dissolved	mg/L	2	0.28	0.241	0.24	0.27
Beryllium-Dissolved	mg/L	0.004	< 0.0010	< 0.0020	< 0.0010	< 0.0010
Cadmium-Dissolved	mg/L	0.005	< 0.0010	< 0.0020	< 0.0010	< 0.0010
Calcium-Dissolved	mg/L		23	28.9	25.7	27
Chloride	mg/L	400	25	29.2	29.5	26
Chromium-Dissolved	mg/L	0.1	< 0.0050	< 0.0060	< 0.0030	< 0.0050
Copper-Dissolved	mg/L	1	< 0.050	< 0.010	0.007	< 0.050
Cyanide (WAD)	mg/L	0.2	< 0.010	< 0.0100	< 0.0100	< 0.010
Fluoride	mg/L	4	0.16	0.18	0.18	0.15
Iron-Dissolved	mg/L	0.6	6.4	< 0.060	< 0.030	0.021
Lead-Dissolved	mg/L	0.015	< 0.0010	< 0.00300	< 0.00300	< 0.0025
Magnesium-Dissolved	mg/L	150	15	18.4	16.6	16
Manganese-Dissolved	mg/L	0.1	0.066	< 0.0040	0.0033	0.0072
Mercury-Dissolved	mg/L	0.002	< 0.00010	< 0.00020	< 0.00020	< 0.00010
Nickel-Dissolved	mg/L	0.1	< 0.010	< 0.010	< 0.005	< 0.010
Nitrate/Nitrite as N	mg/L	10	1.8	2.79	2.47	2
Nitrogen Total as N	mg/L	10	1.8	2.79	2.47	2
pH-Field	pH unit	6.5-8.5		8.2	7.99	7.7
Potassium-Dissolved	mg/L		6.3	5.87	6.06	7.2
Selenium-Dissolved	mg/L	0.05	< 0.0050	< 0.00250	0.00255	< 0.0050
Silver-Dissolved	mg/L	0.1	< 0.0050	< 0.0050	< 0.0025	< 0.0050
Sodium-Dissolved	mg/L		8	9.04	8.98	9.3
Sulfate as SO4	mg/L	500	6.4	14.9	13.4	9.6
Thallium-Dissolved	mg/L	0.002	< 0.0010	< 0.00100	< 0.00100	< 0.0010
Total Alkalinity	mg/l		100	102	99.5	99
Total Dissolved Solids-Lab	mg/L	1000	200	230	232	200
Zinc-Dissolved	mg/L	5	< 0.010	< 0.0100	< 0.0050	0.017
Drinking Water Standards (For reference purposes only)						

Bald Mountain
Monitoring Report

Permit No.:								
Station Name			**BMM WELL 2**	**BMM WELL 2**	**BMM WELL 2**	**BMM WELL 2**	**BMM WELL 2**	**BMM WELL 2**
Station Code			**WELL_2**	**WELL_2**	**WELL_2**	**WELL_2**	**WELL_2**	**WELL_2**
Sampling Session			**2nd QTR 2010**	**4th QTR 2010**	**1st QTR 2012**	**4th QTR 2012**	**4th QTR 2013**	**4th QTR 2014**
Collect Date			**May 10, 2010**	**October 21, 2010**	**February 09, 2012**	**October 04, 2012**	**November 05, 2013**	**November 06, 2014**
Lab Name			**SVL**	**SVL**	**WET**	**SVL**	**SVL**	**WET**
Lab Test Date			**May 18, 2010**	**October 27, 2010**	**February 10, 2012**	**October 12, 2012**	**November 11, 2013**	**November 11, 2014**
Lab Reference Number			**W0E0290-04**	**W0J0646-18**	**1202191-002**	**W2J0261-02**	**W3K0166-02**	**1411199-002**
Constituent		**Standards***	**2nd QTR 2010**	**4th QTR 2010**	**1st QTR 2012**	**4th QTR 2012**	**4th QTR 2013**	**4th QTR 2014**
Alkalinity Bicarbonate	mg/l		104	99.9	120	102	99.5	99
Aluminum-Dissolved	mg/L	0.2	< 0.080	< 0.080	< 0.045	< 0.080	< 0.040	< 0.045
Antimony-Dissolved	mg/L	0.006	< 0.00300	< 0.00300	0.0011	< 0.00300	< 0.00300	< 0.0025
Arsenic-Dissolved	mg/L	0.01	0.0269	0.0405	0.045	0.0251	0.0286	0.042
Barium-Dissolved	mg/L	2	0.238	0.292	0.28	0.241	0.24	0.27
Beryllium-Dissolved	mg/L	0.004	< 0.00200	< 0.00200	< 0.0010	< 0.0020	< 0.0010	< 0.0010
Cadmium-Dissolved	mg/L	0.005	< 0.0020	< 0.0020	< 0.0010	< 0.0020	< 0.0010	< 0.0010
Calcium-Dissolved	mg/L		27.1	25.5	23	28.9	25.7	27
Chloride	mg/L	400	31.3	27.6	25	29.2	29.5	26
Chromium-Dissolved	mg/L	0.1	< 0.0060	< 0.0060	< 0.0050	< 0.0060	< 0.0030	< 0.0050
Copper-Dissolved	mg/L	1	< 0.010	< 0.010	< 0.050	< 0.010	0.007	< 0.050
Cyanide (WAD)	mg/L	0.2	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.0100	< 0.010
Fluoride	mg/L	4	0.197	0.2	0.16	0.18	0.18	0.15
Iron-Dissolved	mg/L	0.6	0.067	0.18	6.4	< 0.060	< 0.030	0.021
Lead-Dissolved	mg/L	0.015	< 0.00300	< 0.00300	< 0.0010	< 0.00300	< 0.00300	< 0.0025
Magnesium-Dissolved	mg/L	150	16.9	14.7	15	18.4	16.6	16
Manganese-Dissolved	mg/L	0.1	0.008	0.0179	0.066	< 0.0040	0.0033	0.0072
Mercury-Dissolved	mg/L	0.002	< 0.00020	< 0.00020	< 0.00010	< 0.00020	< 0.00020	< 0.00010
Nickel-Dissolved	mg/L	0.1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.005	< 0.010
Nitrate/Nitrite as N	mg/L	10	1.34	2.2	1.8	2.79	2.47	2
Nitrogen Total as N	mg/L	10			1.8	2.79	2.47	2
pH-Field	pH unit	6.5-8.5				8.2	7.99	7.7
Potassium-Dissolved	mg/L		5.79	7	6.3	5.87	6.06	7.2
Selenium-Dissolved	mg/L	0.05	< 0.00300	< 0.00300	< 0.0050	< 0.00250	0.00255	< 0.0050
Silver-Dissolved	mg/L	0.1	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0025	< 0.0050
Sodium-Dissolved	mg/L		9.22	9.09	8	9.04	8.98	9.3
Sulfate as SO4	mg/L	500	18.6	13.1	6.4	14.9	13.4	9.6
Thallium-Dissolved	mg/L	0.002	< 0.00100	< 0.00100	< 0.0010	< 0.00100	< 0.00100	< 0.0010
Total Alkalinity	mg/l		104	99.9	100	102	99.5	99
Total Dissolved Solids-Lab	mg/L	1000	257	215	200	230	232	200
Zinc-Dissolved	mg/L	5	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.0050	0.017
Drinking Water Standards (For reference purposes only)								

Bald Mountain
Monitoring Report

Permit No.:			
Station Name			**MOONEY BASIN WELL**
Station Code			**MBW**
Sampling Session			**2nd QTR 2010**
Collect Date			**May 10, 2010**
Lab Name			**SVL**
Lab Test Date			**May 18, 2010**
Lab Reference Number			**W0E0290-08**
Constituent		**Standards***	**2nd QTR 2010**
Alkalinity Bicarbonate	mg/l		119
Aluminum-Dissolved	mg/L	0.2	< 0.080
Antimony-Dissolved	mg/L	0.006	< 0.00300
Arsenic-Dissolved	mg/L	0.01	< 0.00300
Barium-Dissolved	mg/L	2	0.265
Beryllium-Dissolved	mg/L	0.004	< 0.00200
Cadmium-Dissolved	mg/L	0.005	< 0.0020
Calcium-Dissolved	mg/L		32.9
Chloride	mg/L	400	20.3
Chromium-Dissolved	mg/L	0.1	< 0.0060
Copper-Dissolved	mg/L	1	< 0.010
Cyanide (WAD)	mg/L	0.2	< 0.010
Fluoride	mg/L	4	0.19
Iron-Dissolved	mg/L	0.6	< 0.060
Lead-Dissolved	mg/L	0.015	< 0.00300
Magnesium-Dissolved	mg/L	150	13.3
Manganese-Dissolved	mg/L	0.1	0.0497
Mercury	mg/L	0.002	< 0.00020
Mercury-Dissolved	mg/L	0.002	< 0.00020
Nickel-Dissolved	mg/L	0.1	< 0.010
Nitrate/Nitrite as N	mg/L	10	2.94
Potassium-Dissolved	mg/L		6.4
Selenium-Dissolved	mg/L	0.05	< 0.00300
Silver-Dissolved	mg/L	0.1	< 0.0050
Sodium-Dissolved	mg/L		9.25
Sulfate as SO4	mg/L	500	8.25
Thallium-Dissolved	mg/L	0.002	< 0.00100
Total Alkalinity	mg/l		130
Total Dissolved Solids-Lab	mg/L	1000	254
Zinc-Dissolved	mg/L	5	0.0455
Drinking Water Standards (For reference purposes only)			

BARRICK
BALD MOUNTAIN

Bald Mountain
Monitoring Report

Permit No.: NEV98100 - Mooney

Station Name			MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1	MOONEY MONITOR WELL 1
Station Code			MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1	MMW 1
Sampling Session			2nd QTR 2009	2nd QTR 2009	3rd QTR 2009	4th QTR 2009	1st QTR 2010	2nd QTR 2010	3rd QTR 2010	4th QTR 2010	1st QTR 2011	2nd QTR 2011	3rd QTR 2011	4th QTR 2011	1st QTR 2012	2nd QTR 2012	3rd QTR 2012	4th QTR 2012	2nd QTR 2013	3rd QTR 2013	4th QTR 2013	1st QTR 2014	2nd QTR 2014	3rd QTR 2014	4th QTR 2014	1st QTR 2015	2nd QTR 2015	3rd QTR 2015	4th QTR 2015
Collect Date			May 06, 2009	June 02, 2009	September 16, 2009	December 01, 2009	February 23, 2010	May 19, 2010	September 14, 2010	October 06, 2010	January 18, 2011	May 11, 2011	August 11, 2011	November 14, 2011	January 25, 2012	April 16, 2012	July 19, 2012	October 09, 2012	April 02, 2013	September 09, 2013	November 07, 2013	February 20, 2014	June 04, 2014	July 30, 2014	November 18, 2014	March 17, 2015	June 17, 2015	August 05, 2015	October 22, 2015
Lab Name			SVL	SVL	SVL	SVL	SVL	SVL	SVL	SVL	SVL	SVL	SVL	SVL	SVL	SVL	SVL	SVL	SVL	SVL	SVL	SVL	WET	WET	WET	WET	WET	WET	FLD
Lab Test Date			May 08, 2009	June 05, 2009	September 18, 2009	December 04, 2009	March 09, 2010	June 01, 2010	September 20, 2010	October 15, 2010	January 25, 2011	May 20, 2011	August 16, 2011	November 22, 2011	February 01, 2012	April 23, 2012	July 25, 2012	October 15, 2012	April 10, 2013	September 16, 2013	November 15, 2013	February 26, 2014	June 06, 2014	August 01, 2014	November 25, 2014	March 23, 2015	June 19, 2015	August 18, 2015	October 22, 2015
Lab Reference Number			W9E0179-01	W9F0118-01	W9I0498-01	W8L0082-01	W0B0497-03	W0E0534-03	W0I0440-03	W0J0300-03	W1A0346-01	W1E0375-01	W1H0358-01	W1K0422-01	W2A0476-01	W2D0386-01	W2G0518-01	W2J0355-03	W3D0171-01	W30279-02	W3K0251-01	W4B0364-01	1406196-001	1408030-002	1411610-001	1503599-003	1506586-002	1508183-001	
Constituent		**Standards***	**2nd QTR 2009**	**2nd QTR 2009**	**3rd QTR 2009**	**4th QTR 2009**	**1st QTR 2010**	**2nd QTR 2010**	**3rd QTR 2010**	**4th QTR 2010**	**1st QTR 2011**	**2nd QTR 2011**	**3rd QTR 2011**	**4th QTR 2011**	**1st QTR 2012**	**2nd QTR 2012**	**3rd QTR 2012**	**4th QTR 2012**	**2nd QTR 2013**	**3rd QTR 2013**	**4th QTR 2013**	**1st QTR 2014**	**2nd QTR 2014**	**3rd QTR 2014**	**4th QTR 2014**	**1st QTR 2015**	**2nd QTR 2015**	**3rd QTR 2015**	**4th QTR 2015**
Alkalinity Bicarbonate	mg/l		101	118	117	129	130	119	114	114	120	119	119	115	117	114	127	123	118	114	123	125	160	130	130	120	120	110	
Aluminum-Dissolved	mg/L	0.2	0.65	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.040	< 0.040	< 0.040	< 0.040	< 0.045	< 0.045	< 0.045	< 0.045	< 0.045	< 0.045	
Antimony-Dissolved	mg/L	0.006	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	
Arsenic-Dissolved	mg/L	0.01	0.00696	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
Barium-Dissolved	mg/L	2	0.213	0.117	0.128	0.126	0.147	0.141	0.137	0.144	0.15	0.143	0.148	0.15	0.146	0.139	0.128	0.144	0.15	0.144	0.158	0.143	0.14	0.14	0.15	0.16	0.17	0.17	
Beryllium-Dissolved	mg/L	0.004	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	
Cadmium-Dissolved	mg/L	0.005	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	
Calcium-Dissolved	mg/L		44.6	45.8	45.7	43	47.7	46.9	43.2	47.6	50.2	45.5	47.5	49.1	45.5	47.3	42.6	45.3	46.1	46.6	47.9	47.2	49	46	50	53	50	52	
Chloride	mg/L	400	16.1	16.6	16.4	17.2	23.5	18	17	17.6	20.1	17.8	17.7	16.8	17.3	16.3	16.1	15.6	17.4	16.2	17.1	16.6	17	17	18	18	18	18	
Chromium-Dissolved	mg/L	0.1	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
Copper-Dissolved	mg/L	1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	
Cyanide (WAD)	mg/L	0.2	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
Fluoride	mg/L	4	0.199	0.127	0.16	0.1	0.102	0.193	0.154	0.118	0.17	0.23	0.19	0.13	0.18	0.16	0.13	0.17	0.16	0.17	0.26	0.13	0.14	0.12	0.17	0.12	0.18	< 0.10	
Iron-Dissolved	mg/L	0.6	1.48	< 0.060	< 0.060	0.159	0.192	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	0.226	< 0.060	0.156	0.331	0.097	0.204	0.154	0.151	0.108	0.13	< 0.010	0.11	0.15	0.11	0.041	
Lead-Dissolved	mg/L	0.015	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	
Magnesium-Dissolved	mg/L	150	4.87	5.03	4.26	4.01	4.49	4.25	3.89	4.29	4.41	4.19	4.22	4.44	4.07	4.38	3.77	4.23	4.12	4.14	4.15	4.1	4.3	4.3	4.5	4.8	4.5	4.7	
Manganese-Dissolved	mg/L	0.1	0.163	0.105	0.0563	0.0581	0.0338	0.0192	0.0255	0.0278	0.0264	0.0326	0.03	0.0323	0.0257	0.0287	0.0233	0.0354	0.0517	0.0268	0.0279	0.0311	0.013	0.026	0.023	0.025	0.033	0.029	
Mercury-Dissolved	mg/L	0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.00054	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00010	0.0001	< 0.00010	< 0.00010	< 0.00010	< 0.00010	
Nickel-Dissolved	mg/L	0.1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	
Nitrate/Nitrite as N	mg/L	10	3.05	2.25	2.25	1.6	2.13	2.4	2.35	2.48	2.56	2.37	2.23	3.16	2.56	2.42	1.71	2.44	2.61	2.65	3.12	3.41	1.4	0.92	1.9	2.9	1.7	2.2	
Nitrogen Total as N	mg/L	10												3.16	2.56	2.42	1.71	2.44	2.61	2.65	3.12	3.41	1.4	0.92	1.9	2.9	1.7	2.2	
pH-Field	pH unit	6.5-8.5																7.18	7.15	7.15	7.08		7.15	7.55	7.46	7.04	7.71	6.92	6.76
Potassium-Dissolved	mg/L		6.1	6.04	6.4	5.89	6.79	6.47	6.35	6.74	6.64	6.37	6.56	6.71	6.38	6.49	5.86	6.63	6.42	6.27	6.58	6.22	6.9	6.5	6.6	6.8	6.5	6.8	
Selenium-Dissolved	mg/L	0.05	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
Silver-Dissolved	mg/L	0.1	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	
Sodium-Dissolved	mg/L		18.2	14.7	12	10.8	12	12	11.1	12.5	11.1	11.5	11.4	11.6	11.1	11.6	11.1	11.9	10.9	10.9	11.4	10.8	12	12	12	12	12	12	
Sulfate as SO4	mg/L	500	23.5	25.7	21.9	23.4	22.6	23.1	21	21.2	22.5	20.7	20.8	20.9	21.1	20.3	20.8	21.4	22.9	20.8	23.4	22.7	20	21	21	20	21	20	
Thallium-Dissolved	mg/L	0.002	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	
Total Alkalinity	mg/l		114	118	117	129	130	119	114	114	120	119	119	115	117	114	127	123	118	114	123	125	130	130	130	120	120	110	
Total Dissolved Solids-Lab	mg/L	1000	217	234	253	214	261	254	862	237	229	238	215	244	222	203	229	258	243	225	223	261	210	230	240	290	220	220	
Zinc-Dissolved	mg/L	5	< 0.0100	0.239	2.05	7.81	6.19	0.739	0.547	0.619	0.671	1.17	0.53	0.555	0.504	0.425	4.18	0.605	0.555	0.455	0.532	0.399	2.9	1.3	0.44	< 0.010	0.67	1.6	
Drinking Water Standards (For reference purposes only)																													

Bald Mountain
Monitoring Report

Permit No.: NEV98100 - Mooney

Station Name			**MOONEY MONITOR WELL 2**	**MOONEY MONITOR WELL 2**	**MOONEY MONITOR WELL 2**	**MOONEY MONITOR WELL 2**	**MOONEY MONITOR WELL 2**	**MOONEY MONITOR WELL 2**	**MOONEY MONITOR WELL 2**	**MOONEY MONITOR WELL 2**
Station Code			**MMW_2**	**MMW_2**	**MMW_2**	**MMW_2**	**MMW_2**	**MMW_2**	**MMW_2**	**MMW_2**
Sampling Session			**2nd QTR 2009**	**2nd QTR 2009**	**3rd QTR 2009**	**4th QTR 2009**	**1st QTR 2010**	**2nd QTR 2010**	**4th QTR 2010**	**2nd QTR 2013**
Collect Date			**May 08, 2009**	**June 02, 2009**	**September 16, 2009**	**December 01, 2009**	**February 23, 2010**	**May 19, 2010**	**October 13, 2010**	**April 22, 2013**
Lab Name			**SVL**	**SVL**	**SVL**	**SVL**	**SVL**	**SVL**	**SVL**	**WET**
Lab Test Date			**May 14, 2009**	**June 05, 2009**	**September 18, 2009**	**December 07, 2009**	**March 10, 2010**	**June 01, 2010**	**October 20, 2010**	**April 24, 2013**
Lab Reference Number			**W9E0267-01**	**W9F0118-02**	**W9I0498-02**	**W9L0082-02**	**W0B0497-04**	**W0E0534-04**	**W0J0464-01**	**1304447-001**
Constituent		**Standards***	**2nd QTR 2009**	**2nd QTR 2009**	**3rd QTR 2009**	**4th QTR 2009**	**1st QTR 2010**	**2nd QTR 2010**	**4th QTR 2010**	**2nd QTR 2013**
Alkalinity Bicarbonate	mg/l		200	< 1.0	< 1.0	< 1.0		< 1.0	< 1.0	160
Aluminum-Dissolved	mg/L	0.2	0.933	< 0.080	0.18	0.176	0.234	< 0.080	0.119	< 0.045
Antimony-Dissolved	mg/L	0.006	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.0025
Arsenic-Dissolved	mg/L	0.01	0.00387	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.0050
Barium-Dissolved	mg/L	2	0.679	0.588	0.522	0.51	0.636	1.39	1.2	0.082
Beryllium-Dissolved	mg/L	0.004	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.00200	< 0.0010
Cadmium-Dissolved	mg/L	0.005	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0010
Calcium-Dissolved	mg/L		381	154	123	117	163	336	243	56
Chloride	mg/L	400	19.2	14.4	15.1	14	18.3	13.9	14.4	17
Chromium-Dissolved	mg/L	0.1	0.0353	0.0065	0.0982	0.105	0.0293	< 0.0060	< 0.0060	< 0.0050
Copper-Dissolved	mg/L	1	0.012	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.050
Cyanide (WAD)	mg/L	0.2	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.050
Fluoride	mg/L	4	0.273	0.613	0.158	0.35	0.157	0.14	0.266	< 0.10
Iron-Dissolved	mg/L	0.6	0.691	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	0.4
Lead-Dissolved	mg/L	0.015	< 0.00300	< 0.00300	0.0209	0.0101	0.0144	0.0629	0.0201	< 0.0025
Magnesium-Dissolved	mg/L	150	0.87	0.077	< 0.060	< 0.060	< 0.060	< 0.060	< 0.060	6.4
Manganese-Dissolved	mg/L	0.1	0.0558	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0050
Mercury-Dissolved	mg/L	0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00010
Nickel-Dissolved	mg/L	0.1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Nitrate/Nitrite as N	mg/L	10	2.44	2.34	2.15	2.1	2.07	1.64	0.782	3.4
Nitrogen Total as N	mg/L	10								3.4
Potassium-Dissolved	mg/L		14.4	9.43	9.09	8.38	9.15	15.8	13.3	6
Selenium-Dissolved	mg/L	0.05	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.0050
Silver-Dissolved	mg/L	0.1	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Sodium-Dissolved	mg/L		35.8	30.1	28.5	25.8	22.7	34.1	27.1	13
Sulfate as SO4	mg/L	500	44.6	11.3	9.84	10.2	9.22	5.73	3.9	15
Thallium-Dissolved	mg/L	0.002	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.0010
Total Alkalinity	mg/l		974	383	355	362		872	688	130
Total Dissolved Solids-Lab	mg/L	1000	968	452	422	518	472	936	764	260
Zinc-Dissolved	mg/L	5	0.0104	< 0.0100	0.294	0.363	0.484	1.23	1.29	< 0.010
Drinking Water Standards (For reference purposes only)										

Bald Mountain
Monitoring Report

Permit No.: NEV98100 - Mooney

Station Name			MOONEY MONITOR WELL 2A (PZ-1057)	MOONEY MONITOR WELL 2A (PZ-1057)	MOONEY MONITOR WELL 2A (PZ-1057)	MOONEY MONITOR WELL 2A (PZ-1057)	MOONEY MONITOR WELL 2A (PZ-1057)	MOONEY MONITOR WELL 2A (PZ-1057)	MOONEY MONITOR WELL 2A (PZ-1057)	MOONEY MONITOR WELL 2A (PZ-1057)	MOONEY MONITOR WELL 2A (PZ-1057)	MOONEY MONITOR WELL 2A (PZ-1057)	MOONEY MONITOR WELL 2A (PZ-1057)	MOONEY MONITOR WELL 2A (PZ-1057)	MOONEY MONITOR WELL 2A (PZ-1057)	MOONEY MONITOR WELL 2A (PZ-1057)
Station Code			MMW_2A	MMW_2A	MMW_2A	MMW_2A	MMW_2A	MMW_2A	MMW_2A	MMW_2A	MMW_2A	MMW_2A	MMW_2A	MMW_2A	MMW_2A	MMW_2A	MMW_2A
Sampling Session			1st QTR 2012	2nd QTR 2012	3rd QTR 2012	4th QTR 2012	1st QTR 2013	2nd QTR 2013	3rd QTR 2013	4th QTR 2013	1st QTR 2014	2nd QTR 2014	3rd QTR 2014	4th QTR 2014	1st QTR 2015	2nd QTR 2015	3rd QTR 2015
Collect Date			March 20, 2012	April 25, 2012	August 22, 2012	November 15, 2012	February 04, 2013	April 22, 2013	August 22, 2013	October 23, 2013	February 18, 2014	May 22, 2014	August 20, 2014	November 20, 2014	March 24, 2015	June 17, 2015	August 13, 2015
Lab Name			SVL	SVL	SVL	SVL	SVL	SVL	SVL	SVL	SVL	WET	WET	WET	WET	WET	WET
Lab Test Date			March 29, 2012	May 01, 2012	August 28, 2012	November 28, 2012	February 08, 2013	April 26, 2013	September 03, 2013	November 06, 2013	February 25, 2014	May 27, 2014	August 22, 2014	November 25, 2014	March 27, 2015	June 19, 2015	August 25, 2015
Lab Reference Number			W2C0487-01	W2D0631-01	W2H0726-01	W2K0484-01	W3B0113-01	W3D0522-01	W3H0753-03	W3K0008-01	W4B0324-01	1405556-002	1408617-002	1411610-002	1503775-004	1506586-003	1508391-003
Constituent		Standards*	1st QTR 2012	2nd QTR 2012	3rd QTR 2012	4th QTR 2012	1st QTR 2013	2nd QTR 2013	3rd QTR 2013	4th QTR 2013	1st QTR 2014	2nd QTR 2014	3rd QTR 2014	4th QTR 2014	1st QTR 2015	2nd QTR 2015	3rd QTR 2015
Alkalinity Bicarbonate	mg/l		141	135	142	144	131	130	130	134	135	160	140	130	130	130	130
Aluminum-Dissolved	mg/L	0.2	< 0.080	< 0.080	< 0.080	< 0.080	< 0.080	< 0.040	< 0.040	< 0.040	< 0.040	< 0.045	< 0.045	< 0.045	< 0.045	< 0.045	< 0.045
Antimony-Dissolved	mg/L	0.006	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
Arsenic-Dissolved	mg/L	0.01	< 0.0030	0.0037	0.0033	0.0035	0.0036	0.0047	0.0041	0.0034	0.003	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Barium-Dissolved	mg/L	2	0.0769	0.0761	0.0761	0.0785	0.077	0.0757	0.0814	0.0748	0.0765	0.08	0.08	0.076	0.081	0.084	0.081
Beryllium-Dissolved	mg/L	0.004	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Cadmium-Dissolved	mg/L	0.005	< 0.0020	< 0.0020	0.0064	< 0.0020	< 0.0020	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Calcium-Dissolved	mg/L		53	48	49	53.5	39.2	48.9	54.7	52.1	51.2	54	48	53	50	53	53
Chloride	mg/L	400	15.8	16.2	16.4	17.6	17.1	17.7	18.5	17.6	17.3	19	18	19	19	20	19
Chromium-Dissolved	mg/L	0.1	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Copper-Dissolved	mg/L	1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Cyanide (WAD)	mg/L	0.2	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Fluoride	mg/L	4	0.16	0.11	< 0.10	0.17	0.18	0.15	0.21	0.15	0.16	0.12	0.11	0.13	0.11	0.12	< 0.10
Iron-Dissolved	mg/L	0.6	0.215	0.095	< 0.060	0.353	< 0.060	0.26	< 0.030	< 0.030	< 0.030	0.013	0.46	0.012	0.03	< 0.020	< 0.020
Lead-Dissolved	mg/L	0.015	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.0025	< 0.0025	< 0.0025	< 0.0025	0.0047	< 0.0025
Magnesium-Dissolved	mg/L	150	5.75	5.49	5.51	6.09	5.45	5.49	6.22	6.02	5.72	5.9	5.7	5.9	6.1	5.8	5.7
Manganese-Dissolved	mg/L	0.1	0.0285	< 0.0040	< 0.0040	0.0067	0.0058	0.0071	< 0.0020	< 0.0020	< 0.0020	< 0.0050	< 0.0050	< 0.0050	0.0052	< 0.0050	< 0.0050
Mercury-Dissolved	mg/L	0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Nickel-Dissolved	mg/L	0.1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Nitrate/Nitrite as N	mg/L	10	4.51	2.42	3.51	3.04	0.531	3.54	4	3.57	4	3.5	0.15	3	0.2	3.3	3.5
Nitrogen Total as N	mg/L	10	4.51	2.42	3.51	3.04	< 0.55	3.54	4	3.57	4	3.5	0.64	3	0.88	3.3	3.5
pH-Field	pH unit	6.5-8.5			7.21	7.34	7.54	7.29	7.74		7.67	7.93	7.26	6.39	7.83	7.21	6.51
Potassium-Dissolved	mg/L		5.46	5.54	5.56	5.59	5.76	5.5	5.81	5.32	5.37	5.9	5.7	5.6	5.9	5.5	5.5
Selenium-Dissolved	mg/L	0.05	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Silver-Dissolved	mg/L	0.1	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Sodium-Dissolved	mg/L		11.2	11.4	11.3	11.3	11.8	11.1	11.8	11.3	11.1	12	11	12	13	12	12
Sulfate as SO4	mg/L	500	15.5	15.4	15.5	16.1	14.8	17.2	16.9	17.2	16.4	16	16	16	14	15	15
Thallium-Dissolved	mg/L	0.002	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Total Alkalinity	mg/l		141	135	142	144	131	130	130	134	135	130	140	130	130	130	130
Total Dissolved Solids-Lab	mg/L	1000	239	218	245	239	237	243	241	255	276	260	240	220	230	230	230
Zinc-Dissolved	mg/L	5	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	0.0065	< 0.0050	< 0.0050	< 0.0050	< 0.010	0.024	< 0.010	< 0.010	< 0.010	< 0.010
Drinking Water Standards (For reference purposes only)																	

Bald Mountain
Monitoring Report

Permit No.: NEV98100 - Mooney

Station Name **Station Code** **Sampling Session** **Collect Date** **Lab Name** **Lab Test Date** **Lab Reference Number** **Constituent**		**Standards***	**MOONEY MONITOR WELL 3** **MMW_3** **2nd QTR 2009** **May 20, 2009** **SVL** **May 29, 2009** **W9E0523-01** **2nd QTR 2009**	**MOONEY MONITOR WELL 3** **MMW_3** **3rd QTR 2009** **September 16, 2009** **SVL** **September 21, 2009** **W9I0498-03** **3rd QTR 2009**	**MOONEY MONITOR WELL 3** **MMW_3** **4th QTR 2009** **November 30, 2009** **SVL** **December 07, 2009** **W9L0082-03** **4th QTR 2009**	**MOONEY MONITOR WELL 3** **MMW_3** **1st QTR 2010** **February 24, 2010** **SVL** **March 05, 2010** **W0C0126-01** **1st QTR 2010**
Aluminum-Dissolved	mg/L	0.2			< 0.080	
Arsenic-Dissolved	mg/L	0.01			0.0102	
Cadmium-Dissolved	mg/L	0.005			< 0.0020	
Chloride	mg/L	400	38.2	26.7	23	25.7
Cyanide (WAD)	mg/L	0.2	< 0.0100	< 0.0100	< 0.0100	< 0.0100
Fluoride	mg/L	4	1.66	1.35	1.21	1.27
Iron-Dissolved	mg/L	0.6			< 0.060	
Manganese-Dissolved	mg/L	0.1			< 0.0040	
Mercury	mg/L	0.002	< 0.00020			
Mercury-Dissolved	mg/L	0.002			< 0.00020	
Nitrate/Nitrite as N	mg/L	10	0.164		0.887	
Sulfate as SO4	mg/L	500	18.4			
Total Dissolved Solids-Lab	mg/L	1000			400	
Zinc-Dissolved	mg/L	5			0.0129	
Drinking Water Standards (For reference purposes only)						

Bald Mountain
Monitoring Report

SYS_LOC_	SAMPLE_DATE	CAS_RN	CHEMICAL_NAME	REPORT_F	REPORT_RESULT_UNIT
MMW_4	2/13/2012	BICARBONATE	Alkalinity Bicarbonate	136	mg CaCO3/L
MMW_4	2/13/2012	BICARBONATE	Alkalinity Bicarbonate	160	mg/L
MMW_4	5/9/2012	BICARBONATE	Alkalinity Bicarbonate	134	mg CaCO3/L
MMW_4	7/25/2012	BICARBONATE	Alkalinity Bicarbonate	144	mg CaCO3/L
MMW_4	10/17/2012	BICARBONATE	Alkalinity Bicarbonate	150	mg CaCO3/L
MMW_4	1/22/2013	BICARBONATE	Alkalinity Bicarbonate	141	mg CaCO3/L
MMW_4	11/18/2014	BICARBONATE	Alkalinity Bicarbonate	150	mg CaCO3/L
MMW_4	11/18/2014	BICARBONATE	Alkalinity Bicarbonate	150	mg CaCO3/L
MMW_4	3/4/2015	BICARBONATE	Alkalinity Bicarbonate	140	mg CaCO3/L
MMW_4	5/26/2015	BICARBONATE	Alkalinity Bicarbonate	140	mg CaCO3/L
MMW_4	9/28/2015	BICARBONATE	Alkalinity Bicarbonate	150	mg CaCO3/L
MMW_4	11/3/2015	BICARBONATE	Alkalinity Bicarbonate	150	mg CaCO3/L
MMW_4	4/23/2013	BICARBONATE	Alkalinity Bicarbonate	142	mg CaCO3/L
MMW_4	8/27/2013	BICARBONATE	Alkalinity Bicarbonate	139	mg CaCO3/L
MMW_4	10/22/2013	BICARBONATE	Alkalinity Bicarbonate	141	mg CaCO3/L
MMW_4	4/29/2014	BICARBONATE	Alkalinity Bicarbonate	170	mg/L
MMW_4	2/18/2014	BICARBONATE	Alkalinity Bicarbonate	146	mg CaCO3/L
MMW_4	7/17/2014	BICARBONATE	Alkalinity Bicarbonate	140	mg CaCO3/L
MMW_4	2/13/2012	ALKALINITY	Total Alkalinity	136	mg CaCO3/L
MMW_4	2/13/2012	ALKALINITY	Total Alkalinity	130	mg CaCO3/L
MMW_4	5/9/2012	ALKALINITY	Total Alkalinity	134	mg CaCO3/L
MMW_4	7/25/2012	ALKALINITY	Total Alkalinity	144	mg CaCO3/L
MMW_4	10/17/2012	ALKALINITY	Total Alkalinity	150	mg CaCO3/L
MMW_4	1/22/2013	ALKALINITY	Total Alkalinity	141	mg CaCO3/L
MMW_4	11/18/2014	ALKALINITY	Total Alkalinity	150	mg CaCO3/L
MMW_4	11/18/2014	ALKALINITY	Total Alkalinity	150	mg CaCO3/L
MMW_4	3/4/2015	ALKALINITY	Total Alkalinity	140	mg CaCO3/L
MMW_4	5/26/2015	ALKALINITY	Total Alkalinity	140	mg CaCO3/L
MMW_4	9/28/2015	ALKALINITY	Total Alkalinity	150	mg CaCO3/L
MMW_4	11/3/2015	ALKALINITY	Total Alkalinity	150	mg CaCO3/L
MMW_4	4/23/2013	ALKALINITY	Total Alkalinity	142	mg CaCO3/L
MMW_4	8/27/2013	ALKALINITY	Total Alkalinity	139	mg CaCO3/L
MMW_4	10/22/2013	ALKALINITY	Total Alkalinity	141	mg CaCO3/L
MMW_4	4/29/2014	ALKALINITY	Total Alkalinity	140	mg CaCO3/L
MMW_4	2/18/2014	ALKALINITY	Total Alkalinity	146	mg CaCO3/L
MMW_4	7/17/2014	ALKALINITY	Total Alkalinity	140	mg CaCO3/L
MMW_4	2/13/2012	7429-90-5	Aluminum	< 0.045	mg/L
MMW_4	2/13/2012	7429-90-5	Aluminum	< 0.080	mg/L
MMW_4	5/9/2012	7429-90-5	Aluminum	< 0.080	mg/L
MMW_4	7/25/2012	7429-90-5	Aluminum	< 0.080	mg/L
MMW_4	10/17/2012	7429-90-5	Aluminum	< 0.080	mg/L
MMW_4	1/22/2013	7429-90-5	Aluminum	< 0.080	mg/L
MMW_4	11/18/2014	7429-90-5	Aluminum	< 0.045	mg/L
MMW_4	11/18/2014	7429-90-5	Aluminum	< 0.045	mg/L
MMW_4	3/4/2015	7429-90-5	Aluminum	< 0.045	mg/L

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MMW_4	5/26/2015	7429-90-5	Aluminum	< 0.045	mg/L
MMW_4	9/28/2015	7429-90-5	Aluminum	< 0.045	mg/L
MMW_4	11/3/2015	7429-90-5	Aluminum	< 0.045	mg/L
MMW_4	4/23/2013	7429-90-5	Aluminum	< 0.040	mg/L
MMW_4	8/27/2013	7429-90-5	Aluminum	< 0.040	mg/L
MMW_4	10/22/2013	7429-90-5	Aluminum	< 0.040	mg/L
MMW_4	2/18/2014	7429-90-5	Aluminum	< 0.040	mg/L
MMW_4	4/29/2014	7429-90-5	Aluminum	< 0.045	mg/L
MMW_4	7/17/2014	7429-90-5	Aluminum	< 0.045	mg/L
MMW_4	2/13/2012	7440-36-0	Antimony	< 0.0010	mg/L
MMW_4	2/13/2012	7440-36-0	Antimony	< 0.00300	mg/L
MMW_4	5/9/2012	7440-36-0	Antimony	< 0.00300	mg/L
MMW_4	7/25/2012	7440-36-0	Antimony	< 0.00300	mg/L
MMW_4	10/17/2012	7440-36-0	Antimony	< 0.00300	mg/L
MMW_4	1/22/2013	7440-36-0	Antimony	< 0.00300	mg/L
MMW_4	11/18/2014	7440-36-0	Antimony	< 0.0025	mg/L
MMW_4	11/18/2014	7440-36-0	Antimony	< 0.0025	mg/L
MMW_4	3/4/2015	7440-36-0	Antimony	< 0.0025	mg/L
MMW_4	5/26/2015	7440-36-0	Antimony	< 0.0025	mg/L
MMW_4	9/28/2015	7440-36-0	Antimony	< 0.0025	mg/L
MMW_4	11/3/2015	7440-36-0	Antimony	< 0.0025	mg/L
MMW_4	4/23/2013	7440-36-0	Antimony	< 0.00300	mg/L
MMW_4	8/27/2013	7440-36-0	Antimony	< 0.00300	mg/L
MMW_4	10/22/2013	7440-36-0	Antimony	< 0.00300	mg/L
MMW_4	2/18/2014	7440-36-0	Antimony	< 0.00300	mg/L
MMW_4	4/29/2014	7440-36-0	Antimony	< 0.0025	mg/L
MMW_4	7/17/2014	7440-36-0	Antimony	< 0.0025	mg/L
MMW_4	2/13/2012	7440-38-2	Arsenic	< 0.0050	mg/L
MMW_4	2/13/2012	7440-38-2	Arsenic	< 0.0030	mg/L
MMW_4	5/9/2012	7440-38-2	Arsenic	< 0.0030	mg/L
MMW_4	7/25/2012	7440-38-2	Arsenic	< 0.0030	mg/L
MMW_4	10/17/2012	7440-38-2	Arsenic	< 0.0030	mg/L
MMW_4	1/22/2013	7440-38-2	Arsenic	< 0.0030	mg/L
MMW_4	11/18/2014	7440-38-2	Arsenic	< 0.0050	mg/L
MMW_4	11/18/2014	7440-38-2	Arsenic	< 0.0050	mg/L
MMW_4	3/4/2015	7440-38-2	Arsenic	< 0.0050	mg/L
MMW_4	5/26/2015	7440-38-2	Arsenic	< 0.0050	mg/L
MMW_4	9/28/2015	7440-38-2	Arsenic	< 0.0050	mg/L
MMW_4	11/3/2015	7440-38-2	Arsenic	< 0.0050	mg/L
MMW_4	4/23/2013	7440-38-2	Arsenic	< 0.0030	mg/L
MMW_4	8/27/2013	7440-38-2	Arsenic	< 0.0030	mg/L
MMW_4	10/22/2013	7440-38-2	Arsenic	< 0.0030	mg/L
MMW_4	2/18/2014	7440-38-2	Arsenic	< 0.0030	mg/L
MMW_4	4/29/2014	7440-38-2	Arsenic	< 0.0050	mg/L

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MMW_4	7/17/2014	7440-38-2	Arsenic	< 0.0050	mg/L
MMW_4	2/13/2012	7440-39-3	Barium	0.26	mg/L
MMW_4	2/13/2012	7440-39-3	Barium	0.320	mg/L
MMW_4	5/9/2012	7440-39-3	Barium	0.316	mg/L
MMW_4	7/25/2012	7440-39-3	Barium	0.335	mg/L
MMW_4	10/17/2012	7440-39-3	Barium	0.346	mg/L
MMW_4	1/22/2013	7440-39-3	Barium	0.373	mg/L
MMW_4	11/18/2014	7440-39-3	Barium	0.34	mg/L
MMW_4	11/18/2014	7440-39-3	Barium	0.35	mg/L
MMW_4	3/4/2015	7440-39-3	Barium	0.41	mg/L
MMW_4	5/26/2015	7440-39-3	Barium	0.42	mg/L
MMW_4	9/28/2015	7440-39-3	Barium	0.22	mg/L
MMW_4	11/3/2015	7440-39-3	Barium	0.42	mg/L
MMW_4	4/23/2013	7440-39-3	Barium	0.328	mg/L
MMW_4	8/27/2013	7440-39-3	Barium	0.370	mg/L
MMW_4	10/22/2013	7440-39-3	Barium	0.378	mg/L
MMW_4	2/18/2014	7440-39-3	Barium	0.383	mg/L
MMW_4	4/29/2014	7440-39-3	Barium	0.38	mg/L
MMW_4	7/17/2014	7440-39-3	Barium	0.38	mg/L
MMW_4	2/13/2012	7440-41-7	Beryllium	< 0.0010	mg/L
MMW_4	2/13/2012	7440-41-7	Beryllium	< 0.0020	mg/L
MMW_4	5/9/2012	7440-41-7	Beryllium	< 0.0020	mg/L
MMW_4	5/26/2015	7440-41-7	Beryllium	< 0.0010	mg/L
MMW_4	9/28/2015	7440-41-7	Beryllium	< 0.0010	mg/L
MMW_4	11/3/2015	7440-41-7	Beryllium	< 0.0010	mg/L
MMW_4	11/18/2014	7440-41-7	Beryllium	< 0.0010	mg/L
MMW_4	11/18/2014	7440-41-7	Beryllium	< 0.0010	mg/L
MMW_4	3/4/2015	7440-41-7	Beryllium	< 0.0010	mg/L
MMW_4	2/18/2014	7440-41-7	Beryllium	< 0.0010	mg/L
MMW_4	4/29/2014	7440-41-7	Beryllium	< 0.0010	mg/L
MMW_4	7/17/2014	7440-41-7	Beryllium	< 0.0010	mg/L
MMW_4	4/23/2013	7440-41-7	Beryllium	< 0.0010	mg/L
MMW_4	8/27/2013	7440-41-7	Beryllium	< 0.0010	mg/L
MMW_4	10/22/2013	7440-41-7	Beryllium	< 0.0010	mg/L
MMW_4	7/25/2012	7440-41-7	Beryllium	< 0.0020	mg/L
MMW_4	10/17/2012	7440-41-7	Beryllium	< 0.0020	mg/L
MMW_4	1/22/2013	7440-41-7	Beryllium	< 0.0020	mg/L
MMW_4	2/13/2012	7440-43-9	Cadmium	< 0.0010	mg/L
MMW_4	2/13/2012	7440-43-9	Cadmium	< 0.0020	mg/L
MMW_4	5/9/2012	7440-43-9	Cadmium	< 0.0020	mg/L
MMW_4	7/25/2012	7440-43-9	Cadmium	< 0.0020	mg/L
MMW_4	10/17/2012	7440-43-9	Cadmium	< 0.0020	mg/L
MMW_4	1/22/2013	7440-43-9	Cadmium	< 0.0020	mg/L
MMW_4	11/18/2014	7440-43-9	Cadmium	< 0.0010	mg/L

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MMW_4	11/18/2014	7440-43-9	Cadmium	< 0.0010	mg/L
MMW_4	3/4/2015	7440-43-9	Cadmium	< 0.0010	mg/L
MMW_4	5/26/2015	7440-43-9	Cadmium	< 0.0010	mg/L
MMW_4	9/28/2015	7440-43-9	Cadmium	< 0.0010	mg/L
MMW_4	11/3/2015	7440-43-9	Cadmium	< 0.0010	mg/L
MMW_4	4/23/2013	7440-43-9	Cadmium	< 0.0010	mg/L
MMW_4	8/27/2013	7440-43-9	Cadmium	< 0.0010	mg/L
MMW_4	10/22/2013	7440-43-9	Cadmium	< 0.0010	mg/L
MMW_4	2/18/2014	7440-43-9	Cadmium	< 0.0010	mg/L
MMW_4	4/29/2014	7440-43-9	Cadmium	< 0.0010	mg/L
MMW_4	7/17/2014	7440-43-9	Cadmium	< 0.0010	mg/L
MMW_4	2/13/2012	7440-70-2	Calcium	46	mg/L
MMW_4	2/13/2012	7440-70-2	Calcium	54.8	mg/L
MMW_4	5/9/2012	7440-70-2	Calcium	53.2	mg/L
MMW_4	7/25/2012	7440-70-2	Calcium	56.2	mg/L
MMW_4	10/17/2012	7440-70-2	Calcium	53.7	mg/L
MMW_4	1/22/2013	7440-70-2	Calcium	57.6	mg/L
MMW_4	11/18/2014	7440-70-2	Calcium	58	mg/L
MMW_4	11/18/2014	7440-70-2	Calcium	60	mg/L
MMW_4	3/4/2015	7440-70-2	Calcium	62	mg/L
MMW_4	5/26/2015	7440-70-2	Calcium	64	mg/L
MMW_4	9/28/2015	7440-70-2	Calcium	52	mg/L
MMW_4	11/3/2015	7440-70-2	Calcium	64	mg/L
MMW_4	4/23/2013	7440-70-2	Calcium	54.9	mg/L
MMW_4	8/27/2013	7440-70-2	Calcium	56.0	mg/L
MMW_4	10/22/2013	7440-70-2	Calcium	57.8	mg/L
MMW_4	2/18/2014	7440-70-2	Calcium	57.9	mg/L
MMW_4	4/29/2014	7440-70-2	Calcium	60	mg/L
MMW_4	7/17/2014	7440-70-2	Calcium	56	mg/L
MMW_4	2/13/2012	16887-00-6	Chloride	22.7	mg/L
MMW_4	2/13/2012	16887-00-6	Chloride	24	mg/L
MMW_4	5/9/2012	16887-00-6	Chloride	26.7	mg/L
MMW_4	7/25/2012	16887-00-6	Chloride	22.6	mg/L
MMW_4	10/17/2012	16887-00-6	Chloride	23.2	mg/L
MMW_4	1/22/2013	16887-00-6	Chloride	22.5	mg/L
MMW_4	11/18/2014	16887-00-6	Chloride	25	mg/L
MMW_4	11/18/2014	16887-00-6	Chloride	25	mg/L
MMW_4	3/4/2015	16887-00-6	Chloride	27	mg/L
MMW_4	5/26/2015	16887-00-6	Chloride	25	mg/L
MMW_4	9/28/2015	16887-00-6	Chloride	28	mg/L
MMW_4	11/3/2015	16887-00-6	Chloride	23	mg/L
MMW_4	4/23/2013	16887-00-6	Chloride	24.0	mg/L
MMW_4	8/27/2013	16887-00-6	Chloride	23.2	mg/L
MMW_4	10/22/2013	16887-00-6	Chloride	23.2	mg/L

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SYS_LOC_	SAMPLE_DATE	CAS_RN	CHEMICAL_NAME	REPORT_F	REPORT_RESULT_UNIT
MMW_4	2/18/2014	16887-00-6	Chloride	22.9	mg/L
MMW_4	4/29/2014	16887-00-6	Chloride	24	mg/L
MMW_4	7/17/2014	16887-00-6	Chloride	24	mg/L
MMW_4	2/13/2012	7440-47-3	Chromium	< 0.0050	mg/L
MMW_4	2/13/2012	7440-47-3	Chromium	< 0.0060	mg/L
MMW_4	5/9/2012	7440-47-3	Chromium	< 0.0060	mg/L
MMW_4	7/25/2012	7440-47-3	Chromium	< 0.0060	mg/L
MMW_4	10/17/2012	7440-47-3	Chromium	< 0.0060	mg/L
MMW_4	1/22/2013	7440-47-3	Chromium	< 0.0060	mg/L
MMW_4	11/18/2014	7440-47-3	Chromium	< 0.0050	mg/L
MMW_4	11/18/2014	7440-47-3	Chromium	< 0.0050	mg/L
MMW_4	3/4/2015	7440-47-3	Chromium	< 0.0050	mg/L
MMW_4	5/26/2015	7440-47-3	Chromium	< 0.0050	mg/L
MMW_4	9/28/2015	7440-47-3	Chromium	< 0.0050	mg/L
MMW_4	11/3/2015	7440-47-3	Chromium	< 0.0050	mg/L
MMW_4	4/23/2013	7440-47-3	Chromium	< 0.0030	mg/L
MMW_4	8/27/2013	7440-47-3	Chromium	< 0.0030	mg/L
MMW_4	10/22/2013	7440-47-3	Chromium	< 0.0030	mg/L
MMW_4	2/18/2014	7440-47-3	Chromium	< 0.0030	mg/L
MMW_4	4/29/2014	7440-47-3	Chromium	< 0.0050	mg/L
MMW_4	7/17/2014	7440-47-3	Chromium	< 0.0050	mg/L
MMW_4	2/13/2012	7440-50-8	Copper	< 0.050	mg/L
MMW_4	2/13/2012	7440-50-8	Copper	< 0.010	mg/L
MMW_4	5/9/2012	7440-50-8	Copper	< 0.010	mg/L
MMW_4	7/25/2012	7440-50-8	Copper	< 0.010	mg/L
MMW_4	10/17/2012	7440-50-8	Copper	< 0.010	mg/L
MMW_4	1/22/2013	7440-50-8	Copper	< 0.010	mg/L
MMW_4	11/18/2014	7440-50-8	Copper	< 0.050	mg/L
MMW_4	11/18/2014	7440-50-8	Copper	< 0.050	mg/L
MMW_4	3/4/2015	7440-50-8	Copper	< 0.050	mg/L
MMW_4	5/26/2015	7440-50-8	Copper	< 0.050	mg/L
MMW_4	9/28/2015	7440-50-8	Copper	< 0.050	mg/L
MMW_4	11/3/2015	7440-50-8	Copper	< 0.050	mg/L
MMW_4	4/23/2013	7440-50-8	Copper	< 0.005	mg/L
MMW_4	8/27/2013	7440-50-8	Copper	< 0.005	mg/L
MMW_4	10/22/2013	7440-50-8	Copper	< 0.005	mg/L
MMW_4	2/18/2014	7440-50-8	Copper	< 0.005	mg/L
MMW_4	4/29/2014	7440-50-8	Copper	< 0.050	mg/L
MMW_4	7/17/2014	7440-50-8	Copper	< 0.050	mg/L
MMW_4	2/13/2012	16984-48-8	Fluoride	0.15	mg/L
MMW_4	2/13/2012	16984-48-8	Fluoride	< 0.10	mg/L
MMW_4	5/9/2012	16984-48-8	Fluoride	0.13	mg/L
MMW_4	7/25/2012	16984-48-8	Fluoride	< 0.10	mg/L
MMW_4	10/17/2012	16984-48-8	Fluoride	0.13	mg/L

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MMW_4	1/22/2013	16984-48-8	Fluoride	0.13	mg/L
MMW_4	11/18/2014	16984-48-8	Fluoride	0.12	mg/L
MMW_4	11/18/2014	16984-48-8	Fluoride	0.11	mg/L
MMW_4	3/4/2015	16984-48-8	Fluoride	< 0.10	mg/L
MMW_4	5/26/2015	16984-48-8	Fluoride	< 0.10	mg/L
MMW_4	9/28/2015	16984-48-8	Fluoride	0.15	mg/L
MMW_4	11/3/2015	16984-48-8	Fluoride	0.11	mg/L
MMW_4	4/23/2013	16984-48-8	Fluoride	0.12	mg/L
MMW_4	8/27/2013	16984-48-8	Fluoride	0.13	mg/L
MMW_4	10/22/2013	16984-48-8	Fluoride	0.17	mg/L
MMW_4	2/18/2014	16984-48-8	Fluoride	0.14	mg/L
MMW_4	4/29/2014	16984-48-8	Fluoride	0.11	mg/L
MMW_4	7/17/2014	16984-48-8	Fluoride	0.12	mg/L
MMW_4	2/13/2012	7439-89-6	Iron	< 0.010	mg/L
MMW_4	2/13/2012	7439-89-6	Iron	< 0.060	mg/L
MMW_4	5/9/2012	7439-89-6	Iron	< 0.060	mg/L
MMW_4	7/25/2012	7439-89-6	Iron	< 0.060	mg/L
MMW_4	10/17/2012	7439-89-6	Iron	< 0.060	mg/L
MMW_4	1/22/2013	7439-89-6	Iron	< 0.060	mg/L
MMW_4	11/18/2014	7439-89-6	Iron	< 0.010	mg/L
MMW_4	11/18/2014	7439-89-6	Iron	< 0.010	mg/L
MMW_4	3/4/2015	7439-89-6	Iron	0.044	mg/L
MMW_4	5/26/2015	7439-89-6	Iron	0.041	mg/L
MMW_4	9/28/2015	7439-89-6	Iron	1.5	mg/L
MMW_4	11/3/2015	7439-89-6	Iron	0.058	mg/L
MMW_4	4/23/2013	7439-89-6	Iron	0.208	mg/L
MMW_4	8/27/2013	7439-89-6	Iron	0.115	mg/L
MMW_4	10/22/2013	7439-89-6	Iron	0.070	mg/L
MMW_4	2/18/2014	7439-89-6	Iron	< 0.030	mg/L
MMW_4	4/29/2014	7439-89-6	Iron	0.019	mg/L
MMW_4	7/17/2014	7439-89-6	Iron	0.085	mg/L
MMW_4	2/13/2012	7439-92-1	Lead	< 0.0010	mg/L
MMW_4	2/13/2012	7439-92-1	Lead	< 0.00300	mg/L
MMW_4	5/9/2012	7439-92-1	Lead	< 0.00300	mg/L
MMW_4	7/25/2012	7439-92-1	Lead	< 0.00300	mg/L
MMW_4	10/17/2012	7439-92-1	Lead	< 0.00300	mg/L
MMW_4	1/22/2013	7439-92-1	Lead	< 0.00300	mg/L
MMW_4	11/18/2014	7439-92-1	Lead	< 0.0025	mg/L
MMW_4	11/18/2014	7439-92-1	Lead	< 0.0025	mg/L
MMW_4	3/4/2015	7439-92-1	Lead	< 0.0025	mg/L
MMW_4	5/26/2015	7439-92-1	Lead	< 0.0025	mg/L
MMW_4	9/28/2015	7439-92-1	Lead	< 0.0025	mg/L
MMW_4	11/3/2015	7439-92-1	Lead	< 0.0025	mg/L
MMW_4	4/23/2013	7439-92-1	Lead	< 0.00300	mg/L

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MMW_4	8/27/2013	7439-92-1	Lead	< 0.00300	mg/L
MMW_4	10/22/2013	7439-92-1	Lead	< 0.00300	mg/L
MMW_4	2/18/2014	7439-92-1	Lead	< 0.00300	mg/L
MMW_4	4/29/2014	7439-92-1	Lead	< 0.0025	mg/L
MMW_4	7/17/2014	7439-92-1	Lead	< 0.0025	mg/L
MMW_4	2/13/2012	7439-95-4	Magnesium	4.1	mg/L
MMW_4	2/13/2012	7439-95-4	Magnesium	4.66	mg/L
MMW_4	5/9/2012	7439-95-4	Magnesium	4.52	mg/L
MMW_4	7/25/2012	7439-95-4	Magnesium	4.32	mg/L
MMW_4	10/17/2012	7439-95-4	Magnesium	4.40	mg/L
MMW_4	1/22/2013	7439-95-4	Magnesium	4.32	mg/L
MMW_4	11/18/2014	7439-95-4	Magnesium	4.6	mg/L
MMW_4	11/18/2014	7439-95-4	Magnesium	4.8	mg/L
MMW_4	3/4/2015	7439-95-4	Magnesium	5.0	mg/L
MMW_4	5/26/2015	7439-95-4	Magnesium	5.0	mg/L
MMW_4	9/28/2015	7439-95-4	Magnesium	4.6	mg/L
MMW_4	11/3/2015	7439-95-4	Magnesium	4.7	mg/L
MMW_4	4/23/2013	7439-95-4	Magnesium	4.26	mg/L
MMW_4	8/27/2013	7439-95-4	Magnesium	4.48	mg/L
MMW_4	10/22/2013	7439-95-4	Magnesium	4.76	mg/L
MMW_4	2/18/2014	7439-95-4	Magnesium	4.51	mg/L
MMW_4	4/29/2014	7439-95-4	Magnesium	4.6	mg/L
MMW_4	7/17/2014	7439-95-4	Magnesium	4.5	mg/L
MMW_4	2/13/2012	7439-96-5	Manganese	0.018	mg/L
MMW_4	2/13/2012	7439-96-5	Manganese	0.0281	mg/L
MMW_4	5/9/2012	7439-96-5	Manganese	0.0281	mg/L
MMW_4	7/25/2012	7439-96-5	Manganese	0.0252	mg/L
MMW_4	10/17/2012	7439-96-5	Manganese	0.0264	mg/L
MMW_4	1/22/2013	7439-96-5	Manganese	0.0492	mg/L
MMW_4	11/18/2014	7439-96-5	Manganese	0.043	mg/L
MMW_4	11/18/2014	7439-96-5	Manganese	0.048	mg/L
MMW_4	3/4/2015	7439-96-5	Manganese	0.028	mg/L
MMW_4	5/26/2015	7439-96-5	Manganese	0.030	mg/L
MMW_4	9/28/2015	7439-96-5	Manganese	0.34	mg/L
MMW_4	11/3/2015	7439-96-5	Manganese	< 0.0050	mg/L
MMW_4	4/23/2013	7439-96-5	Manganese	0.0356	mg/L
MMW_4	8/27/2013	7439-96-5	Manganese	0.0363	mg/L
MMW_4	10/22/2013	7439-96-5	Manganese	0.0270	mg/L
MMW_4	2/18/2014	7439-96-5	Manganese	0.0144	mg/L
MMW_4	4/29/2014	7439-96-5	Manganese	0.024	mg/L
MMW_4	7/17/2014	7439-96-5	Manganese	0.025	mg/L
MMW_4	2/13/2012	7439-97-6	Mercury	< 0.00010	mg/L
MMW_4	2/13/2012	7439-97-6	Mercury	< 0.00020	mg/L
MMW_4	5/9/2012	7439-97-6	Mercury	< 0.00020	mg/L

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MMW_4	7/25/2012	7439-97-6	Mercury	< 0.00020	mg/L
MMW_4	10/17/2012	7439-97-6	Mercury	< 0.00020	mg/L
MMW_4	1/22/2013	7439-97-6	Mercury	< 0.00020	mg/L
MMW_4	11/18/2014	7439-97-6	Mercury	< 0.00010	mg/L
MMW_4	11/18/2014	7439-97-6	Mercury	< 0.00010	mg/L
MMW_4	3/4/2015	7439-97-6	Mercury	< 0.00010	mg/L
MMW_4	5/26/2015	7439-97-6	Mercury	< 0.00010	mg/L
MMW_4	9/28/2015	7439-97-6	Mercury	< 0.00010	mg/L
MMW_4	11/3/2015	7439-97-6	Mercury	< 0.00010	mg/L
MMW_4	4/23/2013	7439-97-6	Mercury	< 0.00020	mg/L
MMW_4	8/27/2013	7439-97-6	Mercury	< 0.00020	mg/L
MMW_4	10/22/2013	7439-97-6	Mercury	< 0.00020	mg/L
MMW_4	2/18/2014	7439-97-6	Mercury	< 0.00020	mg/L
MMW_4	4/29/2014	7439-97-6	Mercury	< 0.00010	mg/L
MMW_4	7/17/2014	7439-97-6	Mercury	< 0.00010	mg/L
MMW_4	2/13/2012	7440-02-0	Nickel	< 0.010	mg/L
MMW_4	2/13/2012	7440-02-0	Nickel	< 0.010	mg/L
MMW_4	5/9/2012	7440-02-0	Nickel	< 0.010	mg/L
MMW_4	7/25/2012	7440-02-0	Nickel	< 0.010	mg/L
MMW_4	10/17/2012	7440-02-0	Nickel	< 0.010	mg/L
MMW_4	1/22/2013	7440-02-0	Nickel	< 0.010	mg/L
MMW_4	11/18/2014	7440-02-0	Nickel	< 0.010	mg/L
MMW_4	11/18/2014	7440-02-0	Nickel	< 0.010	mg/L
MMW_4	3/4/2015	7440-02-0	Nickel	< 0.010	mg/L
MMW_4	5/26/2015	7440-02-0	Nickel	< 0.010	mg/L
MMW_4	9/28/2015	7440-02-0	Nickel	< 0.010	mg/L
MMW_4	11/3/2015	7440-02-0	Nickel	< 0.010	mg/L
MMW_4	4/23/2013	7440-02-0	Nickel	< 0.005	mg/L
MMW_4	8/27/2013	7440-02-0	Nickel	< 0.005	mg/L
MMW_4	10/22/2013	7440-02-0	Nickel	< 0.005	mg/L
MMW_4	2/18/2014	7440-02-0	Nickel	< 0.005	mg/L
MMW_4	4/29/2014	7440-02-0	Nickel	< 0.010	mg/L
MMW_4	7/17/2014	7440-02-0	Nickel	< 0.010	mg/L
MMW_4	2/13/2012	E-10128	Nitrate/Nitrite as N	1.92	mg/L
MMW_4	2/13/2012	E-10128	Nitrate/Nitrite as N	2.2	mg/L
MMW_4	5/9/2012	E-10128	Nitrate/Nitrite as N	2.38	mg/L
MMW_4	7/25/2012	E-10128	Nitrate/Nitrite as N	< 0.050	mg/L
MMW_4	10/17/2012	E-10128	Nitrate/Nitrite as N	3.09	mg/L
MMW_4	1/22/2013	E-10128	Nitrate/Nitrite as N	2.83	mg/L
MMW_4	11/18/2014	E-10128	Nitrate/Nitrite as N	0.062	mg/L
MMW_4	11/18/2014	E-10128	Nitrate/Nitrite as N	2.4	mg/L
MMW_4	3/4/2015	E-10128	Nitrate/Nitrite as N	3.0	mg/L
MMW_4	5/26/2015	E-10128	Nitrate/Nitrite as N	3.0	mg/L
MMW_4	9/28/2015	E-10128	Nitrate/Nitrite as N	< 0.10	mg/L

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MMW_4	11/3/2015	E-10128	Nitrate/Nitrite as N	3.3	mg/L
MMW_4	4/23/2013	E-10128	Nitrate/Nitrite as N	2.71	mg/L
MMW_4	8/27/2013	E-10128	Nitrate/Nitrite as N	3.02	mg/L
MMW_4	10/22/2013	E-10128	Nitrate/Nitrite as N	3.08	mg/L
MMW_4	2/18/2014	E-10128	Nitrate/Nitrite as N	3.32	mg/L
MMW_4	4/29/2014	E-10128	Nitrate/Nitrite as N	2.7	mg/L
MMW_4	7/17/2014	E-10128	Nitrate/Nitrite as N	2.8	mg/L
MMW_4	2/13/2012	TOT_N	Nitrogen Total as N	1.92	mg/L
MMW_4	2/13/2012	TOT_N	Nitrogen Total as N	2.2	mg/L
MMW_4	5/9/2012	TOT_N	Nitrogen Total as N	2.38	mg/L
MMW_4	7/25/2012	TOT_N	Nitrogen Total as N	< 0.55	mg/L
MMW_4	10/17/2012	TOT_N	Nitrogen Total as N	3.09	mg/L
MMW_4	1/22/2013	TOT_N	Nitrogen Total as N	2.83	mg/L
MMW_4	11/18/2014	TOT_N	Nitrogen Total as N	0.30	mg/L
MMW_4	11/18/2014	TOT_N	Nitrogen Total as N	2.8	mg/L
MMW_4	3/4/2015	TOT_N	Nitrogen Total as N	3.0	mg/L
MMW_4	5/26/2015	TOT_N	Nitrogen Total as N	3.0	mg/L
MMW_4	9/28/2015	TOT_N	Nitrogen Total as N	1.7	mg/L
MMW_4	11/3/2015	TOT_N	Nitrogen Total as N	3.3	mg/L
MMW_4	4/23/2013	TOT_N	Nitrogen Total as N	2.71	mg/L
MMW_4	8/27/2013	TOT_N	Nitrogen Total as N	3.02	mg/L
MMW_4	10/22/2013	TOT_N	Nitrogen Total as N	3.08	mg/L
MMW_4	2/18/2014	TOT_N	Nitrogen Total as N	3.32	mg/L
MMW_4	4/29/2014	TOT_N	Nitrogen Total as N	2.7	mg/L
MMW_4	7/17/2014	TOT_N	Nitrogen Total as N	2.8	mg/L
MMW_4	2/13/2012	7440-09-7	Potassium	5.9	mg/L
MMW_4	2/13/2012	7440-09-7	Potassium	6.95	mg/L
MMW_4	5/9/2012	7440-09-7	Potassium	6.83	mg/L
MMW_4	7/25/2012	7440-09-7	Potassium	6.92	mg/L
MMW_4	10/17/2012	7440-09-7	Potassium	7.02	mg/L
MMW_4	1/22/2013	7440-09-7	Potassium	6.67	mg/L
MMW_4	11/18/2014	7440-09-7	Potassium	6.8	mg/L
MMW_4	11/18/2014	7440-09-7	Potassium	7.2	mg/L
MMW_4	3/4/2015	7440-09-7	Potassium	7.2	mg/L
MMW_4	5/26/2015	7440-09-7	Potassium	7.2	mg/L
MMW_4	9/28/2015	7440-09-7	Potassium	7.5	mg/L
MMW_4	11/3/2015	7440-09-7	Potassium	7.3	mg/L
MMW_4	4/23/2013	7440-09-7	Potassium	6.60	mg/L
MMW_4	8/27/2013	7440-09-7	Potassium	6.71	mg/L
MMW_4	10/22/2013	7440-09-7	Potassium	6.93	mg/L
MMW_4	2/18/2014	7440-09-7	Potassium	6.66	mg/L
MMW_4	4/29/2014	7440-09-7	Potassium	7.0	mg/L
MMW_4	7/17/2014	7440-09-7	Potassium	6.9	mg/L
MMW_4	2/13/2012	7782-49-2	Selenium	< 0.0050	mg/L

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MMW_4	2/13/2012	7782-49-2	Selenium	< 0.00250	mg/L
MMW_4	5/9/2012	7782-49-2	Selenium	< 0.00250	mg/L
MMW_4	7/25/2012	7782-49-2	Selenium	< 0.00250	mg/L
MMW_4	10/17/2012	7782-49-2	Selenium	< 0.00250	mg/L
MMW_4	1/22/2013	7782-49-2	Selenium	< 0.00250	mg/L
MMW_4	11/18/2014	7782-49-2	Selenium	< 0.0050	mg/L
MMW_4	11/18/2014	7782-49-2	Selenium	< 0.0050	mg/L
MMW_4	3/4/2015	7782-49-2	Selenium	< 0.0050	mg/L
MMW_4	5/26/2015	7782-49-2	Selenium	< 0.0050	mg/L
MMW_4	9/28/2015	7782-49-2	Selenium	< 0.0050	mg/L
MMW_4	11/3/2015	7782-49-2	Selenium	< 0.0050	mg/L
MMW_4	4/23/2013	7782-49-2	Selenium	< 0.00250	mg/L
MMW_4	8/27/2013	7782-49-2	Selenium	< 0.00250	mg/L
MMW_4	10/22/2013	7782-49-2	Selenium	< 0.00250	mg/L
MMW_4	2/18/2014	7782-49-2	Selenium	< 0.00250	mg/L
MMW_4	4/29/2014	7782-49-2	Selenium	< 0.0050	mg/L
MMW_4	7/17/2014	7782-49-2	Selenium	< 0.0050	mg/L
MMW_4	2/13/2012	7440-22-4	Silver	< 0.0050	mg/L
MMW_4	2/13/2012	7440-22-4	Silver	< 0.0050	mg/L
MMW_4	5/9/2012	7440-22-4	Silver	< 0.0050	mg/L
MMW_4	7/25/2012	7440-22-4	Silver	< 0.0050	mg/L
MMW_4	10/17/2012	7440-22-4	Silver	< 0.0050	mg/L
MMW_4	9/28/2015	7440-22-4	Silver	< 0.0050	mg/L
MMW_4	11/3/2015	7440-22-4	Silver	< 0.0050	mg/L
MMW_4	11/18/2014	7440-22-4	Silver	< 0.0050	mg/L
MMW_4	3/4/2015	7440-22-4	Silver	< 0.0050	mg/L
MMW_4	5/26/2015	7440-22-4	Silver	< 0.0050	mg/L
MMW_4	4/29/2014	7440-22-4	Silver	< 0.0050	mg/L
MMW_4	7/17/2014	7440-22-4	Silver	< 0.0050	mg/L
MMW_4	11/18/2014	7440-22-4	Silver	< 0.0050	mg/L
MMW_4	1/22/2013	7440-22-4	Silver	< 0.0050	mg/L
MMW_4	4/23/2013	7440-22-4	Silver	< 0.0025	mg/L
MMW_4	8/27/2013	7440-22-4	Silver	< 0.0025	mg/L
MMW_4	10/22/2013	7440-22-4	Silver	< 0.0025	mg/L
MMW_4	2/18/2014	7440-22-4	Silver	< 0.0025	mg/L
MMW_4	2/13/2012	7440-23-5	Sodium	12	mg/L
MMW_4	2/13/2012	7440-23-5	Sodium	13.5	mg/L
MMW_4	5/9/2012	7440-23-5	Sodium	12.9	mg/L
MMW_4	7/25/2012	7440-23-5	Sodium	12.8	mg/L
MMW_4	10/17/2012	7440-23-5	Sodium	13.1	mg/L
MMW_4	1/22/2013	7440-23-5	Sodium	12.0	mg/L
MMW_4	11/18/2014	7440-23-5	Sodium	13	mg/L
MMW_4	11/18/2014	7440-23-5	Sodium	14	mg/L
MMW_4	3/4/2015	7440-23-5	Sodium	14	mg/L

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MMW_4	5/26/2015	7440-23-5	Sodium	14	mg/L
MMW_4	9/28/2015	7440-23-5	Sodium	20	mg/L
MMW_4	11/3/2015	7440-23-5	Sodium	13	mg/L
MMW_4	4/23/2013	7440-23-5	Sodium	12.1	mg/L
MMW_4	8/27/2013	7440-23-5	Sodium	12.8	mg/L
MMW_4	10/22/2013	7440-23-5	Sodium	13.8	mg/L
MMW_4	2/18/2014	7440-23-5	Sodium	12.2	mg/L
MMW_4	4/29/2014	7440-23-5	Sodium	13	mg/L
MMW_4	7/17/2014	7440-23-5	Sodium	14	mg/L
MMW_4	2/13/2012	14808-79-8	Sulfate as SO4	15.3	mg/L
MMW_4	2/13/2012	14808-79-8	Sulfate as SO4	13	mg/L
MMW_4	5/9/2012	14808-79-8	Sulfate as SO4	14.2	mg/L
MMW_4	5/26/2015	14808-79-8	Sulfate as SO4	16	mg/L
MMW_4	9/28/2015	14808-79-8	Sulfate as SO4	7.6	mg/L
MMW_4	11/3/2015	14808-79-8	Sulfate as SO4	18	mg/L
MMW_4	11/18/2014	14808-79-8	Sulfate as SO4	16	mg/L
MMW_4	11/18/2014	14808-79-8	Sulfate as SO4	16	mg/L
MMW_4	3/4/2015	14808-79-8	Sulfate as SO4	17	mg/L
MMW_4	2/18/2014	14808-79-8	Sulfate as SO4	17.1	mg/L
MMW_4	4/29/2014	14808-79-8	Sulfate as SO4	16	mg/L
MMW_4	7/17/2014	14808-79-8	Sulfate as SO4	16	mg/L
MMW_4	4/23/2013	14808-79-8	Sulfate as SO4	16.6	mg/L
MMW_4	8/27/2013	14808-79-8	Sulfate as SO4	16.2	mg/L
MMW_4	10/22/2013	14808-79-8	Sulfate as SO4	16.7	mg/L
MMW_4	7/25/2012	14808-79-8	Sulfate as SO4	15.8	mg/L
MMW_4	10/17/2012	14808-79-8	Sulfate as SO4	16.1	mg/L
MMW_4	1/22/2013	14808-79-8	Sulfate as SO4	15.4	mg/L
MMW_4	2/13/2012	7440-28-0	Thallium	< 0.0010	mg/L
MMW_4	2/13/2012	7440-28-0	Thallium	< 0.00100	mg/L
MMW_4	5/9/2012	7440-28-0	Thallium	< 0.00100	mg/L
MMW_4	7/25/2012	7440-28-0	Thallium	< 0.00100	mg/L
MMW_4	10/17/2012	7440-28-0	Thallium	< 0.00100	mg/L
MMW_4	1/22/2013	7440-28-0	Thallium	< 0.00100	mg/L
MMW_4	11/18/2014	7440-28-0	Thallium	< 0.0010	mg/L
MMW_4	11/18/2014	7440-28-0	Thallium	< 0.0010	mg/L
MMW_4	3/4/2015	7440-28-0	Thallium	< 0.0010	mg/L
MMW_4	5/26/2015	7440-28-0	Thallium	< 0.0010	mg/L
MMW_4	9/28/2015	7440-28-0	Thallium	< 0.0010	mg/L
MMW_4	11/3/2015	7440-28-0	Thallium	< 0.0010	mg/L
MMW_4	4/23/2013	7440-28-0	Thallium	< 0.00100	mg/L
MMW_4	8/27/2013	7440-28-0	Thallium	< 0.00100	mg/L
MMW_4	10/22/2013	7440-28-0	Thallium	< 0.00100	mg/L
MMW_4	2/18/2014	7440-28-0	Thallium	< 0.00100	mg/L
MMW_4	4/29/2014	7440-28-0	Thallium	< 0.0010	mg/L

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MMW_4	7/17/2014	7440-28-0	Thallium	< 0.0010	mg/L
MMW_4	2/13/2012	TDS_LAB	Total Dissolved Solids-	235	mg/L
MMW_4	2/13/2012	TDS_LAB	Total Dissolved Solids-	210	mg/L
MMW_4	5/9/2012	TDS_LAB	Total Dissolved Solids-	263	mg/L
MMW_4	7/25/2012	TDS_LAB	Total Dissolved Solids-	261	mg/L
MMW_4	10/17/2012	TDS_LAB	Total Dissolved Solids-	253	mg/L
MMW_4	1/22/2013	TDS_LAB	Total Dissolved Solids-	281	mg/L
MMW_4	11/18/2014	TDS_LAB	Total Dissolved Solids-	260	mg/L
MMW_4	11/18/2014	TDS_LAB	Total Dissolved Solids-	270	mg/L
MMW_4	3/4/2015	TDS_LAB	Total Dissolved Solids-	260	mg/L
MMW_4	5/26/2015	TDS_LAB	Total Dissolved Solids-	270	mg/L
MMW_4	9/28/2015	TDS_LAB	Total Dissolved Solids-	230	mg/L
MMW_4	11/3/2015	TDS_LAB	Total Dissolved Solids-	270	mg/L
MMW_4	4/23/2013	TDS_LAB	Total Dissolved Solids-	250	mg/L
MMW_4	8/27/2013	TDS_LAB	Total Dissolved Solids-	232	mg/L
MMW_4	10/22/2013	TDS_LAB	Total Dissolved Solids-	276	mg/L
MMW_4	4/29/2014	TDS_LAB	Total Dissolved Solids-	270	mg/L
MMW_4	2/18/2014	TDS_LAB	Total Dissolved Solids-	252	mg/L
MMW_4	7/17/2014	TDS_LAB	Total Dissolved Solids-	270	mg/L
MMW_4	2/13/2012	57-12-5W	Cyanide (WAD)	< 0.0100	mg/L
MMW_4	2/13/2012	57-12-5W	Cyanide (WAD)	< 0.010	mg/L
MMW_4	5/9/2012	57-12-5W	Cyanide (WAD)	< 0.0100	mg/L
MMW_4	7/25/2012	57-12-5W	Cyanide (WAD)	< 0.0100	mg/L
MMW_4	10/17/2012	57-12-5W	Cyanide (WAD)	< 0.0100	mg/L
MMW_4	1/22/2013	57-12-5W	Cyanide (WAD)	< 0.0100	mg/L
MMW_4	11/18/2014	57-12-5W	Cyanide (WAD)	< 0.010	mg/L
MMW_4	11/18/2014	57-12-5W	Cyanide (WAD)	< 0.010	mg/L
MMW_4	3/4/2015	57-12-5W	Cyanide (WAD)	< 0.010	mg/L
MMW_4	5/26/2015	57-12-5W	Cyanide (WAD)	< 0.010	mg/L
MMW_4	9/28/2015	57-12-5W	Cyanide (WAD)	< 0.010	mg/L
MMW_4	11/3/2015	57-12-5W	Cyanide (WAD)	< 0.010	mg/L
MMW_4	4/23/2013	57-12-5W	Cyanide (WAD)	< 0.0100	mg/L
MMW_4	8/27/2013	57-12-5W	Cyanide (WAD)	< 0.0100	mg/L
MMW_4	10/22/2013	57-12-5W	Cyanide (WAD)	< 0.0100	mg/L
MMW_4	4/29/2014	57-12-5W	Cyanide (WAD)	< 0.010	mg/L
MMW_4	2/18/2014	57-12-5W	Cyanide (WAD)	< 0.0100	mg/L
MMW_4	7/17/2014	57-12-5W	Cyanide (WAD)	< 0.010	mg/L
MMW_4	2/13/2012	7440-66-6	Zinc	< 0.010	mg/L
MMW_4	2/13/2012	7440-66-6	Zinc	< 0.0100	mg/L
MMW_4	5/9/2012	7440-66-6	Zinc	< 0.0100	mg/L
MMW_4	7/25/2012	7440-66-6	Zinc	< 0.0100	mg/L
MMW_4	10/17/2012	7440-66-6	Zinc	< 0.0100	mg/L
MMW_4	1/22/2013	7440-66-6	Zinc	< 0.0100	mg/L
MMW_4	11/18/2014	7440-66-6	Zinc	< 0.010	mg/L

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SYS_LOC_	SAMPLE_DATE	CAS_RN	CHEMICAL_NAME	REPORT_F	REPORT_RESULT_UNIT
MMW_4	11/18/2014	7440-66-6	Zinc	< 0.010	mg/L
MMW_4	3/4/2015	7440-66-6	Zinc	< 0.010	mg/L
MMW_4	5/26/2015	7440-66-6	Zinc	< 0.010	mg/L
MMW_4	9/28/2015	7440-66-6	Zinc	0.023	mg/L
MMW_4	11/3/2015	7440-66-6	Zinc	< 0.010	mg/L
MMW_4	4/23/2013	7440-66-6	Zinc	< 0.0050	mg/L
MMW_4	8/27/2013	7440-66-6	Zinc	< 0.0050	mg/L
MMW_4	10/22/2013	7440-66-6	Zinc	< 0.0050	mg/L
MMW_4	2/18/2014	7440-66-6	Zinc	< 0.0050	mg/L
MMW_4	4/29/2014	7440-66-6	Zinc	< 0.010	mg/L
MMW_4	7/17/2014	7440-66-6	Zinc	< 0.010	mg/L
MMW_4	7/17/2014	PH_FIELD	pH-Field	7.50	SU
MMW_4	10/17/2012	PH_FIELD	pH-Field	6.37	SU
MMW_4	1/22/2013	PH_FIELD	pH-Field	8.12	SU
MMW_4	4/23/2013	PH_FIELD	pH-Field	7.17	SU
MMW_4	8/27/2013	PH_FIELD	pH-Field	7.71	SU
MMW_4	10/22/2013	PH_FIELD	pH-Field	7.71	SU
MMW_4	2/18/2014	PH_FIELD	pH-Field	7.94	SU
MMW_4	4/29/2014	PH_FIELD	pH-Field	7.99	SU
MMW_4	11/18/2014	PH_FIELD	pH-Field	6.99	SU
MMW_4	3/4/2015	PH_FIELD	pH-Field	6.95	SU
MMW_4	5/26/2015	PH_FIELD	pH-Field	6.97	SU
MMW_4	5/26/2015	PH_FIELD	pH-Field	6.97	SU

Bald Mountain
Monitoring Report

Permit No.:																		
Station Name			**MOONEY MONITOR WELL 5 (PZ-1030)**	**MOONEY MONITOR WELL 5 (PZ-1030)**	**MOONEY MONITOR WELL 5 (PZ-1030)**	**MOONEY MONITOR WELL 5 (PZ-1030)**	**MOONEY MONITOR WELL 5 (PZ-1030)**	**MOONEY MONITOR WELL 5 (PZ-1030)**	**MOONEY MONITOR WELL 5 (PZ-1030)**	**MOONEY MONITOR WELL 5 (PZ-1030)**	**MOONEY MONITOR WELL 5 (PZ-1030)**	**MOONEY MONITOR WELL 5 (PZ-1030)**	**MOONEY MONITOR WELL 5 (PZ-1030)**	**MOONEY MONITOR WELL 5 (PZ-1030)**	**MOONEY MONITOR WELL 5 (PZ-1030)**	**MOONEY MONITOR WELL 5 (PZ-1030)**	**MOONEY MONITOR WELL 5 (PZ-1030)**	**MOONEY MONITOR WELL 5 (PZ-1030)**
Station Code			**MMW_5**	**MMW_5**	**MMW_5**	**MMW_5**	**MMW_5**	**MMW_5**	**MMW_5**	**MMW_5**	**MMW_5**	**MMW_5**	**MMW_5**	**MMW_5**	**MMW_5**	**MMW_5**	**MMW_5**	**MMW_5**
Sampling Session			**1st QTR 2012**	**2nd QTR 2012**	**3rd QTR 2012**	**3rd QTR 2012**	**4th QTR 2012**	**1st QTR 2013**	**2nd QTR 2013**	**3rd QTR 2013**	**4th QTR 2013**	**1st QTR 2014**	**2nd QTR 2014**	**3rd QTR 2014**	**4th QTR 2014**	**1st QTR 2015**	**2nd QTR 2015**	**3rd QTR 2015**
Collect Date			**March 14, 2012**	**May 09, 2012**	**July 24, 2012**	**July 25, 2012**	**October 22, 2012**	**January 22, 2013**	**April 30, 2013**	**August 29, 2013**	**October 21, 2013**	**March 13, 2014**	**April 29, 2014**	**July 30, 2014**	**November 18, 2014**	**March 04, 2015**	**May 26, 2015**	**August 05, 2015**
Lab Name			**SVL**	**SVL**	**WET**	**SVL**	**SVL**	**SVL**	**SVL**	**SVL**	**SVL**	**SVL**	**WET**	**WET**	**WET**	**WET**	**WET**	**WET**
Lab Test Date			**March 22, 2012**	**May 15, 2012**	**July 26, 2012**	**July 31, 2012**	**October 26, 2012**	**January 30, 2013**	**May 06, 2013**	**September 06, 2013**	**October 25, 2013**	**March 24, 2014**	**May 02, 2014**	**August 01, 2014**	**November 25, 2014**	**March 06, 2015**	**May 29, 2015**	**August 18, 2015**
Lab Reference Number			**W2C0356-02**	**W2E0369-01**	**1207552-001**	**W2G0697-01**	**W2J0600-01**	**W3A0430-04**	**W3E0033-01**	**W3I0080-01**	**W3J0580-01**	**W4C0339-03**	**1405054-002**	**1408030-003**	**1411610-004**	**1503166-002**	**1507737-002**	**1508183-002**
Constituent		**Standards***	**1st QTR 2012**	**2nd QTR 2012**	**3rd QTR 2012**	**3rd QTR 2012**	**4th QTR 2012**	**1st QTR 2013**	**2nd QTR 2013**	**3rd QTR 2013**	**4th QTR 2013**	**1st QTR 2014**	**2nd QTR 2014**	**3rd QTR 2014**	**4th QTR 2014**	**1st QTR 2015**	**2nd QTR 2015**	**3rd QTR 2015**
Alkalinity Bicarbonate	mg/l		140	123	150	134	127	119	109	133	140	112	130	120	130	100	110	120
Aluminum-Dissolved	mg/L	0.2	< 0.080	< 0.080	< 0.045	< 0.080	< 0.080	< 0.080	< 0.040	< 0.040	< 0.040	< 0.040	< 0.045	< 0.045	< 0.045	< 0.045	< 0.045	< 0.045
Antimony-Dissolved	mg/L	0.006	< 0.00300	< 0.00300	< 0.0025	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
Arsenic-Dissolved	mg/L	0.01	0.0067	< 0.0030	0.006	0.0087	0.007	< 0.0030	< 0.0030	0.0145	0.0135	0.0093	0.012	0.013	0.016	< 0.0050	< 0.0050	0.0059
Barium-Dissolved	mg/L	2	0.137	0.106	0.14	0.158	0.106	0.0846	0.0771	0.153	0.162	0.103	0.11	0.12	0.14	0.09	0.099	0.097
Beryllium-Dissolved	mg/L	0.004	< 0.0020	< 0.0020	< 0.0010	< 0.0020	< 0.0020	< 0.0020	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Cadmium-Dissolved	mg/L	0.005	< 0.0020	< 0.0020	< 0.0010	< 0.0020	< 0.0020	< 0.0020	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Calcium-Dissolved	mg/L		27	16.4	18	22.6	14.6	11.2	10.2	24.7	27.1	14.3	16	17	21	13	14	15
Chloride	mg/L	400	10.1	10	9.8	10.6	9.74	9.39	9.31	10.1	9.76	9.47	9	9	9.4	9.4	9	8.6
Chromium-Dissolved	mg/L	0.1	< 0.0060	< 0.0060	< 0.0050	< 0.0060	< 0.0060	< 0.0060	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Copper-Dissolved	mg/L	1	< 0.010	< 0.010	< 0.050	< 0.010	< 0.010	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Cyanide (WAD)	mg/L	0.2	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Fluoride	mg/L	4	0.48	0.49	0.46	0.64	0.52	0.53	0.5	0.52	0.45	0.49	0.42	0.32	0.43	0.24	0.26	0.27
Iron-Dissolved	mg/L	0.6	0.097	< 0.060	< 0.010	0.53	< 0.060	< 0.060	< 0.030	0.07	0.068	0.063	0.067	0.032	0.043	0.092	0.096	0.042
Lead-Dissolved	mg/L	0.015	< 0.00300	< 0.00300	< 0.0025	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
Magnesium-Dissolved	mg/L	150	10.2	9.56	9.6	9.71	9.43	10.7	11	11.5	13.4	10.7	11	11	12	13	13	13
Manganese-Dissolved	mg/L	0.1	0.118	0.126	0.071	0.086	0.0445	0.0272	0.0228	0.0441	0.045	0.02	0.023	0.019	0.021	0.019	0.018	0.02
Mercury-Dissolved	mg/L	0.002	< 0.00020	< 0.00020	< 0.00010	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Nickel-Dissolved	mg/L	0.1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	< 0.010	< 0.010	< 0.010	0.026	< 0.010
Nitrate/Nitrite as N	mg/L	10	0.192	< 0.050	< 0.10	0.105	0.082	0.058	< 0.050	0.293	0.386	0.063	0.14	< 0.060	0.16	< 0.050	< 0.050	< 0.10
Nitrogen Total as N	mg/L	10	< 0.550	< 0.550	< 1.1	< 0.550	< 0.550	< 0.550	< 0.55	< 0.550	< 0.550	< 0.55	< 0.30	< 0.26	< 0.25	< 0.25	< 0.25	< 0.30
pH-Field	pH unit	6.5-8.5					6.28	8.5	7.58	9.13	7.94	7.31	9.03	8.24	8.05	7.83	8.06	7.3
Potassium-Dissolved	mg/L		1.71	1.77	1.6	1.8	1.81	1.9	1.88	1.66	1.58	1.73	1.7	1.5	1.7	1.7	1.6	1.8
Selenium-Dissolved	mg/L	0.05	< 0.00250	< 0.00250	< 0.0050	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Silver-Dissolved	mg/L	0.1	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Sodium-Dissolved	mg/L		28.4	28.8	28	27.5	27	27.1	27.6	25.3	24.3	24.5	25	23	23	24	24	24
Sulfate as SO4	mg/L	500	19.9	5.75	5.5	11.6	6.87	5.76	5.91	18.2	20.9	9.64	10	12	14	9	9.6	10
Thallium-Dissolved	mg/L	0.002	< 0.00100	< 0.00100	< 0.0010	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Total Alkalinity	mg/l		140	128	120	136	130	119	109	133	140	113	110	120	130	110	110	120
Total Dissolved Solids-Lab	mg/L	1000	183	153	120	136	138	136	117	168	186	145	140	140	160	130	120	130
Zinc-Dissolved	mg/L	5	< 0.0100	< 0.0100	< 0.010	< 0.0100	< 0.0100	< 0.0100	< 0.0050	0.0061	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Drinking Water Standards (For reference purposes only)																		

Bald Mountain
Monitoring Report

Permit No.: NEV98100 - Mooney

Station Name			MOONEY MONITOR WELL (PZ 1033)	MOONEY MONITOR WELL (PZ 1033)	MOONEY MONITOR WELL (PZ 1033)	MOONEY MONITOR WELL (PZ 1033)	MOONEY MONITOR WELL (PZ 1033)	MOONEY MONITOR WELL (PZ 1033)	MOONEY MONITOR WELL (PZ 1033)	MOONEY MONITOR WELL (PZ 1033)	MOONEY MONITOR WELL (PZ 1033)	MOONEY MONITOR WELL (PZ 1033)	MOONEY MONITOR WELL (PZ 1033)	MOONEY MONITOR WELL (PZ 1033)	MOONEY MONITOR WELL (PZ 1033)
Station Code			**MMW_14**	**MMW_14**	**MMW_14**	**MMW_14**	**MMW_14**	**MMW_14**	**MMW_14**	**MMW_14**	**MMW_14**	**MMW_14**	**MMW_14**	**MMW_14**	**MMW_14**
Sampling Session			**4th QTR 2011**	**2nd QTR 2012**	**4th QTR 2012**	**1st QTR 2013**	**2nd QTR 2013**	**3rd QTR 2013**	**4th QTR 2013**	**1st QTR 2014**	**2nd QTR 2014**	**4th QTR 2014**	**4th QTR 2014**	**1st QTR 2015**	**2nd QTR 2015**	**3rd QTR 2015**
Collect Date			**December 13, 2011**	**April 10, 2012**	**November 15, 2012**	**March 12, 2013**	**May 16, 2013**	**September 19, 2013**	**December 18, 2013**	**March 13, 2014**	**May 22, 2014**	**October 14, 2014**	**December 15, 2014**	**March 24, 2015**	**June 09, 2015**	**August 12, 2015**
Lab Name			**SVL**	**SVL**	**SVL**	**SVL**	**SVL**	**SVL**	**SVL**	**SVL**	**WET**	**WET**	**WET**	**WET**	**WET**	**WET**
Lab Test Date			**December 19, 2011**	**April 16, 2012**	**November 28, 2012**	**March 19, 2013**	**May 28, 2013**	**September 30, 2013**	**December 26, 2013**	**March 24, 2014**	**May 27, 2014**	**October 17, 2014**	**December 18, 2014**	**March 27, 2015**	**June 12, 2015**	**August 25, 2015**
Lab Reference Number			**W1L0328-01**	**W2D0270-01**	**W2K0485-01**	**W3C0326-01**	**W3E0541-01**	**W3I0707-01**	**W3L0421-01**	**W4C0339-01**	**1405556-001**	**1410402-001**	**1412566-001**	**1503775-002**	**1506383-002**	**1508391-001**
Constituent		**Standards***	**4th QTR 2011**	**2nd QTR 2012**	**4th QTR 2012**	**1st QTR 2013**	**2nd QTR 2013**	**3rd QTR 2013**	**4th QTR 2013**	**1st QTR 2014**	**2nd QTR 2014**	**4th QTR 2014**	**4th QTR 2014**	**1st QTR 2015**	**2nd QTR 2015**	**3rd QTR 2015**
Alkalinity Bicarbonate	mg/l		88.1	108	132	57.6	52.8	200	125	206	210	100	120	6.6	150	150
Aluminum-Dissolved	mg/L	0.2	< 0.080	< 0.080	< 0.080	< 0.080	< 0.040	< 0.040	< 0.040	< 0.040	< 0.045	< 0.045	< 0.045	< 0.045	< 0.045	< 0.045
Antimony-Dissolved	mg/L	0.006	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
Arsenic-Dissolved	mg/L	0.01	< 0.0030	< 0.0030	< 0.0030	0.0093	0.0238	0.0282	0.0082	0.0243	0.021	< 0.0050	0.0066	< 0.0050	< 0.0050	0.0055
Barium-Dissolved	mg/L	2	0.043	0.051	0.169	0.284	0.585	0.36	0.135	0.463	0.42	0.15	0.23	0.16	0.28	0.26
Beryllium-Dissolved	mg/L	0.004	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Cadmium-Dissolved	mg/L	0.005	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Calcium-Dissolved	mg/L		5.78	5.39	15	7.37	39	43.9	13.5	44.8	38	7	9.8	5.9	10	11
Chloride	mg/L	400	6.9	6.4	7.62	6.59	5.8	6.06	6.16	5.76	5.5	5.8	5.7	5.3	4.8	5.2
Chromium-Dissolved	mg/L	0.1	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Copper-Dissolved	mg/L	1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Cyanide (WAD)	mg/L	0.2	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Fluoride	mg/L	4	0.59	0.55	0.84	1.94	0.45	0.39	0.36	0.41	0.25	0.18	0.16	0.14	0.11	0.15
Iron-Dissolved	mg/L	0.6	< 0.060	0.852	0.076	< 0.060	0.094	0.07	< 0.030	0.17	0.28	< 0.010	0.014	< 0.010	< 0.020	< 0.020
Lead-Dissolved	mg/L	0.015	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
Magnesium-Dissolved	mg/L	150	9.27	9.17	11	7.76	14.6	16.3	6.74	16.7	17	3.3	7.2	6.2	6.9	7
Manganese-Dissolved	mg/L	0.1	< 0.0040	0.072	0.116	< 0.0040	0.232	0.29	0.0106	0.441	0.062	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Mercury-Dissolved	mg/L	0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Nickel-Dissolved	mg/L	0.1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.005	< 0.005	< 0.005	< 0.005	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Nitrate/Nitrite as N	mg/L	10	0.077	< 0.050	< 0.050	0.055	< 0.050	< 0.050	< 0.050	0.054	< 0.10	< 0.060	0.056	0.057	< 0.10	< 0.10
Nitrogen Total as N	mg/L	10	< 0.550	< 0.55	< 0.55	0.59	< 0.550	< 0.550	< 0.55	< 0.55	< 0.30	< 0.26	< 0.25	0.46	< 0.30	< 0.30
pH-Field	pH unit	6.5-8.5			7.65	7.78	8.7	7.99	10.79	9.28	9.93	7.53	8.88	8.95	8.45	7.28
Potassium-Dissolved	mg/L		2.21	2.35	2.35	2.33	2.28	2.3	2.39	2.4	2.5	2.3	2.3	2.4	2.4	2.4
Selenium-Dissolved	mg/L	0.05	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Silver-Dissolved	mg/L	0.1	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Sodium-Dissolved	mg/L		28.1	32	41.7	66.7	24.2	23.8	24.4	16.3	16	16	15	16	15	14
Sulfate as SO4	mg/L	500	9	2.54	2.81	< 0.30	2.3	18.1	15.1	8.07	6.6	6.1	5.8	6.2	3.1	3.4
Thallium-Dissolved	mg/L	0.002	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Total Alkalinity	mg/l		101	108	132	164	134	200	151	206	190	170	150	70	170	150
Total Dissolved Solids-Lab	mg/L	1000	110	126	121	183	161	192	194	224	200	150	180	57	170	150
Zinc-Dissolved	mg/L	5	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Drinking Water Standards (For reference purposes only)																

Bald Mountain
Monitoring Report

Permit No.: NEV98100 - Mooney

Station Name			**MOONEY MONITOR WELL 17**	**MOONEY MONITOR WELL 17**	**MOONEY MONITOR WELL 17**	**MOONEY MONITOR WELL 17**	**MOONEY MONITOR WELL 17**	**MOONEY MONITOR WELL 17**	**MOONEY MONITOR WELL 17**	**MOONEY MONITOR WELL 17**
Station Code			**MMW_17**	**MMW_17**	**MMW_17**	**MMW_17**	**MMW_17**	**MMW_17**	**MMW_17**	**MMW_17**
Sampling Session			**4th QTR 2013**	**1st QTR 2014**	**2nd QTR 2014**	**3rd QTR 2014**	**4th QTR 2014**	**1st QTR 2015**	**2nd QTR 2015**	**3rd QTR 2015**
Collect Date			**December 31, 2013**	**March 13, 2014**	**June 02, 2014**	**September 29, 2014**	**December 15, 2014**	**March 24, 2015**	**May 27, 2015**	**August 11, 2015**
Lab Name			**SVL**	**SVL**	**WET**	**WET**	**WET**	**WET**	**WET**	**WET**
Lab Test Date			**January 09, 2014**	**March 24, 2014**	**June 06, 2014**	**October 01, 2014**	**December 18, 2014**	**March 27, 2015**	**May 29, 2015**	**August 25, 2015**
Lab Reference Number			**W4A0048-01**	**W4C0339-02**	**1406198-001**	**1410005-001**	**1412566-002**	**1503775-003**	**1505737-004**	**1508391-002**
Constituent		**Standards***	**4th QTR 2013**	**1st QTR 2014**	**2nd QTR 2014**	**3rd QTR 2014**	**4th QTR 2014**	**1st QTR 2015**	**2nd QTR 2015**	**3rd QTR 2015**
Alkalinity Bicarbonate	mg/l		186	184	220	190	190	190	190	190
Aluminum-Dissolved	mg/L	0.2	0.066	< 0.040	< 0.045	< 0.045	< 0.045	< 0.045	< 0.045	< 0.045
Antimony-Dissolved	mg/L	0.006	< 0.00300	< 0.00300	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
Arsenic-Dissolved	mg/L	0.01	< 0.0030	< 0.0030	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Barium-Dissolved	mg/L	2	0.102	0.105	0.097	0.11	0.11	0.13	0.12	0.12
Beryllium-Dissolved	mg/L	0.004	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Cadmium-Dissolved	mg/L	0.005	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Calcium-Dissolved	mg/L		59	58.5	63	61	66	69	66	67
Chloride	mg/L	400	16.8	15.4	16	16	16	15	16	15
Chromium-Dissolved	mg/L	0.1	0.0081	< 0.0030	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Copper-Dissolved	mg/L	1	0.013	< 0.005	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Cyanide (WAD)	mg/L	0.2	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Fluoride	mg/L	4	0.18	0.19	0.14	0.14	0.13	0.11	< 0.10	< 0.10
Iron-Dissolved	mg/L	0.6	0.082	< 0.030	0.094	0.16	0.026	0.02	< 0.020	< 0.020
Lead-Dissolved	mg/L	0.015	< 0.00300	< 0.00300	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
Magnesium-Dissolved	mg/L	150	13.2	10.6	10	8.6	9.2	9.3	8	7.4
Manganese-Dissolved	mg/L	0.1	0.318	0.227	< 0.0050	0.36	0.21	0.013	< 0.0050	< 0.0050
Mercury-Dissolved	mg/L	0.002	< 0.00020	< 0.00020	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Nickel-Dissolved	mg/L	0.1	< 0.005	< 0.005	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Nitrate/Nitrite as N	mg/L	10	0.157	< 0.050	< 0.060	< 0.060	< 0.050	< 0.050	0.077	< 0.10
Nitrogen Total as N	mg/L	10	< 0.550	< 0.55	0.62	0.27	< 0.25	< 0.25	0.45	< 0.30
pH-Field	pH unit	6.5-8.5	7.53	7.44	7.13	6.48	6.41	7.7	6.88	6.69
Potassium-Dissolved	mg/L		4.95	5.38	6.3	5.9	5.9	6.5	6	6.3
Selenium-Dissolved	mg/L	0.05	< 0.00250	< 0.00250	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Silver-Dissolved	mg/L	0.1	< 0.0025	< 0.0025	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Sodium-Dissolved	mg/L		18.5	16.8	16	15	16	18	16	16
Sulfate as SO4	mg/L	500	33	31	26	24	22	21	20	20
Thallium-Dissolved	mg/L	0.002	< 0.00100	< 0.00100	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Total Alkalinity	mg/l		186	184	180	190	190	190	190	190
Total Dissolved Solids-Lab	mg/L	1000	295	284	290	250	300	250	290	290
Zinc-Dissolved	mg/L	5	0.128	< 0.0050	0.057	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Drinking Water Standards (For reference purposes only)										

Bald Mountain
Monitoring Report

Permit No.:										
Station Name			**MOONEY WATER WELL 1**	**MOONEY WATER WELL 1**	**MOONEY WATER WELL 1**	**MOONEY WATER WELL 1**	**MOONEY WATER WELL 1**	**MOONEY WATER WELL 1**	**MOONEY WATER WELL 1**	**MOONEY WATER WELL 1**
Station Code			**MWW_1**	**MWW_1**	**MWW_1**	**MWW_1**	**MWW_1**	**MWW_1**	**MWW_1**	**MWW_1**
Sampling Session			**1st QTR 2012**	**3rd QTR 2012**	**1st QTR 2013**	**3rd QTR 2013**	**1st QTR 2014**	**3rd QTR 2014**	**1st QTR 2015**	**3rd QTR 2015**
Collect Date			**January 23, 2012**	**July 18, 2012**	**January 28, 2013**	**August 15, 2013**	**January 28, 2014**	**July 23, 2014**	**February 11, 2015**	**August 12, 2015**
Lab Name			**SVL**	**SVL**	**SVL**	**SVL**	**SVL**	**WET**	**WET**	**WET**
Lab Test Date			**January 30, 2012**	**July 25, 2012**	**February 06, 2013**	**August 26, 2013**	**February 04, 2014**	**July 25, 2014**	**February 17, 2015**	**August 25, 2015**
Lab Reference Number			**W2A0395-01**	**W2G0517-01**	**W3B0014-01**	**W3H0531-01**	**W4A0520-01**	**1407713-001**	**1502379-001**	**1508391-004**
Constituent		**Standards***	**1st QTR 2012**	**3rd QTR 2012**	**1st QTR 2013**	**3rd QTR 2013**	**1st QTR 2014**	**3rd QTR 2014**	**1st QTR 2015**	**3rd QTR 2015**
Alkalinity Bicarbonate	mg/l		107	109	120	105	106	100	100	100
Aluminum-Dissolved	mg/L	0.2	< 0.080	< 0.080	< 0.080	< 0.040	< 0.040	< 0.045	< 0.045	< 0.045
Antimony-Dissolved	mg/L	0.006	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00250	< 0.0025	< 0.0025	< 0.0025
Arsenic-Dissolved	mg/L	0.01	0.0041	0.0041	< 0.0030	0.0044	0.0045	< 0.0050	0.0052	< 0.0050
Barium-Dissolved	mg/L	2	0.139	0.124	0.121	0.143	0.122	0.13	0.13	0.12
Beryllium-Dissolved	mg/L	0.004	< 0.0020	< 0.0020	< 0.0020	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Cadmium-Dissolved	mg/L	0.005	< 0.0020	< 0.0020	< 0.0020	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Calcium-Dissolved	mg/L		45.7	40.5	43.8	41.9	41.2	43	47	44
Chloride	mg/L	400	15.3	15.8	14.5	15.4	15.8	16	17	16
Chromium-Dissolved	mg/L	0.1	< 0.0060	< 0.0060	< 0.0060	< 0.0030	< 0.0030	< 0.0050	< 0.0050	< 0.0050
Copper-Dissolved	mg/L	1	< 0.010	< 0.010	< 0.010	< 0.005	< 0.005	< 0.050	< 0.050	< 0.050
Cyanide (WAD)	mg/L	0.2	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010
Fluoride	mg/L	4	0.17	0.15	0.15	0.21	0.19	0.14	0.19	0.11
Iron-Dissolved	mg/L	0.6	< 0.060	< 0.060	0.138	< 0.030	< 0.030	0.084	0.026	< 0.020
Lead-Dissolved	mg/L	0.015	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00250	< 0.0025	< 0.0025	< 0.0025
Magnesium-Dissolved	mg/L	150	4	3.52	4.83	3.76	3.7	3.8	4.2	3.8
Manganese-Dissolved	mg/L	0.1	< 0.0040	< 0.0040	0.109	< 0.0020	< 0.0020	< 0.0050	0.0068	< 0.0050
Mercury-Dissolved	mg/L	0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00010	< 0.00010	< 0.00010
Nickel-Dissolved	mg/L	0.1	< 0.010	< 0.010	< 0.010	< 0.005	< 0.005	< 0.010	< 0.010	< 0.010
Nitrate/Nitrite as N	mg/L	10	3.73	3.45	2.8	3.43	3.39	3.1	0.63	3
Nitrogen Total as N	mg/L	10	3.73	3.45	2.8	3.43	3.39	3.1	0.63	3
pH-Field	pH unit	6.5-8.5			7.56	7.6		6.63	7.46	7.22
Potassium-Dissolved	mg/L		7.11	6.17	5.89	6.33	6.85	6.8	7	6.8
Selenium-Dissolved	mg/L	0.05	< 0.00250	< 0.00250	< 0.00250	< 0.020	< 0.00250	< 0.0050	< 0.0050	< 0.0050
Silver-Dissolved	mg/L	0.1	< 0.0050	< 0.0050	< 0.0050	< 0.0025	< 0.0025	< 0.0050	< 0.0050	< 0.0050
Sodium-Dissolved	mg/L		12.7	11.7	11	11.9	11.8	12	13	12
Sulfate as SO4	mg/L	500	17.4	17	16	17.5	19.5	18	19	17
Thallium-Dissolved	mg/L	0.002	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00250	< 0.0010	< 0.0010	< 0.0010
Total Alkalinity	mg/l		107	109	120	105	106	100	100	100
Total Dissolved Solids-Lab	mg/L	1000	235	230	227	238	237	240	220	250
Zinc-Dissolved	mg/L	5	< 0.0100	< 0.0100	< 0.0100	< 0.0050	< 0.0050	< 0.010	< 0.010	< 0.010
Drinking Water Standards (For reference purposes only)										

Bald Mountain
Monitoring Report

Permit No.:										
Station Name			**MOONEY WATER WELL 2**	**MOONEY WATER WELL 2**	**MOONEY WATER WELL 2**	**MOONEY WATER WELL 2**	**MOONEY WATER WELL 2**	**MOONEY WATER WELL 2**	**MOONEY WATER WELL 2**	**MOONEY WATER WELL 2**
Station Code			**MWW_2**	**MWW_2**	**MWW_2**	**MWW_2**	**MWW_2**	**MWW_2**	**MWW_2**	**MWW_2**
Sampling Session			**1st QTR 2012**	**3rd QTR 2012**	**1st QTR 2013**	**3rd QTR 2013**	**1st QTR 2014**	**3rd QTR 2014**	**1st QTR 2015**	**3rd QTR 2015**
Collect Date			**February 07, 2012**	**July 17, 2012**	**January 21, 2013**	**August 15, 2013**	**January 28, 2014**	**July 23, 2014**	**February 18, 2015**	**August 12, 2015**
Lab Name			**SVL**	**SVL**	**SVL**	**SVL**	**SVL**	**WET**	**WET**	**WET**
Lab Test Date			**February 14, 2012**	**July 25, 2012**	**January 28, 2013**	**August 26, 2013**	**February 04, 2014**	**July 25, 2014**	**February 23, 2015**	**August 25, 2015**
Lab Reference Number			**W2B0207-01**	**W2G0502-02**	**W3A0391-01**	**W3H0531-02**	**W4A0520-02**	**1407713-002**	**1502530-003**	**1508391-005**
Constituent		**Standards***	**1st QTR 2012**	**3rd QTR 2012**	**1st QTR 2013**	**3rd QTR 2013**	**1st QTR 2014**	**3rd QTR 2014**	**1st QTR 2015**	**3rd QTR 2015**
Alkalinity Bicarbonate	mg/l		130	135	132	129	134	120	140	120
Aluminum-Dissolved	mg/L	0.2	< 0.080	< 0.080	< 0.080	< 0.040	< 0.040	< 0.045	< 0.045	< 0.045
Antimony-Dissolved	mg/L	0.006	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00250	< 0.0025	< 0.0025	< 0.0025
Arsenic-Dissolved	mg/L	0.01	0.003	0.003	< 0.0030	0.0031	0.0033	< 0.0050	< 0.0050	< 0.0050
Barium-Dissolved	mg/L	2	0.142	0.103	0.113	0.144	0.0962	0.17	0.048	0.087
Beryllium-Dissolved	mg/L	0.004	< 0.0020	< 0.0020	< 0.0020	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Cadmium-Dissolved	mg/L	0.005	< 0.0020	< 0.0020	< 0.0020	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Calcium-Dissolved	mg/L		46.3	44.5	47.6	45.1	49.2	44	53	50
Chloride	mg/L	400	14.6	14.2	14.3	14.1	14.3	15	16	15
Chromium-Dissolved	mg/L	0.1	< 0.0060	< 0.0060	< 0.0060	< 0.0030	< 0.0030	< 0.0050	< 0.0050	< 0.0050
Copper-Dissolved	mg/L	1	< 0.010	< 0.010	< 0.010	< 0.005	< 0.005	< 0.050	< 0.050	< 0.050
Cyanide (WAD)	mg/L	0.2	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010
Fluoride	mg/L	4	0.15	0.13	0.16	0.17	0.16	< 0.10	0.12	< 0.10
Iron-Dissolved	mg/L	0.6	< 0.060	< 0.060	< 0.060	< 0.030	< 0.030	0.095	0.027	< 0.020
Lead-Dissolved	mg/L	0.015	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00250	< 0.0025	< 0.0025	< 0.0025
Magnesium-Dissolved	mg/L	150	5.57	5.03	5.43	5.42	5.56	5.4	5.7	5.5
Manganese-Dissolved	mg/L	0.1	< 0.0040	< 0.0040	< 0.0040	< 0.0020	< 0.0020	< 0.0050	0.0058	< 0.0050
Mercury-Dissolved	mg/L	0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00010	< 0.00010	0.0001
Nickel-Dissolved	mg/L	0.1	< 0.010	< 0.010	< 0.010	< 0.005	< 0.005	< 0.010	< 0.010	< 0.010
Nitrate/Nitrite as N	mg/L	10	3.07	3.42	3.85	3.76	3.9	2.9	3.5	3.7
Nitrogen Total as N	mg/L	10	3.07	3.42	3.85	3.76	3.9	2.9	3.5	3.7
pH-Field	pH unit	6.5-8.5			7.61	7.77		7.34	7.4	6.78
Potassium-Dissolved	mg/L		5.41	5.39	5.96	5.36	6.17	5.6	5.9	5.7
Selenium-Dissolved	mg/L	0.05	< 0.00250	< 0.00250	< 0.00250	< 0.020	< 0.00250	< 0.0050	< 0.0050	< 0.0050
Silver-Dissolved	mg/L	0.1	< 0.0050	< 0.0050	< 0.0050	< 0.0025	< 0.0025	< 0.0050	< 0.0050	< 0.0050
Sodium-Dissolved	mg/L		12.8	11.3	11.7	12.3	12.3	12	12	12
Sulfate as SO4	mg/L	500	15.5	15	15.2	15	15.9	14	15	14
Thallium-Dissolved	mg/L	0.002	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00250	< 0.0010	< 0.0010	< 0.0010
Total Alkalinity	mg/l		130	135	132	129	134	120	140	120
Total Dissolved Solids-Lab	mg/L	1000	235	244	224	255	243	240	240	260
Zinc-Dissolved	mg/L	5	< 0.0100	< 0.0100	0.023	0.0055	0.0301	0.012	< 0.010	< 0.010
Drinking Water Standards (For reference purposes only)										

Bald Mountain
Monitoring Report

Permit No.:									
Station Name			**MOONEY WATER WELL 3**	**MOONEY WATER WELL 3**	**MOONEY WATER WELL 3**	**MOONEY WATER WELL 3**	**MOONEY WATER WELL 3**	**MOONEY WATER WELL 3**	**MOONEY WATER WELL 3**
Station Code			**MWW_3**	**MWW_3**	**MWW_3**	**MWW_3**	**MWW_3**	**MWW_3**	**MWW_3**
Sampling Session			**1st QTR 2012**	**3rd QTR 2012**	**3rd QTR 2013**	**1st QTR 2014**	**3rd QTR 2014**	**1st QTR 2015**	**3rd QTR 2015**
Collect Date			**February 07, 2012**	**July 17, 2012**	**August 15, 2013**	**January 28, 2014**	**July 23, 2014**	**February 11, 2015**	**August 11, 2015**
Lab Name			**SVL**	**SVL**	**SVL**	**SVL**	**WET**	**WET**	**WET**
Lab Test Date			**February 14, 2012**	**July 25, 2012**	**August 26, 2013**	**February 04, 2014**	**July 25, 2014**	**February 17, 2015**	**August 25, 2015**
Lab Reference Number			**W2B0207-02**	**W2G0502-01**	**W3H0531-03**	**W4A0520-03**	**1407713-003**	**1502379-002**	**1508391-006**
Constituent		**Standards***	**1st QTR 2012**	**3rd QTR 2012**	**3rd QTR 2013**	**1st QTR 2014**	**3rd QTR 2014**	**1st QTR 2015**	**3rd QTR 2015**
Alkalinity Bicarbonate	mg/l		115	112	120	129	110	100	120
Aluminum-Dissolved	mg/L	0.2	< 0.080	< 0.080	< 0.040	< 0.040	< 0.045	< 0.045	< 0.045
Antimony-Dissolved	mg/L	0.006	< 0.00300	< 0.00300	< 0.00300	< 0.00250	< 0.0025	< 0.0025	< 0.0025
Arsenic-Dissolved	mg/L	0.01	0.0037	0.0042	< 0.0030	0.0031	< 0.0050	0.0058	< 0.0050
Barium-Dissolved	mg/L	2	0.139	0.123	0.0895	0.038	0.12	0.12	0.096
Beryllium-Dissolved	mg/L	0.004	< 0.0020	< 0.0020	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Cadmium-Dissolved	mg/L	0.005	< 0.0020	< 0.0020	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Calcium-Dissolved	mg/L		44.6	40.3	46.4	49.5	43	47	48
Chloride	mg/L	400	15.6	15.5	17.3	17.5	16	17	19
Chromium-Dissolved	mg/L	0.1	< 0.0060	< 0.0060	< 0.0030	< 0.0030	< 0.0050	< 0.0050	< 0.0050
Copper-Dissolved	mg/L	1	< 0.010	< 0.010	< 0.005	< 0.005	< 0.050	< 0.050	< 0.050
Cyanide (WAD)	mg/L	0.2	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010
Fluoride	mg/L	4	0.18	0.15	0.14	0.16	0.12	0.18	< 0.10
Iron-Dissolved	mg/L	0.6	< 0.060	< 0.060	< 0.030	< 0.030	0.038	0.028	< 0.020
Lead-Dissolved	mg/L	0.015	< 0.00300	< 0.00300	< 0.00300	< 0.00250	< 0.0025	< 0.0025	< 0.0025
Magnesium-Dissolved	mg/L	150	4.57	3.64	5.33	5.41	4.2	4.2	5.4
Manganese-Dissolved	mg/L	0.1	< 0.0040	< 0.0040	< 0.0020	0.0027	< 0.0050	< 0.0050	< 0.0050
Mercury-Dissolved	mg/L	0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00010	< 0.00010	< 0.00010
Nickel-Dissolved	mg/L	0.1	< 0.010	< 0.010	< 0.005	< 0.005	< 0.010	< 0.010	< 0.010
Nitrate/Nitrite as N	mg/L	10	3.22	3.19	3.76	4.16	3.2	2.9	3.3
Nitrogen Total as N	mg/L	10	3.22	3.19	4.44	4.16	3.2	2.9	3.3
pH-Field	pH unit	6.5-8.5			7.35		7.02	6.9	6.99
Potassium-Dissolved	mg/L		5.99	6.13	5.81	6.94	6	7	6.1
Selenium-Dissolved	mg/L	0.05	< 0.00250	< 0.00250	< 0.020	< 0.00250	< 0.0050	< 0.0050	< 0.0050
Silver-Dissolved	mg/L	0.1	< 0.0050	< 0.0050	< 0.0025	< 0.0025	< 0.0050	< 0.0050	< 0.0050
Sodium-Dissolved	mg/L		12.8	11.2	12.2	13	12	13	12
Sulfate as SO4	mg/L	500	16.8	17	17.1	17.8	17	19	16
Thallium-Dissolved	mg/L	0.002	< 0.00100	< 0.00100	< 0.00100	< 0.00250	< 0.0010	< 0.0010	< 0.0010
Total Alkalinity	mg/l		115	112	120	129	110	100	120
Total Dissolved Solids-Lab	mg/L	1000	229	231	256	248	240	220	260
Zinc-Dissolved	mg/L	5	0.0238	< 0.0100	< 0.0050	< 0.0050	< 0.010	< 0.010	0.011
Drinking Water Standards (For reference purposes only)									

Bald Mountain
Monitoring Report

Permit No.: NEV98100 - Mooney

Station Name			**MOONEY WATER WELL 6 (PZ-1056)**	**MOONEY WATER WELL 6 (PZ-1056)**	**MOONEY WATER WELL 6 (PZ-1056)**	**MOONEY WATER WELL 6 (PZ-1056)**	**MOONEY WATER WELL 6 (PZ-1056)**	**MOONEY WATER WELL 6 (PZ-1056)**	**MOONEY WATER WELL 6 (PZ-1056)**	**MOONEY WATER WELL 6 (PZ-1056)**	**MOONEY WATER WELL 6 (PZ-1056)**
Station Code			**MWW_6**	**MWW_6**	**MWW_6**	**MWW_6**	**MWW_6**	**MWW_6**	**MWW_6**	**MWW_6**	**MWW_6**
Sampling Session			**3rd QTR 2011**	**1st QTR 2012**	**3rd QTR 2012**	**1st QTR 2013**	**3rd QTR 2013**	**1st QTR 2014**	**3rd QTR 2014**	**1st QTR 2015**	**3rd QTR 2015**
Collect Date			**September 29, 2011**	**February 07, 2012**	**July 17, 2012**	**January 21, 2013**	**August 15, 2013**	**January 28, 2014**	**July 23, 2014**	**February 11, 2015**	**August 12, 2015**
Lab Name			**SVL**	**SVL**	**SVL**	**SVL**	**SVL**	**SVL**	**WET**	**WET**	**WET**
Lab Test Date			**October 10, 2011**	**February 14, 2012**	**July 25, 2012**	**January 28, 2013**	**August 26, 2013**	**February 04, 2014**	**July 25, 2014**	**February 17, 2015**	**August 25, 2015**
Lab Reference Number			**W1J0043-01**	**W2B0207-03**	**W2G0502-03**	**W3A0391-02**	**W3H0531-04**	**W4A0520-04**	**1407713-004**	**1502379-003**	**1508391-007**
Constituent		**Standards***	**3rd QTR 2011**	**1st QTR 2012**	**3rd QTR 2012**	**1st QTR 2013**	**3rd QTR 2013**	**1st QTR 2014**	**3rd QTR 2014**	**1st QTR 2015**	**3rd QTR 2015**
Alkalinity Bicarbonate	mg/l		104	100	109	99.9	105	104	85	100	92
Aluminum-Dissolved	mg/L	0.2	< 0.080	< 0.080	< 0.080	< 0.080	< 0.040	< 0.040	< 0.045	< 0.045	< 0.045
Antimony-Dissolved	mg/L	0.006	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00300	< 0.00250	< 0.0025	< 0.0025	< 0.0025
Arsenic-Dissolved	mg/L	0.01	< 0.0030	0.0039	< 0.0030	0.0045	0.0045	< 0.0025	< 0.0050	< 0.0050	< 0.0050
Barium-Dissolved	mg/L	2	0.181	0.118	0.0621	0.111	0.122	0.104	0.23	0.21	0.1
Beryllium-Dissolved	mg/L	0.004	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Cadmium-Dissolved	mg/L	0.005	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Calcium-Dissolved	mg/L		40.1	42.2	37	40.4	40.9	25.1	32	25	41
Chloride	mg/L	400	16.9	16.4	15.8	15.6	15.1	17	17	17	16
Chromium-Dissolved	mg/L	0.1	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0030	< 0.0030	< 0.0050	< 0.0050	< 0.0050
Copper-Dissolved	mg/L	1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.005	< 0.005	< 0.050	< 0.050	< 0.050
Cyanide (WAD)	mg/L	0.2	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.010	< 0.010	< 0.010
Fluoride	mg/L	4	0.18	0.23	0.17	0.33	0.22	0.2	0.13	0.16	0.13
Iron-Dissolved	mg/L	0.6	1.14	< 0.060	0.823	0.087	< 0.030	0.726	0.17	0.046	< 0.020
Lead-Dissolved	mg/L	0.015	< 0.00300	0.0182	0.0054	< 0.00300	< 0.00300	< 0.00250	< 0.0025	< 0.0025	< 0.0025
Magnesium-Dissolved	mg/L	150	4.52	4.58	3.94	4.59	4.16	2.77	3.5	2.1	4.1
Manganese-Dissolved	mg/L	0.1	0.0531	< 0.0040	0.0749	< 0.0040	< 0.0020	0.0149	0.052	0.0073	< 0.0050
Mercury-Dissolved	mg/L	0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00010	< 0.00010	< 0.00010
Nickel-Dissolved	mg/L	0.1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.005	< 0.005	< 0.010	< 0.010	< 0.010
Nitrate/Nitrite as N	mg/L	10	3.02	2.76	0.663	3.13	3.56	3.08	< 0.060	< 0.050	2.7
Nitrogen Total as N	mg/L	10		2.76	0.66	3.13	3.56	3.08	< 0.26	0.32	2.7
pH-Field	pH unit	6.5-8.5				7.37	7.64		6.85	7.3	7.08
Potassium-Dissolved	mg/L		6.03	6.62	6.1	7.82	6.07	7.04	7.4	7.3	7.1
Selenium-Dissolved	mg/L	0.05	< 0.00300	< 0.00250	< 0.00250	< 0.00250	< 0.020	< 0.00250	< 0.0050	< 0.0050	< 0.0050
Silver-Dissolved	mg/L	0.1	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0025	< 0.0025	< 0.0050	< 0.0050	< 0.0050
Sodium-Dissolved	mg/L		11.2	12.6	11	11.8	11.1	11.5	12	12	12
Sulfate as SO4	mg/L	500	19.2	21.2	18.9	20.5	17	19.3	17	17	19
Thallium-Dissolved	mg/L	0.002	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.00100	< 0.000250	< 0.0010	< 0.0010	< 0.0010
Total Alkalinity	mg/l		104	100	109	99.9	105	104	85	100	92
Total Dissolved Solids-Lab	mg/L	1000	230	224	213	218	239	228	160	220	220
Zinc-Dissolved	mg/L	5	< 0.0100	< 0.0100	< 0.0100	< 0.0100	< 0.0050	< 0.0050	0.014	< 0.010	< 0.010
Drinking Water Standards (For reference purposes only)											

BARRICK
BALD MOUNTAIN

Bald Mountain
Monitoring Report

Permit No.:

Station Name			**YANKEE WATER SUPPLY**
Station Code			**YWS_1**
Sampling Session			**2nd QTR 2012**
Collect Date			**April 17, 2012**
Lab Name			**SVL**
Lab Test Date			**April 24, 2012**
Lab Reference Number			**W2D0421-01**
Constituent		**Standards***	**2nd QTR 2012**
Alkalinity Bicarbonate	mg/l		105
Aluminum-Dissolved	mg/L	0.2	< 0.080
Antimony-Dissolved	mg/L	0.006	< 0.00300
Arsenic-Dissolved	mg/L	0.01	< 0.0030
Barium-Dissolved	mg/L	2	0.111
Beryllium-Dissolved	mg/L	0.004	< 0.0020
Boron-Dissolved	mg/L		0.058
Cadmium-Dissolved	mg/L	0.005	< 0.0020
Calcium-Dissolved	mg/L		29.8
Carbonate	mg/l		< 1.0
Chloride	mg/L	400	14.7
Chromium-Dissolved	mg/L	0.1	< 0.0060
Copper-Dissolved	mg/L	1	< 0.010
Cyanide (WAD)	mg/L	0.2	< 0.0100
Fluoride	mg/L	4	0.23
Iron-Dissolved	mg/L	0.6	0.412
KJELDAHL NITROGEN	mg/L		< 0.50
Lead-Dissolved	mg/L	0.015	< 0.00300
Magnesium-Dissolved	mg/L	150	4.98
Manganese-Dissolved	mg/L	0.1	0.0156
Mercury-Dissolved	mg/L	0.002	< 0.00020
Nickel-Dissolved	mg/L	0.1	< 0.010
Nitrate/Nitrite as N	mg/L	10	< 0.050
Nitrogen Total as N	mg/L	10	< 0.550
pH-Lab	pH unit	6.5-8.5	8.25
Potassium-Dissolved	mg/L		5.47
Selenium-Dissolved	mg/L	0.05	< 0.00250
Silver-Dissolved	mg/L	0.1	< 0.0050
Sodium-Dissolved	mg/L		10.3
Sulfate as SO4	mg/L	500	6.89
Thallium-Dissolved	mg/L	0.002	< 0.00100
Total Alkalinity	mg/l		105
Total Dissolved Solids-Lab	mg/L	1000	126
Zinc-Dissolved	mg/L	5	< 0.0100
Drinking Water Standards (For reference purposes only)			

Appendix D

Soils with Salvage Depths within the Study Area

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Appendix D Soils with Salvage Depths within the Study Area

Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
North Operations Area Project																			
100	Pookaloo-Cavehill-Rock outcrop association	Cavehill	30	H1	0	15	very gravelly silt loam	7.9-9	0-0	0-0	Severe	Moderate	5,519	1,656	15-50	mountains	Poor	C, D, DB, NR, OM, R, S	0
100	Pookaloo-Cavehill-Rock outcrop association	Cavehill	30	H2	15	27	very cobbly loam	7.9-9	0-0	0-2	Severe								
100	Pookaloo-Cavehill-Rock outcrop association	Cavehill	30	H3	27	31	unweathered bedrock	-	-	-									
100	Pookaloo-Cavehill-Rock outcrop association	Pookaloo	40	H1	0	4	very gravelly loam	7.9-8.4	0-0	0-0	Severe	Moderate		2,207	15-50	mountains	Poor	C, D, DB, NR, OM, R, S	0
100	Pookaloo-Cavehill-Rock outcrop association	Pookaloo	40	H2	4	19	very gravelly loam	7.9-8.4	0-0	0-0	Severe								
100	Pookaloo-Cavehill-Rock outcrop association	Pookaloo	40	H2	4	19	very gravelly loam	7.9-8.4	0-0	0-0	Severe								
100	Pookaloo-Cavehill-Rock outcrop association	Pookaloo	40	H3	19	23	unweathered bedrock	-	-	-									
1010	Hunnton-Chiara association	Chiara	35	H1	0	4	silt loam	6.6-8.4	0-5	0-2	Not Severe	Moderate	718	251	2-8	fan remnants	Poor	CL, D, E, OM, R, SC	4
1010	Hunnton-Chiara association	Chiara	35	H2	4	19	loam	7.4-9	5-30	0-4	Not Severe								
1010	Hunnton-Chiara association	Chiara	35	H3	19	23	indurated	-	-	-									
1010	Hunnton-Chiara association	Hunnton	50	H1	0	4	silt loam	7.4-8.4	0-5	0-4	Not Severe	Moderate		359	2-8	fan remnants	Poor	CL, D, E, OM, R, SC	10
1010	Hunnton-Chiara association	Hunnton	50	H2	4	10	clay loam	7.9-8.4	0-5	0-4	Not Severe								
1010	Hunnton-Chiara association	Hunnton	50	H3	10	35	clay	7.4-8.4	1-5	0-4	Not Severe								
1010	Hunnton-Chiara association	Hunnton	50	H4	35	40	indurated	-	-	-									
1081	Bobs-Fax-Parisa association	Bobs	40	H1	0	3	very gravelly loam	7.9-9	0-0	0-0	Not Severe	Moderate	3,206	1,282	2-15	fan remnants	Poor	C, D, E, OM, R, S, SC, StC	14
1081	Bobs-Fax-Parisa association	Bobs	40	H2	3	14	gravelly loam	7.9-9	1-5	0-2	Not Severe								
1081	Bobs-Fax-Parisa association	Bobs	40	H3	14	18	indurated	-	-	-									
1081	Bobs-Fax-Parisa association	Fax	25	H1	0	3	very cobbly coarse sandy loam	7.4-8.4	0-0	0-0	Not Severe	Moderate		801	4-15	fan remnants	Poor	C, D, E, OM, R,S, SC, StC	0
1081	Bobs-Fax-Parisa association	Fax	25	H2	3	12	very cobbly sandy clay loam	7.4-8.4	0-0	0-0	Not Severe								
1081	Bobs-Fax-Parisa association	Fax	25	H3	12	22	very cobbly coarse sandy loam	7.9-8.4	0-0	0-2	Not Severe								
1081	Bobs-Fax-Parisa association	Fax	25	H4	22	48	cemented	-	-	-									
1081	Bobs-Fax-Parisa association	Parisa	20	H1	0	4	gravelly loam	7.9-9	1-5	0-2	Not Severe	Moderate		641	2-8	fan remnants	Poor	C, D, E, OM, R, S, SC, StC	4

Appendix D Soils with Salvage Depths within the Study Area

Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
1081	Bobs-Fax-Parisa association	Parisa	20	H2	4	26	very gravelly loam	7.9-9	5-12	0-2	Not Severe								
1081	Bobs-Fax-Parisa association	Parisa	20	H3	26	47	indurated	-	-	-									
1081	Bobs-Fax-Parisa association	Parisa	20	H4	47	60	extremely gravelly coarse sandy loam	7.9-9	13-30	2-8	Not Severe								
1372	Wardbay-Hardol-Adobe association	Adobe	15	H1	0	5	very gravelly silt loam	7.9-8.4	0-0	0-0	Severe	Moderate	2,349	352	15-50	mountains	Poor	C, CC, D, DB, HR, R, S	0
1372	Wardbay-Hardol-Adobe association	Adobe	15	H2	5	17	very gravelly loam	7.9-8.4	0-0	0-0	Severe								
1372	Wardbay-Hardol-Adobe association	Adobe	15	H3	17	21	unweathered bedrock	-	-	-									
1372	Wardbay-Hardol-Adobe association	Cumulic Haplaquolls	2	H1	0	6	silt loam	8.5-9.6	0-0	4-8	Not Severe	Moderate		47	4-15	drainageways	Poor	C, CC, D, DB, HR, R, S	22
1372	Wardbay-Hardol-Adobe association	Cumulic Haplaquolls	2	H2	6	22	silt loam	8.5-9.6	0-0	4-8	Not Severe								
1372	Wardbay-Hardol-Adobe association	Cumulic Haplaquolls	2	H3	22	60	clay	8.5-9.6	0-0	4-8	Not Severe								
1372	Wardbay-Hardol-Adobe association	Hardol	30	H1	0	12	very gravelly silt loam	7.4-8.4	0-0	0-0	Severe	Moderate		705	15-30	mountains	Poor	C, CC, D, DB, HR, R, S	0
1372	Wardbay-Hardol-Adobe association	Hardol	30	H2	12	33	extremely gravelly silt loam	7.4-8.4	0-0	0-0	Not Severe								
1372	Wardbay-Hardol-Adobe association	Hardol	30	H3	33	60	extremely gravelly loam	7.9-8.4	0-0	0-0	Not Severe								
1372	Wardbay-Hardol-Adobe association	Wardbay	40	H1	0	18	very gravelly loam	7.4-8.4	0-0	0-0	Severe	Moderate		940	15-50	mountains	Poor	C, CC, D, DB, HR, R, S	0
1372	Wardbay-Hardol-Adobe association	Wardbay	40	H2	18	45	extremely cobbly silt loam	7.9-8.4	0-0	0-0	Severe								
1372	Wardbay-Hardol-Adobe association	Wardbay	40	H3	45	49	unweathered bedrock	-	-	-									
226	Hutchley-Tusel-Suak association	Devilsgait	1	H1	0	10	silt loam	7.9-8.4	1-5	0-2	Not Severe	Moderate	1,094	11	2-8	drainageways	Poor	CC, CL, D, DB, HR, NSL, OM, R, S	60
226	Hutchley-Tusel-Suak association	Devilsgait	1	H2	10	60	silt loam to silty clay loam	7.9-8.4	1-5	0-2	Not Severe								
226	Hutchley-Tusel-Suak association	Hutchley	35	H1	0	3	very gravelly loam	6.6-7.8	0-0	0-0	Severe	Low		383	15-50	mountains	Poor	CC, CL, D, DB, HR, NSL, OM, R, S	0
226	Hutchley-Tusel-Suak association	Hutchley	35	H2	3	12	very cobbly clay loam	6.6-7.8	0-0	0-0	Severe								
226	Hutchley-Tusel-Suak association	Hutchley	35	H3	12	16	unweathered bedrock	-	-	-									
226	Hutchley-Tusel-Suak association	Suak	25	H1	0	10	very stony loam	6.6-7.3	0-0	0-0	Not Severe	Low		273	8-30	mountains	Poor	CC, CL, D, DB, HR, NSL, OM, R, S	0

Appendix D Soils with Salvage Depths within the Study Area

Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
226	Hutchley-Tusel-Suak association	Suak	25	H2	10	25	extremely cobbly loam	7.4-7.8	0-0	0-0	Not Severe								
226	Hutchley-Tusel-Suak association	Suak	25	H3	25	35	unweathered bedrock	-	-	-									
226	Hutchley-Tusel-Suak association	Tusel	25	H1	0	13	cobbly loam	6.1-7.3	0-0	0-0	Severe	Moderate		273	15-50	mountains	Poor	CC, CL, D, DB, HR, NSL, OM, R, S	13
226	Hutchley-Tusel-Suak association	Tusel	25	H2	13	42	extremely gravelly clay loam	6.1-7.3	0-0	0-0	Severe								
226	Hutchley-Tusel-Suak association	Tusel	25	H3	42	46	unweathered bedrock	-	-	-									
270	Atlow-Maderbak-Rubble land association	Atlow	40	H1	0	5	Very gravelly loam	7.4-8.4	0-0	0-0	Severe	Low	76	31	15-50	mountains	Poor	DB, OM, D, R, S	0
270	Atlow-Maderbak-Rubble land association	Atlow	40	H2	5	41	Very gravelly sandy clay loam	7.9-9	0-0	0-2									
270	Atlow-Maderbak-Rubble land association	Atlow	40	R	41	66	Bedrock												
270	Atlow-Maderbak-Rubble land association	Maderbak	30	H1	0	8	Very gravelly clay loam	7.4-7.8	0-0	0-0	Severe	Low		23	30-75	mountains	Poor	CL, D, DB, OM, R, CL	0
270	Atlow-Maderbak-Rubble land association	Maderbak	30	H2	8	43	Very gravelly clay	7.4-8.4	0-0	0-0									
270	Atlow-Maderbak-Rubble land association	Maderbak	30	H3	43	74	Very gravelly clay loam	7.9-9	0-0	0-0									
270	Atlow-Maderbak-Rubble land association	Maderbak	30	H4	74	99	Unweathered bedrock												
271	Atlow association	Atlow	20	H1	0	2	very gravelly loam	7.4-8.4	0-0	0-0	Not Severe	Low	16	3	4-15	mountains	Poor	CL, D, DB, OM, R, S	0
271	Atlow association	Atlow	20	H2	2	16	very cobbly clay loam	7.9-9	0-0	0-2	Not Severe								
271	Atlow association	Atlow	20	H3	16	20	unweathered bedrock	-	-	-									
271	Atlow association	Atlow	65	H1	0	2	very gravelly loam	7.4-8.4	0-0	0-0	Severe	Low		11	15-50	mountains	Poor	CL, D, DB, OM, R, S	0
271	Atlow association	Atlow	65	H2	2	16	very cobbly clay loam	7.9-9	0-0	0-2	Severe								
271	Atlow association	Atlow	65	H3	16	20	unweathered bedrock	-	-	-									
282	Palinor very gravelly loam, 2 to 15 percent slopes	Palinor	85	H1	0	10	very gravelly loam	7.9-9	1-5	0-0	Not Severe	Moderate	129	110	2-15	fan piedmonts, fan remnants	Poor	C, CP, D, R, S	0
282	Palinor very gravelly loam, 2 to 15 percent slopes	Palinor	85	H2	10	18	extremely gravelly fine sandy loam	7.9-9	1-5	2-4	Not Severe								
282	Palinor very gravelly loam, 2 to 15 percent slopes	Palinor	85	H3	18	30	cemented material	-	-	-									

Appendix D Soils with Salvage Depths within the Study Area

Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
282	Palinor very gravelly loam, 2 to 15 percent slopes	Palinor	85	H4	30	60	gravelly sandy loam to extremely gravelly coarse sand	7.9-9	1-12	0-0	Not Severe								
290	Palinor-Shabliss-Tulase association	Palinor	45	H1	0	10	gravelly loam	7.9-9	1-5	0-0	Not Severe	Moderate	1,773	798	2-8	fan remnants	Poor	ALK, C, D, E, OM, R, SC	10
290	Palinor-Shabliss-Tulase association	Palinor	45	H2	10	18	extremely gravelly fine sandy loam	7.9-9	1-5	2-4	Not Severe								
290	Palinor-Shabliss-Tulase association	Palinor	45	H3	18	30	indurated	-	-	-									
290	Palinor-Shabliss-Tulase association	Palinor	45	H4	30	60	gravelly sandy loam to extremely gravelly coarse sand	7.9-9	1-12	0-0	Not Severe								
290	Palinor-Shabliss-Tulase association	Shabliss	25	H1	0	3	gravelly loam	7.9-8.4	1-5	0-4	Not Severe	Moderate		443	2-8	fan remnants	Poor	ALK, C, D, E, OM, R, SC	13
290	Palinor-Shabliss-Tulase association	Shabliss	25	H2	3	13	gravelly loam	7.9-8.4	1-12	0-4	Not Severe								
290	Palinor-Shabliss-Tulase association	Shabliss	25	H3	13	55	cemented	-	-	-									
290	Palinor-Shabliss-Tulase association	Tulase	20	H1	0	2	silt loam	7.9-8.4	0-0	0-2	Not Severe	Moderate		355	2-4	inset fans	Poor	ALK, C, D, E, OM, R, SC	60
290	Palinor-Shabliss-Tulase association	Tulase	20	H2	2	60	silt loam	8.5-9	1-5	0-2	Not Severe								
291	Urmafot-Borvant-Biken association	Biken	15	H1	0	9	very gravelly fine sandy loam	8.5-9	0-0	0-0	Not Severe	Moderate	2,224	334	8-30	hills	Poor	ALK, C, D, DB, OM, R, S, SC, SD	0
291	Urmafot-Borvant-Biken association	Biken	15	H2	9	18	very gravelly fine sandy loam	8.5-9	1-12	0-0	Not Severe								
291	Urmafot-Borvant-Biken association	Biken	15	H3	18	30	weathered bedrock	-	-	-									
291	Urmafot-Borvant-Biken association	Biken	15	H4	30	40	unweathered bedrock	-	-	-									
291	Urmafot-Borvant-Biken association	Borvant	20	H1	0	2	gravelly loam	7.9-9	0-0	1-2	Not Severe	Moderate		445	4-15	fan remnants	Poor	ALK, C, D, DB, OM, R, S, SC, SD	2
291	Urmafot-Borvant-Biken association	Borvant	20	H2	2	19	extremely gravelly loam	8.5-9	0-0	0-2	Not Severe								
291	Urmafot-Borvant-Biken association	Borvant	20	H3	19	43	indurated	-	-	-									
291	Urmafot-Borvant-Biken association	Urmafot	50	H1	0	8	very gravelly loam	7.9-8.4	0-0	0-0	Not Severe	Moderate		1,112	2-8	fan remnants	Poor	ALK, C, D, DB, OM, R, S, SC, SD	8 to 14
291	Urmafot-Borvant-Biken association	Urmafot	50	H2	8	14	gravelly loam	7.9-8.4	0-0	0-0	Not Severe								
291	Urmafot-Borvant-Biken association	Urmafot	50	H3	14	32	indurated	-	-	-									

Appendix D Soils with Salvage Depths within the Study Area

Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
291	Urmafot-Borvant-Biken association	Urmafot	50	H4	32	60	extremely gravelly coarse sandy loam to extremely gravelly sandy loam	7.9-8.4	0-0	0-2	Not Severe								
292	Palinor-Urmafot-Urmafot, very shallow association	Palinor	45	H1	0	10	gravelly loam	7.9-9	1-5	0-0	Not Severe	Moderate	258	116	8-15	fan remnants	Poor	C, D, R, S	10
292	Palinor-Urmafot-Urmafot, very shallow association	Palinor	45	H2	10	18	extremely gravelly fine sandy loam	7.9-9	1-5	2-4	Not Severe								
292	Palinor-Urmafot-Urmafot, very shallow association	Palinor	45	H3	18	30	indurated	-	-	-									
292	Palinor-Urmafot-Urmafot, very shallow association	Palinor	45	H4	30	60	gravelly sandy loam to extremely gravelly coarse sand	7.9-9	1-12	0-0	Not Severe								
292	Palinor-Urmafot-Urmafot, very shallow association	Urmafot	15	H1	0	9	very gravelly loam	7.9-8.4	0-0	0-0	Not Severe	Moderate		39	4-15	fan remnants	Poor	C, D, R, S	9 to 32
292	Palinor-Urmafot-Urmafot, very shallow association	Urmafot	15	H2	9	32	gravelly loam	-	-	-									
292	Palinor-Urmafot-Urmafot, very shallow association	Urmafot	15	H4	32	60	extremely gravelly coarse sandy loam to extremely gravelly sandy loam	7.9-8.4	0-0	0-2	Not Severe								
292	Palinor-Urmafot-Urmafot, very shallow association	Urmafot	25	H1	0	8	very gravelly loam	7.9-8.4	0-0	0-0	Not Severe	Moderate		65	2-8	fan remnants	Poor	C, D, R, S	8 to 14
292	Palinor-Urmafot-Urmafot, very shallow association	Urmafot	25	H2	8	14	gravelly loam	7.9-8.4	0-0	0-0	Not Severe								
292	Palinor-Urmafot-Urmafot, very shallow association	Urmafot	25	H3	14	32	indurated	-	-	-									
292	Palinor-Urmafot-Urmafot, very shallow association	Urmafot	25	H4	32	60	extremely gravelly coarse sandy loam to extremely gravelly sandy loam	7.9-8.4	0-0	0-2	Not Severe								
373	Automal-Wintermute association	Automal	65	H1	0	30	Gravelly silt loam	7.9-9	0-0	0-0	Not Severe	Low	363	236	2-8	fan remnants	Fair	OM, D, C, Na, R	12
373	Automal-Wintermute association	Automal	65	H2	30	81	Extremely gravelly sandy loam	7.9-9	1-5	0-2									
373	Automal-Wintermute association	Automal	65	H3	81	152	Extremely gravelly coarse sandy loam	7.9-9	13-30	8-16									
373	Automal-Wintermute association	Wintermute	20	H1	0	5	Gravelly silt loam	7.9-8.4	1-5	0-0	Not Severe	Low		73	2-8	fan remnants	Poor	OM, D, C, SC, R	11

Appendix D Soils with Salvage Depths within the Study Area

Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
373	Automal-Wintermute association	Wintermute	20	H2	5	28	Gravelly fine sandy loam	8.5-9	1-5	0-0									
373	Automal-Wintermute association	Wintermute	20	H3	28	152	Stratified extremely cobbly loamy sand to very gravelly sandy loam	8.5-9	1-12	0-0									
450	Shabliss-Yody association	Shabliss	50	H1	0	8	Gravelly loam	7.9-8.4	1-5	0-4	Not Severe	Low	2	1	2-8	fan remnants	Poor	D, CP, SC, OM, R	12
450	Shabliss-Yody association	Shabliss	50	H2	8	33	Gravelly loam	7.9-8.4	1-12	0-4									
450	Shabliss-Yody association	Shabliss	50	H3	33	140	Cemented material												
450	Shabliss-Yody association	Yody	35	H1	0	10	Gravelly sandy loam	7.9-8.4	0-5	0-2	Not Severe	Low		1	2-8	fan remnants	Poor	SC, OM, CP, D, R	4
450	Shabliss-Yody association	Yody	35	H2	10	76	Gravelly sandy clay loam	7.9-8.4	1-12	2-4									
450	Shabliss-Yody association	Yody	35	H3	76	91	Gravelly sandy loam	7.9-9	1-12	2-4									
450	Shabliss-Yody association	Yody	35	H4	91	152	Cemented												
480	Pioche-Cropper association	Cropper	35	H1	0	4	very cobbly loam	6.6-7.8	0-0	0-0	Severe	Low	1,022	358	15-50	mountains	Poor	CC, CL, D, DB, R, S, StC	0
480	Pioche-Cropper association	Cropper	35	H2	4	16	extremely gravelly clay loam	6.6-7.8	0-0	0-0	Severe								
480	Pioche-Cropper association	Cropper	35	H3	16	20	unweathered bedrock	-	-	-									
480	Pioche-Cropper association	Pioche	50	H1	0	3	extremely stony loam	6.6-7.8	0-0	0-0	Severe	Low		511	15-50	mountains	Poor	CC, CL, D, DB, R, S, StC	0
480	Pioche-Cropper association	Pioche	50	H2	3	15	very cobbly clay	6.6-7.8	0-0	0-0	Severe								
480	Pioche-Cropper association	Pioche	50	H3	15	19	unweathered bedrock	-	-	-									
481	Pioche-Segura-Cropper association	Cropper	15	H1	0	4	very cobbly loam	6.6-7.8	0-0	0-0	Not Severe	Low	1,076	161	8-30	mountains	Poor	CC, CL, D, DB, R, S, StC	0
481	Pioche-Segura-Cropper association	Cropper	15	H2	4	16	extremely gravelly clay loam	6.6-7.8	0-0	0-0	Not Severe								
481	Pioche-Segura-Cropper association	Cropper	15	H3	16	20	unweathered bedrock	-	-	-									
481	Pioche-Segura-Cropper association	Pioche	40	H1	0	3	extremely stony loam	6.6-7.8	0-0	0-0	Not Severe	Low		430	8-30	mountains	Poor	CC, CL, D, DB, R, S, StC	0
481	Pioche-Segura-Cropper association	Pioche	40	H2	3	15	very cobbly clay	6.6-7.8	0-0	0-0	Not Severe								
481	Pioche-Segura-Cropper association	Pioche	40	H3	15	19	unweathered bedrock	-	-	-									
481	Pioche-Segura-Cropper association	Segura	30	H1	0	3	very cobbly loam	6.6-8.4	0-0	0-0	Severe	Low		323	15-50	mountains	Poor	CC, CL, D, DB, R, S, StC	0
481	Pioche-Segura-Cropper association	Segura	30	H2	3	14	gravelly clay loam	6.6-8.4	0-0	0-0	Severe								

Appendix D Soils with Salvage Depths within the Study Area

Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
481	Pioche-Segura-Cropper association	Segura	30	H3	14	18	unweathered bedrock	-	-	-									
486	Pioche-Cropper-Upatad association	Cropper	20	H1	0	4	very cobbly loam	6.6-7.8	0-0	0-0	Severe	Low	820	164	15-50	mountains	Poor	CC, CL, D, DB, R, S, StC	0
486	Pioche-Cropper-Upatad association	Cropper	20	H2	4	16	extremely gravelly clay loam	6.6-7.8	0-0	0-0	Severe								
486	Pioche-Cropper-Upatad association	Cropper	20	H3	16	20	unweathered bedrock	-	-	-									
486	Pioche-Cropper-Upatad association	Pioche	50	H1	0	3	extremely stony loam	6.6-7.8	0-0	0-0	Severe	Low		410	15-50	mountains	Poor	CC, CL, D, DB, R, S, StC	0
486	Pioche-Cropper-Upatad association	Pioche	50	H2	3	15	very cobbly clay	6.6-7.8	0-0	0-0	Severe								
486	Pioche-Cropper-Upatad association	Pioche	50	H3	15	19	unweathered bedrock	-	-	-									
486	Pioche-Cropper-Upatad association	Upatad	20	H1	0	3	very gravelly silt loam	7.4-7.8	0-0	0-0	Severe	Low		164	15-50	mountains	Poor	CC, CL, D, DB, R, S, StC	0
486	Pioche-Cropper-Upatad association	Upatad	20	H2	3	15	very cobbly silty clay loam	7.4-8.4	0-0	0-0	Severe								
486	Pioche-Cropper-Upatad association	Upatad	20	H3	15	19	unweathered bedrock	-	-	-									
500	Segura-McIvey-Hutchley association	Hutchley	15	H1	0	3	very gravelly loam	6.6-7.8	0-0	0-0	Not Severe	Low	3,157	474	8-30	mountains	Poor	CC, CL, D, DB, HR, OM, R, S, StC	0
500	Segura-McIvey-Hutchley association	Hutchley	15	H2	3	12	very cobbly clay loam	6.6-7.8	0-0	0-0	Not Severe								
500	Segura-McIvey-Hutchley association	Hutchley	15	H3	12	16	unweathered bedrock	-	-	-									
500	Segura-McIvey-Hutchley association	McIvey	25	H1	0	12	very gravelly loam	6.6-7.3	0-0	0-0	Severe	Low		789	30-50	mountains	Poor	CC, CL, D, DB, HR, OM, R, S, StC	12 to 18
500	Segura-McIvey-Hutchley association	McIvey	25	H2	12	18	gravelly clay loam	6.1-7.3	0-0	0-0	Severe								
500	Segura-McIvey-Hutchley association	McIvey	25	H3	18	62	extremely cobbly clay	6.1-7.3	0-0	0-0	Severe								
500	Segura-McIvey-Hutchley association	Segura	45	H1	0	3	very cobbly loam	6.6-8.4	0-0	0-0	Severe	Low		1,421	15-50	mountains	Poor	CC, CL, D, DB, HR, OM, R, S, StC	0
500	Segura-McIvey-Hutchley association	Segura	45	H2	3	14	gravelly clay loam	6.6-8.4	0-0	0-0	Severe								
500	Segura-McIvey-Hutchley association	Segura	45	H3	14	18	unweathered bedrock	-	-	-									
510	Onkeyo-Cavehill-Pookaloo association	Buzztail	5	H1	0	8	Very cobbly loam	7.4-7.8	0-1	0-0	Not Severe	Low	508	25	8-15	mountains			

Appendix D Soils with Salvage Depths within the Study Area

Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
510	Onkeyo-Cavehill-Pookaloo association	Buzztail	5	H2	8	38	Very gravelly loam	7.4-8.4	0-1	0-0									
510	Onkeyo-Cavehill-Pookaloo association	Buzztail	5	R	38	63	Bedrock												
510	Onkeyo-Cavehill-Pookaloo association	Cavehill	20	H1	0	23	Very gravelly silt loam	7.9-9	0-0	0-0	Severe	Low		102	15-50	mountains	Poor	C, D, BR, R, S	0
510	Onkeyo-Cavehill-Pookaloo association	Cavehill	20	H2	23	46	Very gravelly silt loam	7.9-9	0-0	0-0									
510	Onkeyo-Cavehill-Pookaloo association	Cavehill	20	H3	46	74	Very gravelly loam	7.9-9	0-0	0-2									
510	Onkeyo-Cavehill-Pookaloo association	Cavehill	20	R	74	99	Bedrock												
510	Onkeyo-Cavehill-Pookaloo association	Onkeyo	50	H1	0	20	Very gravelly silt loam	7.4-9	0-0	0-0	Severe	Low		254	15-50	mountains	Poor	D, BR, C, R, S	0
510	Onkeyo-Cavehill-Pookaloo association	Onkeyo	50	H2	20	38	Extremely cobbly silty clay loam	7.4-9	0-0	0-2									
510	Onkeyo-Cavehill-Pookaloo association	Onkeyo	50	R	38	63	Bedrock												
510	Onkeyo-Cavehill-Pookaloo association	Pookaloo	15	H1	0	10	Very gravelly loam	7.4-8.4	0-0	0-0	Severe	Low		76	15-50	mountains	Poor	D, BR, C, OM, R, S, C	0
510	Onkeyo-Cavehill-Pookaloo association	Pookaloo	15	H2	10	48	Very gravelly silt loam	7.4-8.4	0-0	0-0									
510	Onkeyo-Cavehill-Pookaloo association	Pookaloo	15	R	48	73	Bedrock												
510	Onkeyo-Cavehill-Pookaloo association	Wardbay	5	H1	0	46	Very gravelly loam	7.4-8.4	0-0	0-0	Severe	Low		25	15-50	mountains			
510	Onkeyo-Cavehill-Pookaloo association	Wardbay	5	H2	46	114	Extremely gravelly silt loam	7.9-8.4	0-0	0-0									
510	Onkeyo-Cavehill-Pookaloo association	Wardbay	5	R	114	139	Bedrock												
510	Onkeyo-Cavehill-Pookaloo association	Zarark	3	H1	0	10	Very gravelly loam	7.4-8.4	0-0	0-2	Severe	Low		15	15-50	mountains			
510	Onkeyo-Cavehill-Pookaloo association	Zarark	3	H2	10	45	Very gravelly fine sandy loam	7.4-8.4	0-0	0-2									
510	Onkeyo-Cavehill-Pookaloo association	Zarark	3	H3	45	70	Very gravelly sandy loam	7.4-8.4	0-0	0-2									
510	Onkeyo-Cavehill-Pookaloo association	Zarark	3	R	70	95	Bedrock												
53	Palinor-Urmafot association	Palinor	65	H1	0	10	gravelly loam	7.9-9	1-5	0-0	Not Severe	Moderate	136	89	2-8	fan remnants	Poor	C, D, R, S	10
53	Palinor-Urmafot association	Palinor	65	H2	10	18	extremely gravelly fine sandy loam	7.9-9	1-5	2-4	Not Severe								
53	Palinor-Urmafot association	Palinor	65	H3	18	30	indurated	-	-	-									

Appendix D Soils with Salvage Depths within the Study Area

Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
53	Palinor-Urmafot association	Palinor	65	H4	30	60	gravelly sandy loam to extremely gravelly coarse sand	7.9-9	1-12	0-0	Not Severe								
53	Palinor-Urmafot association	Urmafot	20	H1	0	8	very gravelly loam	7.9-8.4	0-0	0-0	Not Severe	Moderate		27	4-15	fan remnants	Poor	C, D, R, S	0
53	Palinor-Urmafot association	Urmafot	20	H2	8	14	gravelly loam	7.9-8.4	0-0	0-0	Not Severe								
53	Palinor-Urmafot association	Urmafot	20	H3	14	32	indurated	-	-	-									
53	Palinor-Urmafot association	Urmafot	20	H4	32	60	extremely gravelly coarse sandy loam to extremely gravelly sandy loam	7.9-8.4	0-0	0-2	Not Severe								
566	McIvey-Segura-Cropper association	Cropper	25	H1	0	4	very cobbly loam	6.6-7.8	0-0	0-0	Severe	Low	2,253	563	15-50	mountains	Poor	CL, D, DB, HR, OM, R, S	0
566	McIvey-Segura-Cropper association	Cropper	25	H2	4	16	extremely gravelly clay loam	6.6-7.8	0-0	0-0	Severe								
566	McIvey-Segura-Cropper association	Cropper	25	H3	16	20	unweathered bedrock	-	-	-									
566	McIvey-Segura-Cropper association	McIvey	30	H1	0	5	gravelly loam	6.6-7.3	0-0	0-0	Severe	Low		676	15-50	mountains	Poor	CL, D, DB, HR, OM, R, S	5
566	McIvey-Segura-Cropper association	McIvey	30	H2	5	12	very gravelly loam	6.6-7.3	0-0	0-0	Severe								
566	McIvey-Segura-Cropper association	McIvey	30	H3	12	18	gravelly clay loam	6.1-7.3	0-0	0-0	Severe								
566	McIvey-Segura-Cropper association	McIvey	30	H4	18	62	extremely cobbly clay	6.1-7.3	0-0	0-0	Severe								
566	McIvey-Segura-Cropper association	Segura	30	H1	0	3	very cobbly loam	6.6-8.4	0-0	0-0	Severe	Low		676	15-50	mountains	Poor	CL, D, DB, HR, OM, R, S	0
566	McIvey-Segura-Cropper association	Segura	30	H2	3	14	gravelly clay loam	6.6-8.4	0-0	0-0	Severe								
566	McIvey-Segura-Cropper association	Segura	30	H3	14	18	unweathered bedrock	-	-	-									
573	Yody-Palinor-Shabliss association	Blimo	7	H1	0	20	Gravelly loam	7.9-8.4	0-0	0-0	Not Severe	Low	33	2	2-4	fan piedmonts, fan skirts			
573	Yody-Palinor-Shabliss association	Blimo	7	H2	20	53	Gravelly sandy loam	7.9-9	1-5	2-4									
573	Yody-Palinor-Shabliss association	Blimo	7	H3	53	152	Gravelly sandy loam	7.9-9	5-12	2-4									
573	Yody-Palinor-Shabliss association	Heist	3	H1	0	8	Silt loam	6.6-8.4	0-5	0-2	Not Severe	Moderate		1	2-4	fan piedmonts, fan skirts			
573	Yody-Palinor-Shabliss association	Heist	3	H2	8	91	Fine sandy loam	7.4-9	5-12	2-4									

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Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
573	Yody-Palinor-Shabliss association	Heist	3	H3	91	152	Gravelly fine sandy loam	7.4-9	5-12	2-4									
573	Yody-Palinor-Shabliss association	Palinor	30	H1	0	25	Very gravelly loam	7.9-9	1-5	0-0	Not Severe	Low		10	2-8	fan piedmonts, fan remnants	Poor	D, CP, C, R	0
573	Yody-Palinor-Shabliss association	Palinor	30	H2	25	46	Extremely gravelly fine sandy loam	7.9-9	1-5	2-4									
573	Yody-Palinor-Shabliss association	Palinor	30	H3	46	76	Cemented material												
573	Yody-Palinor-Shabliss association	Palinor	30	H4	76	152	Extremely gravelly sandy loam	7.9-9	1-12	0-0									
573	Yody-Palinor-Shabliss association	Shabliss	15	H1	0	8	Gravelly loam	7.9-8.4	1-5	0-4	Not Severe	Low		5	2-4	fan piedmonts, fan remnants	Poor	D, CP, SC, OM, E, R	3
573	Yody-Palinor-Shabliss association	Shabliss	15	H2	8	33	Gravelly loam	7.9-8.4	1-12	0-4									
573	Yody-Palinor-Shabliss association	Shabliss	15	H3	33	140	Cemented material												
573	Yody-Palinor-Shabliss association	Yody	45	H1	0	8	Gravelly sandy loam	7.9-8.4	0-5	0-2	Not Severe	Low		15	2-8	fan piedmonts, fan remnants	Poor	OM, D, SC, CP, R	3
573	Yody-Palinor-Shabliss association	Yody	45	H2	8	41	Gravelly sandy clay loam	7.9-8.4	1-12	2-4									
573	Yody-Palinor-Shabliss association	Yody	45	H3	41	97	Gravelly sandy loam	7.9-9	1-12	2-4									
573	Yody-Palinor-Shabliss association	Yody	45	H4	97	152	Cemented material												
670	Cavehill-Grink-Rock outcrop association	Cavehill	45	H1	0	15	very gravelly silt loam	7.9-9	0-0	0-0	Severe	Moderate	2,435	1,096	15-50	mountains	Poor	C, D, DB, NR, R, S, StC	0
670	Cavehill-Grink-Rock outcrop association	Cavehill	45	H2	15	27	very cobbly loam	7.9-9	0-0	0-2	Severe								
670	Cavehill-Grink-Rock outcrop association	Cavehill	45	H3	27	31	unweathered bedrock	-	-	-									
670	Cavehill-Grink-Rock outcrop association	Grink	30	H1	0	7	very stony loam	7.4-8.4	0-0	0-0	Severe	Low		731	15-50	mountains	Poor	C, D, DB, NR, R, S, StC	0
670	Cavehill-Grink-Rock outcrop association	Grink	30	H2	7	19	very gravelly fine sandy loam	7.4-8.4	0-0	0-0	Severe								
670	Cavehill-Grink-Rock outcrop association	Grink	30	H3	19	29	unweathered bedrock	-	-	-									
753	Upatad-Cropper-Atlow association	Atlow	15	H1	0	2	very gravelly loam	7.4-8.4	0-0	0-0	Severe	Low	110	16	15-50	mountains	Poor	CL, D, DB, OM, R, S	0
753	Upatad-Cropper-Atlow association	Atlow	15	H2	2	16	very cobbly clay loam	7.9-9	0-0	0-2	Severe								

Appendix D Soils with Salvage Depths within the Study Area

Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
753	Upatad-Cropper-Atlow association	Atlow	15	H3	16	20	unweathered bedrock	-	-	-									
753	Upatad-Cropper-Atlow association	Cropper	30	H1	0	4	very cobbly loam	6.6-7.8	0-0	0-0	Severe	Low		33	15-50	mountains	Poor	CL, D, DB, OM, R, S	0
753	Upatad-Cropper-Atlow association	Cropper	30	H2	4	16	extremely gravelly clay loam	6.6-7.8	0-0	0-0	Severe								
753	Upatad-Cropper-Atlow association	Cropper	30	H3	16	20	unweathered bedrock	-	-	-									
753	Upatad-Cropper-Atlow association	Upatad	40	H1	0	3	very gravelly silt loam	7.4-7.8	0-0	0-0	Severe	Low		44	15-50	mountains	Poor	CL, D, DB, OM, R, S	0
753	Upatad-Cropper-Atlow association	Upatad	40	H2	3	15	very cobbly silty clay loam	7.4-8.4	0-0	0-0	Severe								
753	Upatad-Cropper-Atlow association	Upatad	40	H3	15	19	unweathered bedrock	-	-	-									
763	Segura-Pioche-McIvey association	McIvey	20	H1	0	5	gravelly loam	6.6-7.3	0-0	0-0	Not Severe	Low	646	129	4-15	mountains	Poor	CC, CL, D, DB, HR, OM, R, S, StC	5
763	Segura-Pioche-McIvey association	McIvey	20	H2	5	12	very gravelly loam	6.6-7.3	0-0	0-0	Not Severe								
763	Segura-Pioche-McIvey association	McIvey	20	H3	12	18	gravelly clay loam	6.1-7.3	0-0	0-0	Not Severe								
763	Segura-Pioche-McIvey association	McIvey	20	H3	12	18	gravelly clay loam	6.1-7.3	0-0	0-0	Not Severe								
763	Segura-Pioche-McIvey association	McIvey	20	H4	18	62	extremely cobbly clay	6.1-7.3	0-0	0-0	Not Severe								
763	Segura-Pioche-McIvey association	Pioche	30	H1	0	3	extremely stony loam	6.6-7.8	0-0	0-0	Severe	Low		194	15-50	mountains	Poor	CC, CL, D, DB, HR, OM, R, S, StC	0
763	Segura-Pioche-McIvey association	Pioche	30	H2	3	15	very cobbly clay	6.6-7.8	0-0	0-0	Severe								
763	Segura-Pioche-McIvey association	Pioche	30	H2	3	15	very cobbly clay	6.6-7.8	0-0	0-0	Severe								
763	Segura-Pioche-McIvey association	Pioche	30	H3	15	19	unweathered bedrock	-	-	-									
763	Segura-Pioche-McIvey association	Segura	35	H1	0	3	very cobbly loam	6.6-8.4	0-0	0-0	Not Severe	Low		226	8-30	mountains	Poor	CC, CL, D, DB, HR, OM, R, S, StC	0
763	Segura-Pioche-McIvey association	Segura	35	H2	3	14	gravelly clay loam	6.6-8.4	0-0	0-0	Not Severe								
763	Segura-Pioche-McIvey association	Segura	35	H3	14	18	unweathered bedrock	-	-	-									
801	Broland very gravelly loam, 4 to 8 percent slopes	Broland	100	H1	0	3	very gravelly loam	7.9-8.4	0-0	0-2	Not Severe	Low	692	692	4-8	fan remnants	Poor	D, OM, R	3 to 9

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Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
801	Broland very gravelly loam, 4 to 8 percent slopes	Broland	100	H2	3	9	gravelly clay loam	7.9-8.4	0-0	0-2	Not Severe								
801	Broland very gravelly loam, 4 to 8 percent slopes	Broland	100	H3	9	16	extremely gravelly clay loam	7.9-8.4	1-5	0-2	Not Severe								
801	Broland very gravelly loam, 4 to 8 percent slopes	Broland	100	H4	16	19	extremely gravelly sandy loam	7.9-8.4	1-5	0-2	Not Severe								
801	Broland very gravelly loam, 4 to 8 percent slopes	Broland	100	H5	19	40	cemented	-	-	-									
801	Broland very gravelly loam, 4 to 8 percent slopes	Broland	100	H6	40	60	extremely gravelly coarse sand	7.9-8.4	1-5	0-2	Not Severe								
920	Abgese-Yody-Shabliss association	Abgese	45	H1	0	4	sandy loam	7.9-8.4	1-5	0-2	Not Severe	Moderate	451	203	2-4	fan remnants	Poor	ALK, D, E, HR, OM, R, SC	22
920	Abgese-Yody-Shabliss association	Abgese	45	H2	4	22	gravelly sandy clay loam	7.9-8.4	1-5	0-2	Not Severe								
920	Abgese-Yody-Shabliss association	Abgese	45	H3	22	43	very gravelly sandy loam	7.9-8.4	1-5	0-2	Not Severe								
920	Abgese-Yody-Shabliss association	Abgese	45	H4	43	60	very gravelly loamy sand	8.5-9	1-5	2-4	Not Severe								
920	Abgese-Yody-Shabliss association	Shabliss	20	H1	0	3	gravelly loam	7.9-8.4	1-5	0-4	Not Severe	Moderate		90	2-4	fan remnants	Poor	ALK, D, E, HR, OM, R, SC	13
920	Abgese-Yody-Shabliss association	Shabliss	20	H2	3	13	gravelly loam	7.9-8.4	1-12	0-4	Not Severe								
920	Abgese-Yody-Shabliss association	Shabliss	20	H3	13	55	cemented	-	-	-									
920	Abgese-Yody-Shabliss association	Yody	20	H1	0	4	gravelly sandy loam	7.9-8.4	0-5	0-2	Not Severe	Moderate		90	2-4	fan remnants	Poor	ALK, D, E, HR, OM, R, SC	36
920	Abgese-Yody-Shabliss association	Yody	20	H2	4	30	gravelly clay loam	7.9-8.4	1-12	2-4	Not Severe								
920	Abgese-Yody-Shabliss association	Yody	20	H3	30	36	gravelly loam	7.9-9	1-12	2-4	Not Severe								
920	Abgese-Yody-Shabliss association	Yody	20	H4	36	60	cemented	-	-	-									
977	Zimbob-Pookaloo association	Mijoysee	2	A	0	7	Extremely gravelly sandy loam	7.4-8.2	0-3	0-2	Severe	Low	19	0	15-50	hills			
977	Zimbob-Pookaloo association	Mijoysee	2	Bk	7	15	Extremely gravelly sandy loam	7.4-8.4	0-3	0-2									
977	Zimbob-Pookaloo association	Mijoysee	2	R	15	40	Bedrock												
977	Zimbob-Pookaloo association	Pookaloo	15	H1	0	10	Very gravelly loam	7.4-8.4	0-0	0-0	Severe	Low		3	15-50	hills	Poor	D, BR, C, OM, R, S	0
977	Zimbob-Pookaloo association	Pookaloo	15	H2	10	48	Very gravelly silt loam	7.4-8.4	0-0	0-0									
977	Zimbob-Pookaloo association	Pookaloo	15	R	48	73	Bedrock												

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Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
977	Zimbob-Pookaloo association	Pyrat	6	H1	0	15	Very gravelly sandy loam	7.9-8.4	0-0	2-4	Not Severe	Low		1	2-8	alluvial fans, hills			
977	Zimbob-Pookaloo association	Pyrat	6	H2	15	43	Very gravelly sandy loam	7.9-8.4	0-0	2-4									
977	Zimbob-Pookaloo association	Pyrat	6	H3	43	69	Very gravelly loam	7.9-9	0-0	2-4									
977	Zimbob-Pookaloo association	Pyrat	6	H4	69	99	Very gravelly sandy loam	7.9-9	0-0	2-4									
977	Zimbob-Pookaloo association	Pyrat	6	H5	99	152	Extremely gravelly loamy sand	7.9-9	0-0	2-4									
977	Zimbob-Pookaloo association	Tecomar	5	H1	0	5	Extremely gravelly silt loam	7.9-9	0-0	0-2	Severe	Low		1	15-50	hills			
977	Zimbob-Pookaloo association	Tecomar	5	H2	5	48	Extremely cobbly silt loam	7.9-9	1-5	0-2									
977	Zimbob-Pookaloo association	Tecomar	5	R	48	73	Bedrock												
977	Zimbob-Pookaloo association	Zimbob	40	H1	0	3	Extremely gravelly loam	7.9-8.4	1-5	0-0	Severe	Low		8	15-50	hills	Poor	d, br, c, om, r, s	0
977	Zimbob-Pookaloo association	Zimbob	40	H2	3	30	Very gravelly loam	7.9-9	1-5	0-0									
977	Zimbob-Pookaloo association	Zimbob	40	R	30	55	Bedrock												
977	Zimbob-Pookaloo association	Zimbob	30	H1	0	3	Very gravelly loam	7.9-8.4	1-5	0-0	Severe	Low		6	15-50	hills	Poor	D, BR, C, OM, R, S	0
977	Zimbob-Pookaloo association	Zimbob	30	H2	3	20	Very gravelly loam	7.9-9	1-5	0-0									
977	Zimbob-Pookaloo association	Zimbob	30	R	20	45	Bedrock												
South Operations Area Project																			
100	Pookaloo-Cavehill-Rock outcrop association	Cavehill	30	H1	0	15	very gravelly silt loam	7.9-9	0-0	0-0	Severe	Moderate	565	170	15-50	mountains	Poor	C, D, DB, NR, OM, R, S	0
100	Pookaloo-Cavehill-Rock outcrop association	Cavehill	30	H2	15	27	very cobbly loam	7.9-9	0-0	0-2	Severe								
100	Pookaloo-Cavehill-Rock outcrop association	Cavehill	30	H3	27	31	unweathered bedrock	-	-	-									
100	Pookaloo-Cavehill-Rock outcrop association	Pookaloo	40	H1	0	4	very gravelly loam	7.9-8.4	0-0	0-0	Severe	Moderate		226	15-50	mountains	Poor	C, D, DB, NR, OM, R, S	0
100	Pookaloo-Cavehill-Rock outcrop association	Pookaloo	40	H2	4	19	very gravelly loam	7.9-8.4	0-0	0-0	Severe								
100	Pookaloo-Cavehill-Rock outcrop association	Pookaloo	40	H3	19	23	unweathered bedrock	-	-	-									
1151	Zimbob-Rock outcrop association	Zimbob	50	H1	0	3	Very gravelly loam	7.9-8.4	1-5	0-0	Not Severe	Low	9	4	4-15	hills	Poor	D, BR, C, R, S	0
1151	Zimbob-Rock outcrop association	Zimbob	50	H2	3	30	Very gravelly loam	7.9-9	1-5	0-0									
1151	Zimbob-Rock outcrop association	Zimbob	50	R	30	55	Bedrock												
1151	Zimbob-Rock outcrop association	Zimbob	25	H1	0	3	Very gravelly loam	7.9-8.4	1-5	0-0	Severe	Low		2	15-50	hills	Poor	D, BR, C, R, S	0
1151	Zimbob-Rock outcrop association	Zimbob	25	H2	3	30	Very gravelly loam	7.9-9	1-5	0-0									

Appendix D Soils with Salvage Depths within the Study Area

Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
1151	Zimbob-Rock outcrop association	Zimbob	25	R	30	55	Bedrock												
120	Tecomar-Pookaloo-Zimbob association	Pookaloo	20	H1	0	4	very gravelly loam	7.9-8.4	0-0	0-0	Severe	Moderate	335	67	15-50	mountains	Poor	C, CC, D, DB, OM, R, S	0
120	Tecomar-Pookaloo-Zimbob association	Pookaloo	20	H2	4	19	very gravelly loam	7.9-8.4	0-0	0-0	Severe								
120	Tecomar-Pookaloo-Zimbob association	Pookaloo	20	H3	19	23	unweathered bedrock	-	-	-									
120	Tecomar-Pookaloo-Zimbob association	Tecomar	50	H1	0	3	extremely gravelly silt loam	7.9-9	0-0	0-2	Severe	Low		168	15-50	mountains	Poor	C, CC, D, DB, OM, R, S	0
120	Tecomar-Pookaloo-Zimbob association	Tecomar	50	H2	3	18	extremely cobbly silt loam	7.9-9	1-5	0-2	Severe								
120	Tecomar-Pookaloo-Zimbob association	Tecomar	50	H3	18	22	unweathered bedrock	-	-	-									
120	Tecomar-Pookaloo-Zimbob association	Zimbob	15	H1	0	1	very gravelly loam	7.9-8.4	1-5	0-0	Severe	Moderate		50	15-50	hills	Poor	C, CC, D, DB, OM, R, S	0
120	Tecomar-Pookaloo-Zimbob association	Zimbob	15	H2	1	12	very gravelly loam	7.9-9	1-5	0-0	Severe								
120	Tecomar-Pookaloo-Zimbob association	Zimbob	15	H3	12	16	unweathered bedrock	-	-	-									
1260	Urmafot association	Urmafot	15	H1	0	9	very gravelly loam	7.9-8.4	0-0	0-0	Not Severe	Moderate	530	79	4-15	fan remnants	Poor	C, D, R, S	0
1260	Urmafot association	Urmafot	15	H2	9	32	gravelly loam	-	-	-									
1260	Urmafot association	Urmafot	15	H4	32	60	extremely gravelly coarse sandy loam to extremely gravelly sandy loam	7.9-8.4	0-0	0-2	Not Severe								
1260	Urmafot association	Urmafot	70	H1	0	8	very gravelly loam	7.9-8.4	0-0	0-0	Not Severe	Moderate		371	4-15	fan remnants	Poor	C, D, R, S	8 to 14
1260	Urmafot association	Urmafot	70	H2	8	14	gravelly loam	7.9-8.4	0-0	0-0	Not Severe								
1260	Urmafot association	Urmafot	70	H3	14	32	indurated	-	-	-									
1260	Urmafot association	Urmafot	70	H4	32	60	extremely gravelly coarse sandy loam to extremely gravelly sandy loam	7.9-8.4	0-0	0-2	Not Severe								
179	Tulase-Pern association	Devilsgait	1	H1	0	25	Silt loam	7.4-8.4	1-5	0-2	Not Severe	Low	35	0	0-4	fan piedmonts, flood plains			
179	Tulase-Pern association	Devilsgait	1	H2	25	152	Silty clay loam	7.4-8.4	1-5	0-2									
179	Tulase-Pern association	Kunzler	1	H1	0	10	Loam	7.9-9	0-0	0-0	Not Severe	Low		0	2-4	fan piedmonts, fan remnants			
179	Tulase-Pern association	Kunzler	1	H2	10	28	Loam	7.9-9	0-10	2-4									

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Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
179	Tulase-Pern association	Kunzler	1	H3	28	104	Sandy loam	7.9-9.6	15-35	4-16									
179	Tulase-Pern association	Kunzler	1	H4	104	152	Loam	7.9-9.6	40-60	4-16									
179	Tulase-Pern association	Pern	30	H1	0	36	Silt loam	7.9-8.4	0-0	0-0	Not Severe	Low		11	2-8	fan piedmonts, inset fans	Fair	OM, E	60
179	Tulase-Pern association	Pern	30	H2	36	51	Silt loam	7.9-8.4	0-0	0-0									
179	Tulase-Pern association	Pern	30	H3	51	152	Silt loam	7.9-8.4	0-0	0-2									
179	Tulase-Pern association	Pyrat	8	H1	0	15	Gravelly sandy loam	7.9-8.4	0-0	2-4	Not Severe	Low		3	2-15	fan piedmonts, inset fans			
179	Tulase-Pern association	Pyrat	8	H2	15	43	Very gravelly sandy loam	7.9-8.4	0-0	2-4									
179	Tulase-Pern association	Pyrat	8	H3	43	69	Very gravelly loam	7.9-9	0-0	2-4									
179	Tulase-Pern association	Pyrat	8	H4	69	99	Very gravelly sandy loam	7.9-9	0-0	2-4									
179	Tulase-Pern association	Pyrat	8	H5	99	152	Extremely gravelly loamy sand	7.9-9	0-0	2-4									
179	Tulase-Pern association	Tulase	60	H1	0	5	Silt loam	7.9-8.4	0-0	0-2	Severe	Moderate		21	2-15	fan piedmonts, inset fans	Fair	A, E	60
179	Tulase-Pern association	Tulase	60	H2	5	89	Silt loam	7.9-8.4	0-0	0-2									
179	Tulase-Pern association	Tulase	60	H3	89	152	Silt loam	8.5-9	1-5	0-2									
271	Atlow association	Atlow	20	H1	0	2	very gravelly loam	7.4-8.4	0-0	0-0	Not Severe	Low	86	17	4-15	mountains	Poor	CL, D, DB, OM, R, S	0
271	Atlow association	Atlow	20	H2	2	16	very cobbly clay loam	7.9-9	0-0	0-2	Not Severe								
271	Atlow association	Atlow	20	H3	16	20	unweathered bedrock	-	-	-									
271	Atlow association	Atlow	65	H1	0	2	very gravelly loam	7.4-8.4	0-0	0-0	Severe	Low		56	15-50	mountains	Poor	CL, D, DB, OM, R, S	0
271	Atlow association	Atlow	65	H2	2	16	very cobbly clay loam	7.9-9	0-0	0-2	Severe								
271	Atlow association	Atlow	65	H3	16	20	unweathered bedrock	-	-	-									
288	Palinor-Yody-Broland association	Broland	20	H1	0	3	very gravelly loam	7.9-8.4	0-0	0-2	Not Severe	Low	3,071	614	4-15	fan remnants	Poor	C, CP, D, OM, R, S, SC	3 to 9
288	Palinor-Yody-Broland association	Broland	20	H2	3	9	gravelly clay loam	7.9-8.4	0-0	0-2	Not Severe								
288	Palinor-Yody-Broland association	Broland	20	H3	9	16	extremely gravelly clay loam	7.9-8.4	1-5	0-2	Not Severe								
288	Palinor-Yody-Broland association	Broland	20	H4	16	19	extremely gravelly sandy loam	7.9-8.4	1-5	0-2	Not Severe								
288	Palinor-Yody-Broland association	Broland	20	H5	19	40	cemented material	-	-	-									
288	Palinor-Yody-Broland association	Broland	20	H6	40	60	extremely gravelly coarse sand	7.9-8.4	1-5	0-2	Not Severe								

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Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
288	Palinor-Yody-Broland association	Palinor	40	H1	0	10	gravelly loam	7.9-9	1-5	0-0	Not Severe	Moderate		1,228	2-8	fan piedmonts, fan remnants	Poor	C, CP, D, OM, R, S, SC	10
288	Palinor-Yody-Broland association	Palinor	40	H2	10	18	extremely gravelly fine sandy loam	7.9-9	1-5	2-4	Not Severe								
288	Palinor-Yody-Broland association	Palinor	40	H3	18	30	cemented material	-	-	-									
288	Palinor-Yody-Broland association	Palinor	40	H4	30	60	gravelly sandy loam to extremely gravelly coarse sand	7.9-9	1-12	0-0	Not Severe								
288	Palinor-Yody-Broland association	Yody	25	H1	0	4	gravelly sandy loam	7.9-8.4	0-5	0-2	Not Severe	Moderate		768	2-8	fan remnants	Poor	C, CP, D, OM, R, S, SC	36
288	Palinor-Yody-Broland association	Yody	25	H2	4	30	gravelly clay loam	7.9-8.4	1-12	2-4	Not Severe								
288	Palinor-Yody-Broland association	Yody	25	H2	4	30	gravelly clay loam	7.9-8.4	1-12	2-4	Not Severe								
288	Palinor-Yody-Broland association	Yody	25	H3	30	36	gravelly loam	7.9-9	1-12	2-4	Not Severe								
288	Palinor-Yody-Broland association	Yody	25	H4	36	60	cemented material	-	-	-									
290	Palinor-Shabliss-Tulase association	Palinor	45	H1	0	10	gravelly loam	7.9-9	1-5	0-0	Not Severe	Moderate	329	148	2-8	fan remnants	Poor	ALK, C, D, E, OM, R, SC	10
290	Palinor-Shabliss-Tulase association	Palinor	45	H2	10	18	extremely gravelly fine sandy loam	7.9-9	1-5	2-4	Not Severe								
290	Palinor-Shabliss-Tulase association	Palinor	45	H3	18	30	indurated	-	-	-									
290	Palinor-Shabliss-Tulase association	Palinor	45	H4	30	60	gravelly sandy loam to extremely gravelly coarse sand	7.9-9	1-12	0-0	Not Severe								
290	Palinor-Shabliss-Tulase association	Shabliss	25	H1	0	3	gravelly loam	7.9-8.4	1-5	0-4	Not Severe	Moderate		82	2-8	fan remnants	Poor	ALK, C, D, E, OM, R, SC	13
290	Palinor-Shabliss-Tulase association	Shabliss	25	H2	3	13	gravelly loam	7.9-8.4	1-12	0-4	Not Severe								
290	Palinor-Shabliss-Tulase association	Shabliss	25	H3	13	55	cemented	-	-	-									
290	Palinor-Shabliss-Tulase association	Tulase	20	H1	0	2	silt loam	7.9-8.4	0-0	0-2	Not Severe	Moderate		66	2-4	inset fans	Poor	ALK, C, D, E, OM, R, SC	60
290	Palinor-Shabliss-Tulase association	Tulase	20	H2	2	60	silt loam	8.5-9	1-5	0-2	Not Severe								
292	Palinor-Urmafot-Urmafot, very shallow association	Palinor	45	H1	0	10	gravelly loam	7.9-9	1-5	0-0	Not Severe	Moderate	458	206	8-15	fan remnants	Poor	C, D, R, S	10
292	Palinor-Urmafot-Urmafot, very shallow association	Palinor	45	H2	10	18	extremely gravelly fine sandy loam	7.9-9	1-5	2-4	Not Severe								

Appendix D Soils with Salvage Depths within the Study Area

Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
292	Palinor-Urmafot-Urmafot, very shallow association	Palinor	45	H3	18	30	indurated	-	-	-									
292	Palinor-Urmafot-Urmafot, very shallow association	Palinor	45	H4	30	60	gravelly sandy loam to extremely gravelly coarse sand	7.9-9	1-12	0-0	Not Severe								
292	Palinor-Urmafot-Urmafot, very shallow association	Urmafot	15	H1	0	9	very gravelly loam	7.9-8.4	0-0	0-0	Not Severe	Moderate		69	4-15	fan remnants	Poor	C, D, R, S	9 to 32
292	Palinor-Urmafot-Urmafot, very shallow association	Urmafot	15	H2	9	32	gravelly loam	-	-	-									
292	Palinor-Urmafot-Urmafot, very shallow association	Urmafot	15	H4	32	60	extremely gravelly coarse sandy loam to extremely gravelly sandy loam	7.9-8.4	0-0	0-2	Not Severe								
292	Palinor-Urmafot-Urmafot, very shallow association	Urmafot	25	H1	0	8	very gravelly loam	7.9-8.4	0-0	0-0	Not Severe	Moderate		114	2-8	fan remnants	Poor	C, D, R, S	8 to 14
292	Palinor-Urmafot-Urmafot, very shallow association	Urmafot	25	H2	8	14	gravelly loam	7.9-8.4	0-0	0-0	Not Severe								
292	Palinor-Urmafot-Urmafot, very shallow association	Urmafot	25	H3	14	32	indurated	-	-	-									
292	Palinor-Urmafot-Urmafot, very shallow association	Urmafot	25	H4	32	60	extremely gravelly coarse sandy loam to extremely gravelly sandy loam	7.9-8.4	0-0	0-2	Not Severe								
296	Palinor-Urmafot-Palinor, steep association	Palinor	15	H1	0	10	gravelly loam	7.9-9	1-5	0-0	Severe	Moderate	317	48	15-50	fan remnants	Poor	C, D, R, S	10
296	Palinor-Urmafot-Palinor, steep association	Palinor	15	H2	10	18	extremely gravelly fine sandy loam	7.9-9	1-5	2-4	Severe								
296	Palinor-Urmafot-Palinor, steep association	Palinor	15	H3	18	30	indurated	-	-	-									
296	Palinor-Urmafot-Palinor, steep association	Palinor	15	H4	30	60	gravelly sandy loam to extremely gravelly coarse sand	7.9-9	1-12	0-0	Severe								
296	Palinor-Urmafot-Palinor, steep association	Palinor	50	H1	0	10	gravelly loam	7.9-9	1-5	0-0	Not Severe	Moderate		159	4-15	fan remnants	Poor	C, D, R, S	10
296	Palinor-Urmafot-Palinor, steep association	Palinor	50	H2	10	18	extremely gravelly fine sandy loam	7.9-9	1-5	2-4	Not Severe								
296	Palinor-Urmafot-Palinor, steep association	Palinor	50	H3	18	30	indurated	-	-	-									

Appendix D Soils with Salvage Depths within the Study Area

Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
296	Palinor-Urmafot-Palinor, steep association	Palinor	50	H4	30	60	gravelly sandy loam to extremely gravelly coarse sand	7.9-9	1-12	0-0	Not Severe								
296	Palinor-Urmafot-Palinor, steep association	Urmafot	20	H1	0	8	very gravelly loam	7.9-8.4	0-0	0-0	Not Severe	Moderate		63	4-15	fan remnants	Poor	C, D, R, S	8 to 14
296	Palinor-Urmafot-Palinor, steep association	Urmafot	20	H2	8	14	gravelly loam	7.9-8.4	0-0	0-0	Not Severe								
296	Palinor-Urmafot-Palinor, steep association	Urmafot	20	H3	14	32	indurated	-	-	-									
296	Palinor-Urmafot-Palinor, steep association	Urmafot	20	H4	32	60	extremely gravelly coarse sandy loam to extremely gravelly sandy loam	7.9-8.4	0-0	0-2	Not Severe								
326	Palinor-Urmafot-Roden association	Palinor	35	H1	0	10	gravelly loam	7.9-9	1-5	0-0	Not Severe	Moderate	1,238	433	2-8	fan remnants	Poor	C, CL, D, DB, OM, R, S	10
326	Palinor-Urmafot-Roden association	Palinor	35	H2	10	18	extremely gravelly fine sandy loam	7.9-9	1-5	2-4	Not Severe								
326	Palinor-Urmafot-Roden association	Palinor	35	H3	18	30	indurated	-	-	-									
326	Palinor-Urmafot-Roden association	Palinor	35	H4	30	60	gravelly sandy loam to extremely gravelly coarse sand	7.9-9	1-12	0-0	Not Severe								
326	Palinor-Urmafot-Roden association	Roden	20	H1	0	1	very gravelly clay loam	7.9-8.4	0-0	0-0	Not Severe	Moderate		248	4-15	hills	Poor	C, CL, D, DB, OM, R, S	0
326	Palinor-Urmafot-Roden association	Roden	20	H2	1	8	very gravelly clay	7.9-8.4	0-0	0-0	Not Severe								
326	Palinor-Urmafot-Roden association	Roden	20	H3	8	12	weathered bedrock	-	-	-									
326	Palinor-Urmafot-Roden association	Urmafot	30	H1	0	9	gravelly loam	7.9-8.4	0-0	0-0	Not Severe	Moderate		371	2-8	fan remnants	Poor	C, CL, D, DB, OM, R, S	9
326	Palinor-Urmafot-Roden association	Urmafot	30	H2	9	32	indurated	-	-	-									
326	Palinor-Urmafot-Roden association	Urmafot	30	H4	32	60	extremely gravelly coarse sandy loam to extremely gravelly sandy loam	7.9-8.4	0-0	0-2	Not Severe								
351	Heist-Tulase association	Heist	60	H1	0	3	silt loam	7.9-8.4	1-5	0-2	Not Severe	Moderate	90	54	0-2	fan skirts	Fair	ALK, E, HR, OM, R, SC, SD	60
351	Heist-Tulase association	Heist	60	H2	3	36	fine sandy loam	7.9-9	5-12	2-4	Not Severe								
351	Heist-Tulase association	Heist	60	H2	3	36	fine sandy loam	7.9-9	5-12	2-4	Not Severe								
351	Heist-Tulase association	Heist	60	H3	36	60	gravelly fine sandy loam	7.9-9	5-12	2-4	Not Severe								

Appendix D Soils with Salvage Depths within the Study Area

Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
351	Heist-Tulase association	Tulase	30	H1	0	2	silt loam	7.9-8.4	0-0	0-2	Not Severe	Moderate		27	0-2	inset fans	Fair	ALK, E, HR, OM, R, SC, SD	60
351	Heist-Tulase association	Tulase	30	H2	2	60	silt loam	8.5-9	1-5	0-2	Not Severe								
480	Pioche-Cropper association	Cropper	35	H1	0	4	very cobbly loam	6.6-7.8	0-0	0-0	Severe	Low	175	61	15-50	mountains	Poor	CC, CL, D, DB, R, S, StC	0
480	Pioche-Cropper association	Cropper	35	H2	4	16	extremely gravelly clay loam	6.6-7.8	0-0	0-0	Severe								
480	Pioche-Cropper association	Cropper	35	H3	16	20	unweathered bedrock	-	-	-									
480	Pioche-Cropper association	Pioche	50	H1	0	3	extremely stony loam	6.6-7.8	0-0	0-0	Severe	Low		88	15-50	mountains	Poor	CC, CL, D, DB, R, S, StC	0
480	Pioche-Cropper association	Pioche	50	H2	3	15	very cobbly clay	6.6-7.8	0-0	0-0	Severe								
480	Pioche-Cropper association	Pioche	50	H2	3	15	very cobbly clay	6.6-7.8	0-0	0-0	Severe								
480	Pioche-Cropper association	Pioche	50	H3	15	19	unweathered bedrock	-	-	-									
481	Pioche-Segura-Cropper association	Cropper	15	H1	0	4	very cobbly loam	6.6-7.8	0-0	0-0	Not Severe	Low	1,284	193	8-30	mountains	Poor	CC, CL, D, DB, R, S, StC	0
481	Pioche-Segura-Cropper association	Cropper	15	H2	4	16	extremely gravelly clay loam	6.6-7.8	0-0	0-0	Not Severe								
481	Pioche-Segura-Cropper association	Cropper	15	H3	16	20	unweathered bedrock	-	-	-									
481	Pioche-Segura-Cropper association	Pioche	40	H1	0	3	extremely stony loam	6.6-7.8	0-0	0-0	Not Severe	Low		514	8-30	mountains	Poor	CC, CL, D, DB, R, S, StC	0
481	Pioche-Segura-Cropper association	Pioche	40	H2	3	15	very cobbly clay	6.6-7.8	0-0	0-0	Not Severe								
481	Pioche-Segura-Cropper association	Pioche	40	H3	15	19	unweathered bedrock	-	-	-									
481	Pioche-Segura-Cropper association	Segura	30	H1	0	3	very cobbly loam	6.6-8.4	0-0	0-0	Severe	Low		385	15-50	mountains	Poor	CC, CL, D, DB, R, S, StC	0
481	Pioche-Segura-Cropper association	Segura	30	H2	3	14	gravelly clay loam	6.6-8.4	0-0	0-0	Severe								
481	Pioche-Segura-Cropper association	Segura	30	H3	14	18	unweathered bedrock	-	-	-									
561	McIvey-Pioche-Upatad association	McIvey	40	H1	0	12	very gravelly loam	6.6-7.3	0-0	0-0	Severe	Low	221	88	15-50	mountains	Poor	CC, CL, D, DB, HR, OM, R, S, StC	0
561	McIvey-Pioche-Upatad association	McIvey	40	H2	12	18	gravelly clay loam	6.1-7.3	0-0	0-0	Severe								
561	McIvey-Pioche-Upatad association	McIvey	40	H3	18	62	extremely cobbly clay	6.1-7.3	0-0	0-0	Severe								
561	McIvey-Pioche-Upatad association	Pioche	25	H1	0	3	extremely stony loam	6.6-7.8	0-0	0-0	Severe	Low		55	15-50	mountains	Poor	CC, CL, D, DB, HR, OM, R, S, StC	0

Appendix D Soils with Salvage Depths within the Study Area

Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
561	McIvey-Pioche-Upatad association	Pioche	25	H2	3	15	very cobbly clay	6.6-7.8	0-0	0-0	Severe								
561	McIvey-Pioche-Upatad association	Pioche	25	H3	15	19	unweathered bedrock	-	-	-									
561	McIvey-Pioche-Upatad association	Upatad	20	H1	0	3	very gravelly silt loam	7.4-7.8	0-0	0-0	Severe	Low		44	15-50	mountains	Poor	CC, CL, D, DB, HR, OM, R, S, StC	0
561	McIvey-Pioche-Upatad association	Upatad	20	H2	3	15	very cobbly silty clay loam	7.4-8.4	0-0	0-0	Severe								
561	McIvey-Pioche-Upatad association	Upatad	20	H3	15	19	unweathered bedrock	-	-	-									
763	Segura-Pioche-McIvey association	McIvey	20	H1	0	5	gravelly loam	6.6-7.3	0-0	0-0	Not Severe	Low	1,892	378	4-15	mountains	Poor	CC, CL, D, DB, HR, OM, R, S, StC	5
763	Segura-Pioche-McIvey association	McIvey	20	H2	5	12	very gravelly loam	6.6-7.3	0-0	0-0	Not Severe								
763	Segura-Pioche-McIvey association	McIvey	20	H3	12	18	gravelly clay loam	6.1-7.3	0-0	0-0	Not Severe								
763	Segura-Pioche-McIvey association	McIvey	20	H4	18	62	extremely cobbly clay	6.1-7.3	0-0	0-0	Not Severe								
763	Segura-Pioche-McIvey association	Pioche	30	H1	0	3	extremely stony loam	6.6-7.8	0-0	0-0	Severe	Low		567	15-50	mountains	Poor	CC, CL, D, DB, HR, OM, R, S, StC	0
763	Segura-Pioche-McIvey association	Pioche	30	H2	3	15	very cobbly clay	6.6-7.8	0-0	0-0	Severe								
763	Segura-Pioche-McIvey association	Pioche	30	H3	15	19	unweathered bedrock	-	-	-									
763	Segura-Pioche-McIvey association	Segura	35	H1	0	3	very cobbly loam	6.6-8.4	0-0	0-0	Not Severe	Low		662	8-30	mountains	Poor	CC, CL, D, DB, HR, OM, R, S, StC	0
763	Segura-Pioche-McIvey association	Segura	35	H2	3	14	gravelly clay loam	6.6-8.4	0-0	0-0	Not Severe								
763	Segura-Pioche-McIvey association	Segura	35	H3	14	18	unweathered bedrock	-	-	-									
780	Bobs-Orr-Urmafot association	Bobs	50	H1	0	10	Very gravelly loam	7.9-9	0-0	0-0	Not Severe	Low	220	110	4-15	fan remnants	Poor	D, CP, C, R, S	12
780	Bobs-Orr-Urmafot association	Bobs	50	H2	10	30	Gravelly loam	7.9-9	1-5	0-2									
780	Bobs-Orr-Urmafot association	Bobs	50	H3	30	64	Cemented material												
780	Bobs-Orr-Urmafot association	Orr	20	H1	0	13	Gravelly sandy loam	6.6-7.3	0-0	0-0	Not Severe	Low		44	4-15	fan remnants	Fair	R, S	60
780	Bobs-Orr-Urmafot association	Orr	20	H2	13	89	Gravelly sandy clay loam	7.4-7.8	0-0	0-0									
780	Bobs-Orr-Urmafot association	Orr	20	H3	89	152	Gravelly sandy loam	7.4-7.8	0-0	0-0									

Appendix D Soils with Salvage Depths within the Study Area

Mapunit Symbol	Mapunit Name	Component Name	Component %	Horizon Designation	Horizon Top depth	Horizon Bottom depth	Texture	pH	Soil Absorption Ratio (SAR)	Electrical Condctivity (EC)	Water Erosion Potential	Wind Erosion Potential	Mapunit Acres	Component Acres	Slope	Geomorphic Description	Topsoil Suitability	Limiting Factors	Recommended Salvage Depth (RSD)
780	Bobs-Orr-Urmafot association	Urmafot	15	H1	0	20	Very gravelly loam	7.9-8.4	0-0	0-0	Not Severe	Low		33	4-15	fan remnants	Poor	D, CP, C, R	14
780	Bobs-Orr-Urmafot association	Urmafot	15	H2	20	36	Gravelly loam	7.9-8.4	0-0	0-0									
780	Bobs-Orr-Urmafot association	Urmafot	15	H3	36	81	Cemented material												
780	Bobs-Orr-Urmafot association	Urmafot	15	H4	81	152	Stratified extremely gravelly coarse sandy loam to extremely gravelly sandy loam	7.9-8.4	0-0	0-2									
977	Zimbob-Pookaloo association	Mijoysee	2	A	0	7	Extremely gravelly sandy loam	7.4-8.2	0-3	0-2	Severe	Low	10	1	15-50	hills			
977	Zimbob-Pookaloo association	Mijoysee	2	Bk	7	15	Extremely gravelly sandy loam	7.4-8.4	0-3	0-2									
977	Zimbob-Pookaloo association	Mijoysee	2	R	15	40	Bedrock												
977	Zimbob-Pookaloo association	Pookaloo	15	H1	0	10	Very gravelly loam	7.4-8.4	0-0	0-0	Severe	Low		1	15-50	hills	Poor	D, BR, C, OM, R, S	0
977	Zimbob-Pookaloo association	Pookaloo	15	H2	10	48	Very gravelly silt loam	7.4-8.4	0-0	0-0									
977	Zimbob-Pookaloo association	Pookaloo	15	R	48	73	Bedrock												
977	Zimbob-Pookaloo association	Pyrat	6	H1	0	15	Very gravelly sandy loam	7.9-8.4	0-0	2-4	Not Severe	Low		1	2-8	alluvial fans, hills			
977	Zimbob-Pookaloo association	Pyrat	6	H2	15	43	Very gravelly sandy loam	7.9-8.4	0-0	2-4									
977	Zimbob-Pookaloo association	Pyrat	6	H3	43	69	Very gravelly loam	7.9-9	0-0	2-4									
977	Zimbob-Pookaloo association	Pyrat	6	H4	69	99	Very gravelly sandy loam	7.9-9	0-0	2-4									
977	Zimbob-Pookaloo association	Pyrat	6	H5	99	152	Extremely gravelly loamy sand	7.9-9	0-0	2-4									
977	Zimbob-Pookaloo association	Tecomar	5	H1	0	5	Extremely gravelly silt loam	7.9-9	0-0	0-2	Severe	Low		0	15-50	hills			
977	Zimbob-Pookaloo association	Tecomar	5	H2	5	48	Extremely cobbly silt loam	7.9-9	1-5	0-2									
977	Zimbob-Pookaloo association	Tecomar	5	R	48	73	Bedrock												
977	Zimbob-Pookaloo association	Zimbob	40	H1	0	3	Extremely gravelly loam	7.9-8.4	1-5	0-0	Severe	Low		4	15-50	hills	Poor	d, br, c, om, r, s	0
977	Zimbob-Pookaloo association	Zimbob	40	H2	3	30	Very gravelly loam	7.9-9	1-5	0-0									
977	Zimbob-Pookaloo association	Zimbob	40	R	30	55	Bedrock												
977	Zimbob-Pookaloo association	Zimbob	30	H1	0	3	Very gravelly loam	7.9-8.4	1-5	0-0	Severe	Low		3	15-50	hills	Poor	D, BR, C, OM, R, S	0

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Appendix E

Inventory of Migratory and Resident Bird Species Potentially Occurring within the Study Area

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Appendix E Inventory of Migratory and Resident Bird Species Potentially Occurring within the Study Area

Common Name	Scientific Name	Status[1]	Observed in Study Area[2]
American crow	*Corvus brachyrhynchos*	-	Yes
American kestrel	*Falco sparverius*	-	No
American robin	*Turdus migratorius*	-	Yes
Ash-throated flycatcher	*Myiarchus cinerascens*	PIF	Yes
Barn swallow	*Hirundo rustica*	-	Yes
Black-billed magpie	*Pica pica*	-	Yes
Black-headed grosbeak	*Pheucticus melanocephalus*	-	Yes
Black-throated gray warbler	*Dendroica nigrescens*	PIF	Yes
Black-throated sparrow	*Amphispiza bilineata*	-	Yes
Blue-gray gnatcatcher	*Polioptila caerulea*	-	Yes
Brewer's blackbird	*Euphagus cyanocephalus*	-	Yes
Brewer's sparrow	*Spizella breweri*	BCC	Yes
Broad-tailed hummingbird	*Selasphorus platycercus*	-	Yes
Brown-headed cowbird	*Molothrus ater*	-	No
Bullock's oriole	*Icterus bullockii*	-	Yes
Bushtit	*Psaltriparus minimus*	-	Yes
Cassin's finch	*Carpodacus cassinii*	-	Yes
Chipping sparrow	*Spizella passerina*	-	Yes
Chukar	*Alectoris chukar*	-	Yes
Clark's nutcracker	*Nucifraga columbiana*	-	Yes
Cliff swallow	*Hirundo pyrrhonota*	-	No
Common raven	*Corvus corax*	-	Yes
Cooper's hawk	*Accipiter cooperii*	PIF	Yes
Dusky grouse	*Dendragapus obscurus*	-	Yes
Ferruginous hawk	*Buteo regalis*	BLM, PIF	Yes
Golden eagle	*Aquila chrysaetos*	BLM, BCC	Yes
Gray flycatcher	*Empidonax wrightii*	PIF	Yes
Gray partridge	*Perdix perdix*	-	No
Great horned owl	*Bubo virginianus*	-	Yes
Greater sage-grouse	*Centrocercus urophasianus*	BLM, BCC, PIF	Yes
Green-tailed towhee	*Pipilo chlorurus*	BCC	Yes
Hairy woodpecker	*Picoides villosus*	-	Yes
Hermit thrush	*Catharus guttatus*	-	Yes
Horned lark	*Eremophila alpestris*	-	Yes
House finch	*Carpodacus mexicanus*	-	Yes
House wren	*Troglodytes aedon*	-	Yes
Lark sparrow	*Chondestes grammacus*	-	Yes
Lazuli bunting	*Passerina amoena*	-	Yes
Lewis's woodpecker	*Melanerpes lewis*	BLM, BCC, PIF	No

Appendix E Inventory of Migratory and Resident Bird Species Potentially Occurring within the Study Area

Common Name	Scientific Name	Status[1]	Observed in Study Area[2]
Loggerhead shrike	*Lanius ludovicianus*	BLM, BCC, PIF	No
MacGillivray's warbler	*Oporornis tolmiei*	PIF	Yes
Mountain bluebird	*Sialia currucoides*	-	Yes
Mountain chickadee	*Poecile gambeli*	-	Yes
Mourning dove	*Zenaida macroura*	-	Yes
Northern flicker	*Colaptes auratus*	-	Yes
Northern harrier	*Circus cyaneus*	-	Yes
Pinyon jay	*Gymnorhinus cyanocephalus*	BLM, BCC, PIF	Yes
Plumbeous vireo	*Vireo plumbeus*	-	Yes
Peregrine falcon	*Falco peregrines*	BLM, BCC, PIF	No
Prairie falcon	*Falco mexicanus*	BLM, PIF	Yes
Red-naped sapsucker	*Sphyrapicus nuchalis*	PIF	Yes
Red-tailed hawk	*Buteo jamaicensis*	-	Yes
Rock wren	*Salpinctes obsoletus*	-	Yes
Ruby-crowned kinglet	*Regulus calendula*	-	Yes
Sage sparrow	*Amphispiza belli*	BCC, PIF	Yes
Sage thrasher	*Oreoscoptes montanus*	BCC, PIF	Yes
Song sparrow	*Melospiza melodia*	-	Yes
Spotted towhee	*Pipilo maculates*	-	Yes
Swainson's hawk	*Buteo swainsoni*	BLM, PIF	Yes
Townsend's solitaire	*Myadestes townsendii*	-	Yes
Turkey vulture	*Cathartes aura*	-	Yes
Vesper sparrow	*Pooecetes gramineus*	BLM, PIF	Yes
Violet-green swallow	*Tachycineta thalassina*	-	Yes
Warbling vireo	*Vireo gilvus*	-	Yes
Western meadowlark	*Sturnella magna*	-	Yes
Western scrub-jay	*Aphelocoma californica*	-	Yes
Western tanager	*Piranga ludoviciana*	-	Yes
Western wood-peewee	*Contopus sordidulus*	-	Yes
White-breasted nuthatch	*Sitta carolinensis*	-	Yes
White-crowned sparrow	*Zonotrichia leucophrys*	-	Yes
White-throated swift	*Aeronautes saxatalis*	-	Yes
Yellow warbler	*Setophaga petechia*	-	Yes
Yellow-rumped warbler	*Setophaga coronata*	-	Yes

[1] BLM = BLM Sensitive; BCC = USFWS Birds of Conservation Concern; PIF = Nevada Partners in Flight Priority Bird Species.

[2] Identified during baseline biological surveys within the study area.

Sources: BLM 2009a; Floyd et al. 2007; JBR 2011b; Neel 1999; SRK 2011a, 2008; USFWS 2008b.

Appendix F

Mule Deer Monitoring Plan

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Bald Mountain Mine (BMM) North Operations Area Project
Mule Deer Monitoring Plan

Monitoring Plan Objective:

Measure the effectiveness and success of the decision and the accuracy of analysis and whether the decision is achieving the intended environmental goal of supporting mule deer migration through the project area between seasonal ranges (environmental objective) and determine if predicted environmental direct and indirect effects, as identified in the North and South Operations Area Projects EIS, are accurate.

Coverage:

The BLM will be responsible for inspections to ensure that Barrick is in compliance with the mule deer design features and other measures designed to achieve the environmental objective.

A Wildlife Working Group (WWG) consisting of representatives from the BLM, NDOW, and Barrick will be established in order to review data and reports prepared under this monitoring plan.

Mule deer migration will primarily be monitored by placing GPS collars on individual mule deer that migrate through the North Operations Area Project (NOA). Potential additional information could be gathered and utilized as determined by the WWG, which could include camera traps, track counts, aerial imagery, migratory trail mapping flights (during heavy and fresh snow events), and other tracking methods in order to determine whether the decision is achieving the intended environmental objective and to measure the effectiveness of the mule deer design features and other measures designed to achieve the environmental objective.

Pertinent project development as-builts will be collected and provided by Barrick to the WWG for the annual report preparation to determine the behavioral responses of the collared individuals from development within the project area.

Frequency:

Inspections will be conducted prior to each migration season (e.g., January/early February and August/early September) in order to ensure that Barrick is in compliance with the mule deer design features and others measures designed to achieve the environmental objective.

Annual monitoring data points will be collected from mule deer GPS collars at regular intervals to be determined by the WWG in order to meet the objective of the monitoring plan. Time intervals will be modified as needed to obtain more precise migrating mule deer locations through the NOA.

Pertinent project development as-builts will be collected in early November and late February and provided to the WWG at the end of the migration season.

Intensity:

Duration:

Monitoring will be conducted from the signing of the Record of Decision (ROD) until 3 years after all facilities have been recontoured and reseeded within the North Operations Area. However, the monitoring plan will be reevaluated by the WWG after 5 years and every year thereafter and the WWG will provide a recommendation to the BLM to determine whether additional monitoring would be required to meet the monitoring plan objective identified above. Subsequently, the BLM Authorized Officer may determine to terminate the monitoring requirements.

Methods:

Monitoring of the mule deer design features and other measures designed to achieve the environmental objective will be conducted by performing inspections. Photos, locations, and descriptions will be documented during these inspections.

Mule deer migration movement will be monitored by collaring migratory mule deer that are expected to move through the NOA during each migration season. If mule deer are collared and determined to be resident mule deer to the area, data from those collars would be noted but not included in the monitoring report and those mule deer would not be recaptured and collared. Capture and collaring locations are expected to vary based on weather and other factors in order to collar mule deer that are expected to migrate through the NOA.

A minimum of 30 mule deer will be collared at all times during the monitoring period. During each subsequent year, additional mule deer will be collared in order to maintain the minimum 30 collared mule deer. To the extent practicable, GPS collars will be redeployed on individual mule deer that are known (from prior telemetry data) to have traversed the NOA. This step will ensure individual behavioral responses to mining development can be detected on an annual basis. This will generally require individual deer to be recaptured approximately every 2 years to maintain a functional GPS collar. If a collared deer dies before the battery life of the collar is depleted, then a new individual may be captured during the following capture period to maintain the required sample size.

Mule deer migration movement may also be potentially monitored with equipment which could include: camera traps, track counts, migratory trail mapping flights (during heavy and fresh snow events), or other tracking methods as determined by the WWG.

Reporting:

Inspection reports will be prepared following the on-site inspections in order to document Barrick's compliance with the mule deer design features and other measures designed to achieve the environmental objective.

An annual report will be prepared by a third party contractor identified by the WWG and selected and approved by the BLM. This analysis will use the collar data plus any other data identified by the

WWG in order to make a determination of whether the monitoring plan objective is being met. The best available science at the time would be applied to the analysis of the data. The BLM will review and approve the annual report.

Other data to be used within the annual report will include:

- Aerial imagery or other pertinent project development as-builts;
- Weather data, including precipitation and snow depth;
- Mule deer collar data from previous years; and
- NDOW annual mule deer assessments.

An annual meeting will be held by the WWG to discuss the information presented in the annual report and to discuss the effectiveness of the mule deer design features and other measures designed to achieve the environmental objective and discuss potential adjustments to the mule deer design features already constructed on-site.

Points of discussion during the annual meetings will include:

- Identifying field trips to be conducted to sites where successful and unsuccessful actions have been completed;
- Presentations of completed actions by BLM, NDOW, and Barrick; and
- Presentations of upcoming actions by BLM, NDOW, and Barrick.

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Appendix G

Special Status Species Identified for the Proposed Project

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Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
MAMMALS					
Pallid bat *Antrozous pallidus*	BLM; NV-SP	Range: Throughout Nevada. Habitat: Found in a variety of habitats from desert scrub to forests. Roosts in a variety of structures including mines, caves, buildings, and trees. Intolerant of roosts in excess of 40°C.	High. This species has been documented within the study area. Suitable roosting and foraging habitat occurs within the study area.	No.	Bradley et al. 2006; JBR 2012a.
Townsend's big-eared bat *Corynorhinus townsendii*	BLM; NV-SPS	Range: Throughout Nevada. Habitat: Highly associated with caves and mines. Very susceptible to disturbance at roost sites. Periodically moves to alternate roosts and actively forages and drinks throughout the winter. Typically forages in open forest habitats.	High. This species has been documented within the study area. Suitable roosting and foraging habitat occurs within the study area.	No.	Bradley et al. 2006; JBR 2012a.
Big brown bat *Eptesicus fuscus*	BLM	Range: Throughout Nevada. Habitat: Found in a variety of habitats including forests, shrublands, and agricultural and urban areas. Roosts in a variety of structures including mines, caves, buildings and trees. More tolerant of human habitation than other bat species. Roosts in groups up to several hundred individuals.	High. This species has been documented within the study area. Suitable roosting and foraging habitat occurs within the study area.	No.	Bradley et al. 2006; JBR 2012a.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Spotted bat *Euderma maculatum*	BLM; NV-T	Range: Throughout Nevada. Habitat: Found in a variety of habitats from low elevation desert scrub to high elevation coniferous forest habitats, including pinyon-juniper, sagebrush, and urban habitats. Closely associated with rocky cliffs. Roosts primarily in crevices on cliff faces and in caves and mines.	High. This species has been documented in White Pine county, Nevada. Suitable roosting and foraging habitat occurs within the study area.	No.	Bradley et al. 2006.
Silver-haired bat *Lasionycteris noctivagans*	BLM	Range: Throughout Nevada but occurs primarily in forest and riparian habitats. Habitat: A forest associated species often found at higher elevations in pinyon-juniper, subalpine fir, aspen and willow habitats. Roosts almost exclusively in trees in the summer. Frequently alternates roost sites. Maternity roost sites are usually in woodpecker holes.	High. This species has been documented within the study area. Suitable roosting and foraging habitat occurs within the study area.	No.	Bradley et al. 2006; JBR 2012a.
Hoary bat *Lasiurus cinereus*	BLM	Range: Patchy distribution throughout Nevada. Habitat: Tree-associated species. Found primarily in forested upland habitats, as well as in forest riparian zones, and agriculture habitats. May occur in park and garden settings in urban areas. A solitary rooster that typically roosts in trees.	High. This species has been documented within the study area. Suitable roosting and foraging habitat occurs within the study area.	No.	Bradley et al. 2006; JBR 2012a.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
California myotis *Myotis californicus*	BLM	Range: Throughout Nevada but mainly found in the southern half of the state at lower elevations. Habitat: Found in a variety of habitats from desert scrub to forests. Roosts in a variety of structures including mines, caves, buildings, and trees. Actively forages throughout the winter.	High. This species has been documented within the study area. Suitable roosting and foraging habitat occurs within the study area.	No.	Bradley et al. 2006; JBR 2012a.
Western small-footed myotis *Myotis ciliolabrum*	BLM	Range: Throughout Nevada. Habitat: Found in a variety of habitats from desert scrub to pine-fir forests. Roosts in caves, mines and trees. Forages in open areas.	High. This species has been documented at abandoned mines within the study area. Suitable roosting and foraging habitat occurs within the study area.	No.	Bradley et al. 2006; JBR 2006.
Long-eared myotis *Myotis evotis*	BLM	Range: Throughout Nevada, primarily at higher elevations. Habitat: Primarily a forest-associated species. Roosts in caves, mines and under bridges. May forage within mine and cave structures, gleaning moths from the rock walls.	High. This species has been documented within the study area. Suitable roosting and foraging habitat occurs within the study area.	No.	Bradley et al. 2006; JBR 2006, 2012a.
Little brown myotis *Myotis lucifugus*	BLM	Range: Found primarily in the northern part of Nevada. Habitat: Found at higher elevations in coniferous forest. Requires a nearby water source. Roosts in trees, buildings, caves, and mines. One of the species most commonly found in human structures.	High. This species has been documented within the study area. Suitable roosting and foraging habitat occurs within the study area.	No.	Bradley et al. 2006; JBR 2012a.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Fringed myotis *Myotis thysanodes*	BLM	Range: Throughout Nevada. Habitat: Found in a variety of habitats from low desert scrub habitats to high elevation coniferous forests. Found from upper elevation creosote bush desert to pinyon-juniper and white fir in the White Pine Range in White Pine County, Nevada. Roosts in mines, caves, trees, and buildings.	High. This species has been documented in White Pine county, Nevada. Suitable roosting and foraging habitat occurs within the study area.	No.	Bradley et al. 2006.
Long-legged myotis *Myotis volans*	BLM	Range: Throughout Nevada but absent from the low desert. Habitat: Pinyon-juniper and other higher elevation forest habitats. Night roosts and hibernacula located in caves and mines. Forages in open areas at canopy height.	High. This species has been documented within the study area. Suitable roosting and foraging habitat occurs within the study area.	No.	Bradley et al. 2006; JBR 2012a.
Yuma myotis *Myotis yumanensis*	BLM	Range: Found in the western, southern and north-central part of Nevada. Habitat: Found in a wide variety of habitats from low to mid-elevations, including sagebrush, salt desert scrub, agriculture, playa, and riparian habitats. One of the species that is most tolerant of human habitation and one of the few that thrives in a relatively urbanized environment. Roosts in buildings, trees, mines, caves, bridges and other man-made structures.	High. This species has been documented within the study area. Suitable roosting and foraging habitat occurs within the study area.	No.	Bradley et al. 2006; JBR 2012a.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Western pipistrelle bat *Pipstrellus hesperus*	BLM	Range: Throughout most of Nevada. More common in the western and southern portions. Habitat: Lower and Upper Sonoran desert habitats of blackbrush, creosote, salt desert shrub and sagebrush, with occasional occurrence in Ponderosa pine and pinyon-juniper, usually in association with rock features such as granite boulders and canyons. Roosts in mainly in rock crevices.	High. This species has been documented in White Pine county, Nevada. Suitable roosting and foraging habitat occurs within the study area.	No.	Bradley et al. 2006.
Brazilian free-tailed bat *Tadarida braziliensis*	BLM; NV-SP	Range: Throughout Nevada. Habitat: Found in a wide variety of habitats from desert scrub to coniferous forests. Roosts in caves, mines, trees, bridges, and buildings. Colonies often number in the thousands.	High. This species has been documented within the study area. Suitable roosting and foraging habitat occurs within the study area.	No.	Bradley et al. 2006; JBR 2012a.
Dark kangaroo mouse *Microdipodops megacephalus*	BLM; NV-SP	Range: Throughout Nevada. Habitat: Intermountain desert scrub, sagebrush, grasslands and meadows, badlands and dunes, and areas around desert playas and ephemeral pools.	Moderate. This species has not been documented within the study area; however, suitable sagebrush habitat occurs within the study area.	No.	Wildlife Action Plan Team 2012.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Pygmy rabbit *Brachylagus idahoensis*	BLM	Range: Throughout Nevada but typically found in areas dominated by sagebrush. Habitat: Requires dense sagebrush for cover as well as appropriate deep soils for burrowing (i.e., high clay content). Often found in drainages with taller sagebrush present.	High. This species has been recorded north of the study area near Ruby Lake NWR and likely occurs within the study area based on the presence of suitable habitat. The study area contains approximately 15,853 acres of potentially suitable habitat.	No.	BLM 2004; NNHP 2012b; SRK 2011b.
BIRDS					
Bald eagle *Haliaeetus leucocephalus*	BLM; NV-E	Range: Throughout Nevada. Habitat: Generally nests and roosts in close proximity to large water bodies including rivers, lakes, and reservoirs. Requires abundant food sources such as fish and waterfowl. Breeding period is February 15 to July 15.	Low: Due to the lack of suitable habitat within the study area, occurrence within the study area would be limited to migrating and foraging individuals from the Ruby Lake NWR.	No.	Floyd et al. 2007; Herron et al. 1985; Johnsgard 1990.
Northern goshawk *Accipiter gentilis*	BLM; NV-SPS	Range: Primarily found in the northern two-thirds of Nevada. Habitat: Deep conifer-dominated mixed forests. May exhibit seasonal migrations depending on prey availability. Preferred nesting habitat is aspen stands within coniferous forests along perennial streams. Breeding period is April 15 to August 1.	None.	Yes. No suitable habitat occurs within the study area.	Floyd et al. 2007; Herron et al. 1985; Johnsgard 1990.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Swainson's hawk *Buteo swainsoni*	BLM	Range: Found throughout Nevada, typically in agricultural areas. Habitat: Agricultural valleys and associated uplands. Nests in large shrubs and trees such as cottonwood, willows and aspen. Breeding period is April 15 to July 15.	High. This species has been documented as nesting approximately 1 mile west of the study area. Suitable nesting and foraging habitat occurs within the study area.	No.	Floyd et al. 2007; Herron et al. 1985; JBR 2011b; Johnsgard 1990.
Ferruginous hawk *Buteo regalis*	BLM	Range: Throughout Nevada; mainly in the east-central portion of the state. Habitat: Dry, open country. Nests usually occur in trees at the interface between pinyon-juniper and desert scrub/grasslands. Forages over open areas with an adequate prey base such as jackrabbits and ground squirrels. Breeding period is March 15 to July 15.	High. A total of 10 nests have been documented within or near the study area. Suitable nesting and foraging habitat occurs throughout the study area.	No.	Floyd et al. 2007; Herron et al. 1985; JBR 2011b; Johnsgard 1990.
Golden eagle *Aquila chrysaetos*	BLM	Range: Throughout Nevada. Habitat: Mountain or hilly terrain. Nests usually occur on cliffs or in trees. Forages over open areas with an adequate prey base. Breeding period is March 15 to July 15.	High. A total of seven nests have been documented within or near the study area. Suitable nesting and foraging habitat occurs within the study area.	No.	Floyd et al. 2007; Herron et al. 1985; JBR 2011b; Johnsgard 1990, Stantec 2015.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Peregrine falcon *Falco peregrinus*	BLM; NV-E	Range: Southwest and extreme southeast Nevada. Habitat: Open country near cliffs. Typically migrates south of U.S. during winter months. Nests on cliffs and rock ledges. Forages in open areas typically near water. Breeding period is March 15 to July 15.	None.	Yes. This species known distribution in Nevada is outside the study area.	Floyd et al. 2007; Herron et al. 1985; Johnsgard 1990.
Greater sage-grouse *Centrocercus urophasianus*	FC; BLM	Range: Throughout Nevada in areas with sagebrush. Habitat: Sagebrush grasslands. Leks are located in open areas in close proximity to escape cover. Nests are located in sagebrush habitat, typically within 2 miles of the lek. Broods are raised in wet, grassy areas near sagebrush. Winter habitat consists of south and east facing slopes with minimal snow cover. Breeding period (including displaying, nesting, and brooding) is March 1 to July 31.	High. Nine active, one inactive, and six unknown leks occur within three miles of the study area. Suitable nesting, brooding, and wintering habitat occurs within the study area. In addition, the BLM and NDOW have mapped Core, Priority, and General Habitat within the study area.	No.	Connelly et al. 2000; Floyd et al. 2007; Neel 1999; Wildlife Action Plan Team 2012, Coates et al. 2014.
Western burrowing owl *Athene cunicularia hypugea*	BLM	Range: Throughout Nevada. Habitat: Open country from desert scrub to grasslands. Often found in or around prairie dog colonies and ground squirrel colonies. Nests in burrows. Breeding period is April 15 to August 15.	High. This species has been documented within the study area and suitable nesting and foraging habitat occurs within the study area, especially in recently reclaimed grassland areas.	No.	Floyd et al. 2007; Herron et al. 1985; JBR 2012a.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Lewis's woodpecker *Melanerpes lewis*	BLM	Range: A resident breeder in isolated pockets mainly in the northern half of the state. Habitat: During the breeding season, this species prefers open habitats that facilitate its foraging behavior of hawking for insects. Scattered trees and/or snags are necessary for nesting. Open or park-like ponderosa pine, burned-over stands of Douglas fir, mixed conifer, pinyon-juniper, riparian and oak woodlands are preferred nesting areas. Furthermore, this species prefers areas with a grassy and bushy understory. Breeding period is April 15 to July 15.	Moderate. This species has not been documented within the study area; however, suitable nesting and foraging habitat occurs within the study area.	No.	Floyd et al. 2007; Neel 1999; Wildlife Action Plan Team 2012.
Loggerhead shrike *Lanius ludovicianus*	BLM; NV-SPS	Range: Throughout Nevada. Habitat: Open country including desert scrub and sagebrush grasslands. Nests and forages in brushy areas. Breeding period is April 15 to July 15.	High. This species has been observed within the study area and suitable nesting and foraging habitat occurs within the study area.	No.	Floyd et al. 2007; Neel 1999; Wildlife Action Plan Team 2012; JBR 2012a.
Pinyon jay *Gymnorthinus cyanocephalus*	BLM	Range: Throughout Nevada, although more common in the central and southern portions of the state. Habitat: Pinyon-juniper woodlands. Less frequently found in pine forests and sagebrush grasslands. Distribution is determined by availability of food resources. Nests in loose colonies. Breeding period is April 15 to July 15.	High. This species has been documented within the study area during field surveys. Suitable nesting and foraging habitat occurs within the study area.	No.	Floyd et al. 2007; JBR 2012a, 2011; Neel 1999; SRK 2011a; Wildlife Action Plan Team 2012.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Sage thrasher *Oreoscoptes montanus*	BLM; NV-SPS	Range: Throughout Nevada. Habitat: Spends the summer months in sagebrush shrublands and winters in desert scrub. Breeding period is April 15 to July 15.	High: This species has been documented within the study area during field surveys. Suitable nesting and foraging habitat occurs within the study area.	No.	JBR 2012a, 2011b; SRK 2011a; Stokes and Stokes 1996.
Brewer's sparrow *Spizella breweri*	BLM; NV-SPS	Range: Throughout Nevada. Habitat: Sagebrush shrublands, brushy areas, and desert scrub. Except for singing males, this bird is very secretive and found under the canopy cover. Breeding season is April 15 to July 15.	High: This species has been documented within the study area during field surveys. Suitable nesting and foraging habitat occurs within the study area.	No.	JBR 2012a, 2011b; SRK 2011a; Stokes and Stokes 1996.
Black rosy-finch *Leucosticte atrata*	BLM	Range: In Nevada, this species breeds on the highest mountains of Elko and White Pine counties. Habitat: Breeds and nests in alpine tundra habitat. Nests on high ridges and peaks (9,000 to 13,000 feet in elevation) near rock cover, usually in crevices and holes in cliff sides. Breeding period is May 1 to July 15.	None.	Yes. No suitable habitat occurs within the project area.	Floyd et al. 2007; Neel 1999; Wildlife Action Plan Team 2012.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
AMPHIBIANS					
Northern leopard frog *Rana pipiens*	BLM; NV-SP	Range: Isolated habitats throughout Nevada. Absent from the southwest portion of the state. Habitat: Springs, slow streams, marshes, bogs, ponds, canals, flood plains, reservoirs, and lakes. Usually found in permanent water with rooted aquatic vegetation. During the summer, commonly inhabits wet meadows and fields. Females typically lay eggs in late April and May. Tadpoles develop into frogs from mid-summer to late fall.	Low. No known records of this species exist for the study area, although this species has been documented north of the study area at the Ruby Lake NWR. Suitable habitat occurs at the springs and seeps located within the study area.	No.	NatureServe 2012; NNHP 2012a; SRK 2007.
PLANTS					
White bearpoppy *Arctomecon merriamii*	BLM	Range: Clark, Lincoln, and Nye counties, Nevada; also in California. Habitat: On a wide variety of dry to sometimes moist basic soils, including alkaline clay and sand, gypsum, calcareous alluvial gravels, and carbonate rock outcrops. Elevation: 2,000 to 6,280 feet amsl. Flowering: Spring.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NNHP 2001.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Eastwood milkweed *Asclepias eastwoodiana*	BLM	Range: Esmeralda, Lander, Lincoln, and Nye counties, Nevada. Habitat: Open areas on a wide variety of basic soils, including calcareous clay knolls, sand, carbonate or basaltic gravels, or shale outcrops, generally barren and lacking competition, frequently in small washes or other moisture-accumulating micro-sites, in the shadscale, mixed-shrub, sagebrush and lower pinyon-juniper zones. Elevation: 4,680 to 7,080 feet amsl. Flowering: late-spring.	Low. While the proposed NOA and SOA projects do meet some of the required habitat characteristics, the NOA and SOA projects are outside of the elevation for the species.	Yes.	NNHP 2001.
Torrey milkvetch *Astragalus calycosus* var. *monophyllidius*	BLM	Range: Clark, Elko, Eureka, Lincoln, and Nye counties, Nevada, also in Utah. Habitat: Unknown. Elevation: 5,350 to 7,465 feet amsl. Flowering: unknown.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NNHP 2001.
Veyo milkvetch *Astragalus ensiformis* var. *gracilior*	BLM	Range: Lincoln County, Nevada, Washington County, Utah. Habitat: Open washes, valley floors, and hillsides, in clay soil, with pinyon-juniper and sagebrush species. Elevation: 4,200 to 5,000 feet.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NatureServe 2013.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Needle Mountains milkvetch *Astragalus eurylobus*	BLM	Range: Known within Lincoln and Nye counties, Nevada and also in Arizona and Utah. Habitat: Generally deep, barren, sandy, gravelly, or clay soils derived from sandstone or siliceous volcanics, frequently in or along drainages. Elevation: 4,600 to 5,750 feet amsl. Flowering late spring.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NNHP 2001.
Threecorner milkvetch *Astragalus geyeri* var. *triquetrus*	BLM, NV-SP	Range: Clark and Lincoln counties, Nevada; also in Arizona. Habitat: Open, deep sandy soil or dunes, generally stabilized by vegetation and/or a gravel veneer. Dependent on sand dunes or deep sand in Nevada. Elevation: 1,100 to 2,400 feet amsl. Flowering: late-winter to early spring.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NNHP 2001.
Straw milkvetch *Astragalus lentiginosus* var. *stramineus*	BLM	Range: Mohave County, Arizona, Clark County, Nevada, and Washington County Utah. Habitat: Sandy and gravelly flats and dunes. Elevation 2,000 to 3,000 feet. Flowering: Unknown.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NatureServe 2013.
Long-calyx eggvetch *Astragalus oophorus* var. *lonchocalyx*	BLM	Range: Lincoln County, Nevada; also in Utah. Habitat: No Information available. Elevation: 6,000 to 7,480 feet amsl. Flowering: Unknown.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NNHP 2001; NatureServe 2013.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Currant milkvetch *Astragalus uncialis*	BLM	Range: Millard County, Utah; and Nye County, Nevada. Habitat: Found in shadscale communities in Utah, and sagebrush communities in Nevada. In Nevada, found on dry, open, sparsely vegetated, calcareous sandy-clay soils on flats and gentle slopes of hillsides and alluvial fans. Elevation 4,800 to 6,050 feet amsl. Flowering late-spring.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NatureServe 2013; NNHP 2001.
Dainty moonwort *Botrychium crenulatum*	BLM	Range: Clark County, Nevada, and may include Elko, Esmeralda, Lander, Lyon, Mineral, Nye, and White Pine counties, Nevada; also in Arizona, California, Idaho, Montana, Oregon, Utah, Washington, and Wyoming. Likely occurs in isolated pockets in many of the higher and wetter mountains of Nevada. Habitat: Aquatic or wetland-dependent in Nevada. Elevation: 8,202 to 11,150 feet amsl. Flowering late-spring.	None. The proposed NOA and SOA projects do not meet the required habitat characteristics.	Yes.	NNHP 2001.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Monte Neva paintbrush *Castilleja salsuginosa*	BLM, NV-SP	Range: Eureka and White Pine counties, Nevada. Nevada endemic. Habitat: Damp, open, alkaline to saline clay soils of hummocks and drainages on travertine hot-spring mounds with greasewood, rubber rabbitbrush, alkali sacaton, etc. Aquatic or wetland-dependent. Elevation: 5,965 to 6,130 feet amsl. Flowering late-spring to summer.	Low. While the proposed NOA and SOA projects do meet some of the required habitat characteristics, it is highly unlikely that suitable habitat is found in the study area.	Yes.	NNHP 2001.
Intermountain wavewing *Cymopterus basalticus*	BLM	Range: White Pine County, Nevada, also in Utah. Habitat (Not reviewed for Nevada): Bare basaltic rocks, barren clays, and (in Utah) gravelly hills and alluvial fans, mostly on dolomite in the pinyon-juniper, sagebrush, and shadscale zones. Elevation: 4,429 to 6,998 feet amsl. Flowering: spring.	Low. While the proposed NOA and SOA projects do meet some of the required habitat characteristics, the NOA and SOA projects are outside of the elevation for the species.	Yes.	NNHP 2001.
Nevada willowherb *Epilobium nevadense*	BLM	Range: Clark, Eureka, and Lincoln counties, Nevada; also in Utah. Habitat: (Utah) - Slopes with limestone outcrops or talus at 5,118 to 9,186 m elevation. Associated with singleleaf pinyon and ponderosa pine. Habitat information not available for Nevada. Elevation: 6,000 to 8,930 feet amsl. Flowering: unknown.	Low. Low. While the proposed NOA and SOA projects do meet some of the required habitat characteristics, it is unlikely the species would be found in the project footprint.	Yes.	NNHP 2001.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Antelope Canyon goldenbush *Ericameria cervina*	BLM	Range: northwest Arizona, adjacent Nevada, and Utah. Habitat: Rock-crevices and talus, often on granitic outcrops and soils. Elevation 4,921 to 7, 874 feet amsl. Flowering: late summer-fall.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	Efloras 2008.
Sheep fleabane *Erigeron ovinus*	BLM	Range: Clark and Lincoln counties, Nevada. Known only from the Sheep and Groom ranges and Mount Irish. Nevada endemic. Habitat: Crevices in carbonate cliffs and ridgeline outcrops in the pinyon-juniper and montane conifer zones. Elevation: 3,600 to 8,400 feet amsl. Flowering late-spring to summer.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NNHP 2001.
Las Vegas buckwheat *Eriogonum corymbosum* var. *nilesii*	BLM, FC	Range: Clark County, Nevada; also in Washington County, Utah. Habitat: On and near gypsum soils, often forming low mounds or outcrops in washes and drainages, or in areas of generally low relief, often with California bearpoppy and other gypsum-tolerant species, surrounded by burrobush, Desert princes' plume, fourwing saltbush, Torrey's jointfir, creosote bush, catclaw acacia, Mojave seablite, Fremont's dalea, etc. Elevation: 1,900 to 3,839 feet amsl. Flowering summer to fall.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NNHP 2001; USFWS 2013.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Scarlet buckwheat *Eriogonum microthecum* var. *phoeniceum* [*Eriogonum microthecum* var. *arceuthinum]*	BLM	Range: Juab and Millard counties, Utah. Habitat: Tuffaceous ash outcrops, sagebrush communities, pinyon-juniper woodlands. Elevation: 5,429 to 6,889 feet amsl.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	Efloras 2008.
Deer Lodge buckwheat *Eriogonum pharnaceoides* var. *cervinum*	BLM	Range: Lincoln County, Nevada, Iron and Washington counties, Utah, and Mohave County, Arizona. Habitat: Sandy or gravelly slopes, sagebrush, and mountain mahogany communities, oak, pinyon-juniper and montane conifer woodlands. Elevation: 4,593 to 7,545 feet amsl. Flowering: July to September.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	Efloras 2008.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Sticky buckwheat *Eriogonum viscidulum*	BLM, NV-SP	Range: Clark and Lincoln counties, Nevada; also in Arizona. Habitat: Deep loose sandy soils in washes, flats, roadsides, steep aeolian slopes, and stabilized dune areas, with burrobush, creosote bush, big galleta, littleleaf ratany, Indian ricegrass, saltcedar, arrowweed, geyer's milkvetch, gravel milkvetch, little deserttrumpet, Torrey's jointfir, desert twinbugs, breadroot, California croton, sand dropseed, Fremont's dalea, sand verbena, woody crinklemat, etc. Can withstand moderate temporary disturbance. Dependent on sand dunes or deep sand in Nevada. Elevation: 1,200 to 2,200 feet amsl.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NNHP 2001.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Sunnyside green gentian *Frasera gypsicola*	BLM, NV-SP	Range: Nye and White Pine counties, Nevada; also in Utah. Habitat: Open, dry, whitish, alkaline, often salt-crusted and spongy silty-clay soils on calcareous flats and barrens, with little if any gypsum content, in cushion-plant associations surrounded by sagebrush, greasewood, and occasionally barberry and swamp cedar vegetation, with pygmy sagebrush, big sagebrush, Shockley's buckwheat, Chamber's twinpod, Welsh's cryptantha, fineleaf hymenopappus, mound phlox, dwarf pepperweed, etc. Elevation: 5,180 to 5,510 feet amsl. Flowering: Summer.	Low. While the proposed NOA and SOA projects do meet some of the required habitat characteristics, it is highly unlikely that suitable habitat is found in the study area.	Yes.	NNHP 2001.
Sand cholla *Grusonia pulchella*	BLM	Range: Churchill, Douglas, Esmeralda, Lander, Lincoln, Mineral, Nye, Pershing, and Washoe counties, Nevada; also in Arizona, California, and Utah. Habitat: (not yet reviewed for Nevada): Sand of dunes, dry-lake borders, river bottoms, washes, valleys, and plains in the desert. Dependent on sand dunes or deep sand in Nevada. Elevation: 3,950 to 6,300 feet amsl. Flowering: unknown.	Low. While the proposed NOA and SOA projects do meet some of the required habitat characteristics, the NOA and SOA projects are outside of the elevation for the species.	Yes.	NNHP 2001.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Rock purpusia *Ivesia arizonica* var. *saxosa*	BLM	Range: Lincoln and Nye counties, Nevada. Endemic to Nevada. Habitat: Crevices of cliffs and boulders on volcanic and possibly carbonate rocks in the upper mixed-shrub, sagebrush, and pinyon-juniper zones. Elevation: 4,925 to 6,800 feet amsl. Flowering: May to July.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NNHP 2001.
Waxflower *Jamesia tetrapetala*	BLM	Range: Lincoln, Nye, and White Pine counties, Nevada; also in Utah. Habitat: (not yet reviewed for Nevada): Crevices in limestone cliffs. Elevation: 7,000 to 10,720 feet amsl. Flowering: Unknown.	Low. While the proposed NOA and SOA projects do meet some of the required habitat characteristics, it is unlikely the species would be found in the project footprint.	Yes.	NNHP 2001.
Maquire's bitterroot *Lewisia maguirei*	BLM	Range: Nye County, Nevada. Endemic to the Quinn Canyon and Grant ranges. Habitat: Dry, sparsely vegetated carbonate scree or shallow gravelly clay soils on steep slopes and ridgelines of all aspects in the pinyon-juniper zone with desert frasera, Torrey's milkvetch, stemless four-nerve daisy, Nevada onion, rock goldenrod, etc. Elevation: 7,360 to 8,280 feet amsl. Flowering: late-spring.	None. Species is an endemic with limited distribution. The proposed NOA and SOA projects are located outside of the species limited range.	Yes.	NNHP 2001.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Pioche blazingstar *Mentzelia argillicola*	BLM	Range: Lincoln County, Nevada, Sanpete and Sevier counties, Utah. Habitat: Silty clay soils on knolls and slopes with sparse vegetation Elevation: around 5,600 feet amsl. Flowering: unknown.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NatureServe 2013; Holmgren and Holmgren 2002
Tiehm blazingstar *Mentzelia tiehmii*	BLM	Range: Endemic to the White River Valley within northeastern Nye County and adjacent Lincoln County, Nevada. Habitat: Unknown. Elevation: 4,900 to 5,200 feet amsl. Flowering late June to early September.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	Holmgren and Holmgren 2001; NatureServe 2010; NNHP 2001.
Tunnel Springs beardtongue *Penstemon concinnus*	BLM	Range: Lincoln and White Pine counties, Nevada; also in Utah. Habitat: no summary available. Elevation: 6,200 to 6,600 feet amsl. Flowering: unknown.	Low. While the proposed NOA and SOA projects do meet some of the required habitat characteristics, it is highly unlikely that suitable habitat is found in the study area. In further, the proposed project is outside the range of known locations.	Yes.	NNHP 2013.
Pennell beardtongue *Penstemon leiophyllus* var. *francisci-pennellii*	BLM	Range: Lincoln, Nye, and White Pine counties, Nevada; also in Utah. In Nevada known from the Snake, Wilson Creek, southern Schell Creek, Egan, and Grant ranges. Habitat: (not yet reviewed for Nevada): Rocky calcareous slopes, shaded banks. Elevation: 7,000 to 11,500 feet. Flowering: Unknown.	Low. While the proposed NOA and SOA projects do meet some of the required habitat characteristics, it is highly unlikely that suitable habitat is found in the study area. In further, the proposed project is outside the range of known locations.	Yes.	NNHP 2001.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Parish phacelia *Phacelia parishii*	BLM	Range: Clark, Lincoln, Nye, and White Pine counties, Nevada; also in Arizona and California. Habitat: Moist to superficially dry, open, flat to hummocky, mostly barren, often salt-crusted silty-clay soils on valley bottom flats, lake deposits, and playa edges, often near seepage areas, sometimes on gypsum deposits, surrounded by saltbush scrub vegetation. Aquatic or wetland-dependent in Nevada. Elevation: 2,190 to 5,922 feet amsl.	Low. The proposed NOA and SOA projects have limited aquatic or wetland vegetation and are outside the range of known locations.	Yes.	NNHP 2001.
Blaine pincushion *Sclerocactus blainei*	BLM	Range: Nye County, Nevada; also in Utah. Habitat: Alkaline calcareous and volcanic gravelly clay soils in open valley bottom areas in the shadscale and lower sagebrush zones with greasewood, James galleta, shadscale saltbush, big sagebrush, rubber rabbitbrush, etc. Elevation: 5,100 to 5,300 feet amsl. Flowering: late-spring.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NNHP 2001.
Great Basin fishhook cactus *Sclerocactus pubispinus*	BLM	Range: Lincoln, Elko and White Pine counties, Utah; Beaver, Iron, Juab, Millard, Sevier, and Toole counties, Utah. Habitat: Rocky hillsides of woodland and upper desert mountains. Elevation range and flowering period unknown.	Low. While the proposed NOA and SOA projects do meet some of the required habitat characteristics, it is highly unlikely that suitable habitat is found in the study area. In further, the proposed NOA and SOA projects are located outside the known range of the species.	Yes.	NNHP 2001; NatureServe 2013.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Schlesser pincushion *Sclerocactus schlesseri*	BLM	Range: Lincoln County, Nevada; also in Utah. Possible or probable Nevada endemic. Habitat: Open, stable or stabilized, gravelly, sandy silt or silty clay soils derived from somewhat ashy and/or gypsiferous lacustrine sediments, on mesic microsites created and/or maintained by gentle north to east aspects, dense shrub and/or grass canopies, high clay and silt content of the soil, and/or cryptobiotic soil crusts, usually associated with such soil crusts in the shadscale zone. Elevation: 4,760 to 5,145 feet amsl. Flowering: late-spring.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NNHP 2001.
Nachlinger's catchfly *Silene nachlingerae*	BLM	Range: Elko, Nye, and White Pine counties, Nevada. Nevada endemic. Habitat: Generally dry, exposed or somewhat sheltered carbonate (rarely quartzite) crevices in ridgeline outcrops, talus, or very rocky soils on or at the bases of steep slopes or cliffs, on all aspects but predominantly on northwesterly to northeasterly exposures, mainly in the subalpine conifer zone. Elevation: 7,160 to 11,250 feet amsl. Flowering: Summer.	Moderate. Potential habitat could occur in the study area.	No.	NNHP 2001.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
St. George blue-eyed grass *Sisyrinchium radicatum*	BLM	Range: Known from southern Nevada; and southwestern Utah, apparently restricted to the St. George-Las Vegas region. Habitat: Moist meadows or on streambanks associated with bluegrass, rush, and sea milkwort. Elevation: 1,970 to 4,265 feet amsl. Flowering late-spring to mid-summer.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NatureServe 2013; Efloras 2008.
Railroad Valley globemallow *Sphaeralcea caespitosa* var. *williamsiae*	BLM	Range: Nye County, Nevada. Habitat: Dry, open flat to gently sloped, gravelly carbonate soils on alluvium and valley fill, often more abundant on recovering disturbances such as washes and roadsides in the greasewood, shadscale and mixed shrub zones. Elevation: unknown. Flowering May - June.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NatureServe 2013; NNHP 2001.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Ute ladies'-tresses orchid *Spiranthes diluvialis*	BLM, FT	Range: Lincoln and White Pine counties, Nevada; also in Colorado, Idaho, Montana, Nebraska, Utah, and Wyoming. Habitat: Moist to very wet, somewhat alkaline or calcareous native meadows near streams, springs, seeps, lake shores, or in abandoned stream meanders that still retain ample ground water, global. Aquatic or wetland-dependent in Nevada. Elevation: In Nevada, found around 4,750 feet amsl. Flowering: Summer.	None. The proposed NOA and SOA projects do not have the required habitat characteristics.	Yes.	NNHP 2001.
Currant Summit clover *Trifolium andinum* var. *podocephalum*	BLM	Range: Lincoln and Nye counties, Nevada. Endemic to the White Pine and Egan ranges. Habitat: Crevices of volcanic or carbonate rock in the pinyon-juniper zone, Elevation: 6,900 to 7,400 feet amsl. Flowering: late-springs to summer.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NNHP 2001.

Appendix G Special Status Species Identified for the Proposed Project

Common Name/ Scientific Name	Status[1]	Range and Habitat Requirements	Potential for Occurrence Within or Near the Project Area	Eliminated from Detailed Analysis	References
Rock violet *Viola lithion*	BLM	Range: Elko, Nye, and White Pine counties, Nevada; also in Utah. In Nevada known only from the White Pine and Pilot ranges. Habitat: Seasonally wet crevices in steep carbonate or quartzite outcrops in shaded northeast-facing avalanche chutes and cirque headwalls in the subalpine conifer zone. Elevation: 7,840 to 10,480 feet amsl. Flowering: late-spring to summer.	None. The proposed NOA and SOA projects are outside of the species range.	Yes.	NNHP 2001.

[1] Status:

BLM = BLM Sensitive Species.

FC = Federal Candidate Species.

FT = Federally Threatened Species.

NV-SP = Nevada State Protected.

NV-SPS = Nevada State Protected Sensitive.

NV-T = Nevada State Threatened.

Appendix H

Visual Resources

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Appendix H1

Visual Simulations

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Bald Mountain Mine
North and South Operations
Area Projects EIS

Figure H-1

Visual Simulations for KOP-1

BLM

Ely District Office

Note: No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

BLM

Ely District Office

Bald Mountain Mine
North and South Operations
Area Projects EIS

Figure H-2

Visual Simulations for
KOP-2

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Bald Mountain Mine
North and South Operations
Area Projects EIS

Figure H-3

Visual Simulations for
KOP-3

BLM

Ely District Office

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BLM

Ely District Office

Bald Mountain Mine
North and South Operations
Area Projects EIS

Figure H-4

Visual Simulations for
KOP-4

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BLM

Ely District Office

Bald Mountain Mine
North and South Operations
Area Projects EIS

Figure H-5

Visual Simulations for
KOP-5

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Bald Mountain Mine
North and South Operations
Area Projects EIS

Figure H-6

Visual Simulations for
KOP-6

BLM

Ely District Office

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BLM

Ely District Office

Bald Mountain Mine
North and South Operations
Area Projects EIS

Figure H-7

Visual Simulations for
KOP-7

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Bald Mountain Mine
North and South Operations
Area Projects EIS

Figure H-8

Visual Simulations for
KOP-8

BLM

Ely District Office

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Bald Mountain Mine
North and South Operations
Area Projects EIS

Figure H-9

Visual Simulations for
KOP-9

BLM

Ely District Office

Bald Mountain Mine
North and South Operations
Area Projects EIS

Figure H-10

Visual Simulations for KOP-1 (Western Redbird Modification Alternative)

BLM

Ely District Office

Note: No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Appendix H2

Contrast Rating Forms

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date 04/24/2012

District Ely FO

Resource Area

Activity (program)

SECTION A. PROJECT INFORMATION

1. Project Name
Bald Mountain Mine

2. Key Observation Point
KOP-1

3. VRM Class
IV

4. Location Nevada SH 892-Pony Express Tr.

Township

Range_____

Section_____

5. Location Sketch

Please see Figure 3.19-1

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar mine landforms, angular mountains and wide planar valley floor.	Planar blanket of pinyon juniper, sagebrush and grasses.	Indistinct roads and buildings in the background.
LINE	Horizontal and angular mine landforms, horizontal valley and angular ridgelines.	Irregular pinyon juniper, sagebrush and grass patterns.	Indistinct roads and buildings in the background
COLOR	Light to medium reddish tan.	Dark olive green pinyon-juniper and light to medium silvery green sagebrush and light tan grasses.	Light tans and grays of distant roads and buildings
TEX-TURE	Smooth landforms.	Smooth, medium and coarse.	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar and rounded rock disposal and heap leach area	Change from removal of trees and shrubs to indistinct grasses	Indistinct new roads and buildings
LINE	Vertical, horizontal, and angular rock disposal and heap leach areas	Change from rounded trees and shrubs to horizontal grasses	Indistinct new roads and buildings
COLOR	Light, medium and dark browns	Change from dark olive trees and varied shrubs to homogenous light tan grasses	Indistinct new roads and buildings
TEX-TURE	Smooth	Change medium and coarse to smooth	Indistinct new roads and buildings

SECTION D. CONTRAST RATING ☐ SHORT TERM ☑ LONG TERM

DEGREE OF CONTRAST		FEATURES											
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form	X					X					X	
	Line	X						X				X	
	Color		X			X						X	
	Texture		X				X					x	

2. Does project design meet visual resource management objectives? ☑ **Yes** ☐ **No** **(Explain on reverse side)**

3. Additional mitigating measures recommended ☐ **Yes** ☐ **No (Explain on reverse side)**

Evaluator's Names	Date
M. Paulson	03/06/2013

BLM has directed the use of building surface color from the BLM Standard Environmental Colors Chart, with one color for those buildings/structures in disturbed soils (Carlsbad Canyon color), and another color in areas with surrounding vegetation, including tree lines (Shadow Gray color). Vegetation and landform reclamation are included in the vegetation section.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date 04/24/2012

District Ely FO

Resource Area

Activity (program)

SECTION A. PROJECT INFORMATION

1. Project Name
Bald Mountain Mine

2. Key Observation Point
KOP-2

3. VRM Class
III

4. Location White Pine Cty Rd 3-Pony Exp Tr.

Township

Range_____

Section_____

5. Location Sketch

Please see Figure 3.19-1

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar mine landforms, angular mountains and wide planar valley floor.	Planar blanket of pinyon juniper, sagebrush and grasses.	Indistinct roads and buildings in the background.
LINE	Horizontal and angular mine landforms, horizontal valley and angular ridgelines.	Irregular pinyon juniper, sagebrush and grass patterns.	Indistinct roads and buildings in the background
COLOR	Light to medium reddish tan.	Dark olive green pinyon-juniper and light to medium silvery green sagebrush and light tan grasses.	Light tans and grays of distant roads and buildings
TEX-TURE	Smooth landforms.	Smooth, medium and coarse.	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar and rounded rock disposal and heap leach area	Change from removal of trees and shrubs to indistinct grasses	Indistinct new roads and buildings
LINE	Vertical, horizontal, and angular rock disposal and heap leach areas	Change from rounded trees and shrubs to horizontal grasses	Indistinct new roads and buildings
COLOR	Light, medium and dark browns	Change from dark olive trees and varied shrubs to homogenous light tan grasses	Indistinct new roads and buildings
TEX-TURE	Smooth	Change medium and coarse to smooth	Indistinct new roads and buildings

SECTION D. CONTRAST RATING ☐ SHORT TERM ☑ LONG TERM

DEGREE OF CONTRAST		FEATURES											
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form	X					X					X	
	Line	X						X				X	
	Color		X			X						X	
	Texture		X				X					x	

2. Does project design meet visual resource management objectives? ☐ **Yes** ☑ **No** **(Explain on reverse side)**

3. Additional mitigating measures recommended ☐ **Yes** ☐ **No** **(Explain on reverse side)**

Evaluator's Names	Date
M. Paulson	03/06/2013

Strong contrasts of form, line, color, and/or texture do not meet VRM Class III management objectives.

BLM has directed the use of building surface color from the BLM Standard Environmental Colors Chart, with one color for those buildings/structures in disturbed soils (Carlsbad Canyon color), and another color in areas with surrounding vegetation, including tree lines (Shadow Gray color). Vegetation and landform reclamation are included in the vegetation section.

The Reconfiguration Alternative contrasts will be less than the Proposed Action and will meet VRM Class III objectives from this KOP (KOP-2) over the long term.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date 04/24/2012

District Ely FO

Resource Area

Activity (program)

SECTION A. PROJECT INFORMATION

1. Project Name
Bald Mountain Mine

2. Key Observation Point
KOP-3

3. VRM Class
III

4. Location White Pine Cty Rd 3 – Ruby Valley.

Township

Range_____

Section_____

5. Location Sketch

Please see Figure 3.19-1

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar mine landforms, angular mountains and wide planar valley floor.	Planar blanket of pinyon juniper, sagebrush and grasses.	Indistinct roads and buildings in the background.
LINE	Horizontal and angular mine landforms, horizontal valley and angular ridgelines.	Irregular pinyon juniper, sagebrush and grass patterns.	Indistinct roads and buildings in the background
COLOR	Light to medium reddish tan.	Dark olive green pinyon-juniper and light to medium silvery green sagebrush and light tan grasses.	Light tans and grays of distant roads and buildings
TEX-TURE	Smooth landforms.	Smooth, medium and coarse.	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar and rounded rock disposal and heap leach area	Change from removal of trees and shrubs to indistinct grasses	Indistinct new roads and buildings
LINE	Vertical, horizontal, and angular rock disposal and heap leach areas	Change from rounded trees and shrubs to horizontal grasses	Indistinct new roads and buildings
COLOR	Light, medium and dark browns	Change from dark olive trees and varied shrubs to homogenous light tan grasses	Indistinct new roads and buildings
TEX-TURE	Smooth	Change medium and coarse to smooth	Indistinct new roads and buildings

SECTION D. CONTRAST RATING ☐ SHORT TERM ☑ LONG TERM

DEGREE OF CONTRAST		FEATURES											
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form	X					X					X	
	Line	X						X				X	
	Color		X			X						X	
	Texture		X				X					x	

2. Does project design meet visual resource management objectives? ☐ **Yes** ☑ **No** **(Explain on reverse side)**

3. Additional mitigating measures recommended ☐ **Yes** ☐ **No** **(Explain on reverse side)**

Evaluator's Names	Date
M. Paulson	03/06/2013

Strong contrasts of form, line, color, and/or texture do not meet VRM Class III management objectives.

BLM has directed the use of building surface color from the BLM Standard Environmental Colors Chart, with one color for those buildings/structures in disturbed soils (Carlsbad Canyon color), and another color in areas with surrounding vegetation, including tree lines (Shadow Gray color). Vegetation and landform reclamation are included in the vegetation section.

The Reconfiguration Alternative contrasts will be less than the Proposed Action and will meet VRM Class III objectives from this KOP (KOP-3) over the long term.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date 04/24/2012

District Ely FO

Resource Area

Activity (program)

SECTION A. PROJECT INFORMATION

1. Project Name
Bald Mountain Mine

2. Key Observation Point
KOP-4

3. VRM Class
IV

4. Location BLM Road-Alligator Ridge Area.

Township

Range

Section_____

5. Location Sketch

Please see Figure 3.19-1

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar mine landforms, angular mountains and wide planar valley floor.	Planar blanket of pinyon juniper, sagebrush and grasses.	Indistinct roads and buildings in the background.
LINE	Horizontal and angular mine landforms, horizontal valley and angular ridgelines.	Irregular pinyon juniper, sagebrush and grass patterns.	Indistinct roads and buildings in the background
COLOR	Light to medium reddish tan.	Dark olive green pinyon-juniper and light to medium silvery green sagebrush and light tan grasses.	Light tans and grays of distant roads and buildings
TEX-TURE	Smooth landforms.	Smooth, medium and coarse.	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar and rounded rock disposal and heap leach area	Change from removal of trees and shrubs to indistinct grasses	Indistinct new roads and buildings
LINE	Vertical, horizontal, and angular rock disposal and heap leach areas	Change from rounded trees and shrubs to horizontal grasses	Indistinct new roads and buildings
COLOR	Light, medium and dark browns	Change from dark olive trees and varied shrubs to homogenous light tan grasses	Indistinct new roads and buildings
TEX-TURE	Smooth	Change medium and coarse to smooth	Indistinct new roads and buildings

SECTION D. CONTRAST RATING ☐ SHORT TERM ☑ LONG TERM

DEGREE OF CONTRAST		FEATURES											
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form	X					X					X	
	Line	X						X				X	
	Color		X			X						X	
	Texture		X				X					x	

2. Does project design meet visual resource management objectives? ☑ **Yes** ☐ **No** **(Explain on reverse side)**

3. Additional mitigating measures recommended ☐ **Yes** ☐ **No (Explain on reverse side)**

Evaluator's Names	Date
M. Paulson	03/06/2013

Strong contrasts of form, line, color, and/or texture comply with VRM Class IV management objectives.

BLM has directed the use of building surface color from the BLM Standard Environmental Colors Chart, with one color for those buildings/structures in disturbed soils (Carlsbad Canyon color), and another color in areas with surrounding vegetation, including tree lines (Shadow Gray color). Vegetation and landform reclamation are included in the vegetation section.

The Reconfiguration Alternative contrasts will be less than the Proposed Action as seen from this KOP (KOP-4) over the long term.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	04/24/2012
District	**Ely FO**
Resource Area	
Activity (program)	

SECTION A. PROJECT INFORMATION

1. Project Name **Bald Mountain Mine**	**4. Location** BLM Road-Sunshine Area. **Township** **Range** **Section**_____	**5. Location Sketch** Please see Figure 3.19-1
2. Key Observation Point **KOP-5**		
3. VRM Class **IV**		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar mine landforms, angular mountains and wide planar valley floor.	Planar blanket of pinyon juniper, sagebrush and grasses.	Indistinct roads and buildings in the background.
LINE	Horizontal and angular mine landforms, horizontal valley and angular ridgelines.	Irregular pinyon juniper, sagebrush and grass patterns.	Indistinct roads and buildings in the background
COLOR	Light to medium reddish tan.	Dark olive green pinyon-juniper and light to medium silvery green sagebrush and light tan grasses.	Light tans and grays of distant roads and buildings
TEX-TURE	Smooth landforms.	Smooth, medium and coarse.	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar and rounded rock disposal and heap leach area	Change from removal of trees and shrubs to indistinct grasses	Indistinct new roads and buildings
LINE	Vertical, horizontal, and angular rock disposal and heap leach areas	Change from rounded trees and shrubs to horizontal grasses	Indistinct new roads and buildings
COLOR	Light, medium and dark browns	Change from dark olive trees and varied shrubs to homogenous light tan grasses	Indistinct new roads and buildings
TEX-TURE	Smooth	Change medium and coarse to smooth	Indistinct new roads and buildings

SECTION D. CONTRAST RATING ☐ SHORT TERM ☑ LONG TERM

DEGREE OF CONTRAST		FEATURES											
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form	X					X					X	
	Line	X						X				X	
	Color		X			X						X	
	Texture		X				X					x	

2. Does project design meet visual resource management objectives? ☑ **Yes** ☐ **No** **(Explain on reverse side)**

3. Additional mitigating measures recommended ☐ **Yes** ☐ **No (Explain on reverse side)**

Evaluator's Names	**Date**
M. Paulson	03/06/2013

Strong contrasts of form, line, color, and/or texture comply with VRM Class IV management objectives.

BLM has directed the use of building surface color from the BLM Standard Environmental Colors Chart, with one color for those buildings/structures in disturbed soils (Carlsbad Canyon color), and another color in areas with surrounding vegetation, including tree lines (Shadow Gray color). Vegetation and landform reclamation are included in the vegetation section.

The Reconfiguration Alternative contrasts will be less than the Proposed Action as seen from this KOP (KOP-5) over the long term.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date 04/24/2012

District Ely FO

Resource Area

Activity (program)

SECTION A. PROJECT INFORMATION

1. Project Name
Bald Mountain Mine

2. Key Observation Point
KOP-6

3. VRM Class
IV

4. Location Long Valley Road.

Township

Range

Section_____

5. Location Sketch

Please see Figure 3.19-1

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar mine landforms, angular mountains and wide planar valley floor.	Planar blanket of pinyon juniper, sagebrush and grasses.	Indistinct roads and buildings in the background.
LINE	Horizontal and angular mine landforms, horizontal valley and angular ridgelines.	Irregular pinyon juniper, sagebrush and grass patterns.	Indistinct roads and buildings in the background
COLOR	Light to medium reddish tan.	Dark olive green pinyon-juniper and light to medium silvery green sagebrush and light tan grasses.	Light tans and grays of distant roads and buildings
TEX-TURE	Smooth landforms.	Smooth, medium and coarse.	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar and rounded rock disposal and heap leach area	Change from removal of trees and shrubs to indistinct grasses	Indistinct new roads and buildings
LINE	Vertical, horizontal, and angular rock disposal and heap leach areas	Change from rounded trees and shrubs to horizontal grasses	Indistinct new roads and buildings
COLOR	Light, medium and dark browns	Change from dark olive trees and varied shrubs to homogenous light tan grasses	Indistinct new roads and buildings
TEX-TURE	Smooth	Change medium and coarse to smooth	Indistinct new roads and buildings

SECTION D. CONTRAST RATING ☐ SHORT TERM ☑ LONG TERM

DEGREE OF CONTRAST		FEATURES											
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form	X					X					X	
	Line	X						X				X	
	Color		X			X						X	
	Texture		X				X					x	

2. Does project design meet visual resource management objectives? ☑ **Yes** ☐ **No** **(Explain on reverse side)**

3. Additional mitigating measures recommended ☐ **Yes** ☐ **No (Explain on reverse side)**

Evaluator's Names	Date
M. Paulson	03/06/2013

Strong contrasts of form, line, color, and/or texture comply with VRM Class IV management objectives.

BLM has directed the use of building surface color from the BLM Standard Environmental Colors Chart, with one color for those buildings/structures in disturbed soils (Carlsbad Canyon color), and another color in areas with surrounding vegetation, including tree lines (Shadow Gray color). Vegetation and landform reclamation are included in the vegetation section.

The Reconfiguration Alternative contrasts will be less than the Proposed Action as seen from this KOP (KOP-6) over the long term.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	04/12/2013
District	**Ely FO**
Resource Area	
Activity (program)	

SECTION A. PROJECT INFORMATION

1. Project Name **Bald Mountain Mine**	**4. Location** Sunshine Locality Historic Site **Township** **Range** **Section**	**5. Location Sketch** Please see Figure 3.19-1
2. Key Observation Point **KOP-7**		
3. VRM Class **IV**		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar mine landforms, angular mountains and wide planar valley floor.	Planar blanket of pinyon juniper, sagebrush and grasses.	Indistinct roads and buildings in the background.
LINE	Horizontal and angular mine landforms, horizontal valley and angular ridgelines.	Irregular pinyon juniper, sagebrush and grass patterns.	Indistinct roads and buildings in the background
COLOR	Light to medium reddish tan.	Dark olive green pinyon-juniper and light to medium silvery green sagebrush and light tan grasses.	Light tans and grays of distant roads and buildings
TEX-TURE	Smooth landforms.	Smooth, medium and coarse.	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar and rounded rock disposal and heap leach area	Change from removal of trees and shrubs to indistinct grasses	Indistinct new roads and buildings
LINE	Vertical, horizontal, and angular rock disposal and heap leach areas	Change from rounded trees and shrubs to horizontal grasses	Indistinct new roads and buildings
COLOR	Light, medium and dark browns	Change from dark olive trees and varied shrubs to homogenous light tan grasses	Indistinct new roads and buildings
TEX-TURE	Smooth	Change medium and coarse to smooth	Indistinct new roads and buildings

SECTION D. CONTRAST RATING ☐ SHORT TERM ☑ LONG TERM

DEGREE OF CONTRAST		FEATURES											
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form	X					X					X	
	Line	X						X				X	
	Color		X			X						X	
	Texture		X				X					x	

2. Does project design meet visual resource management objectives? ☑ **Yes** ☐ **No** **(Explain on reverse side)**

3. Additional mitigating measures recommended ☐ **Yes** ☐ **No (Explain on reverse side)**

Evaluator's Names	**Date**
M. Paulson	05/14/2013

Strong contrasts of form, line, color, and/or texture comply with VRM Class IV management objectives.

BLM has directed the use of building surface color from the BLM Standard Environmental Colors Chart, with one color for those buildings/structures in disturbed soils (Carlsbad Canyon color), and another color in areas with surrounding vegetation, including tree lines (Shadow Gray color). Vegetation and landform reclamation are included in the vegetation section.

The Reconfiguration Alternative contrasts will be less than the Proposed Action as seen from this KOP (KOP-7) over the long term.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date 04/12/2013

District Ely FO

Resource Area

Activity (program)

SECTION A. PROJECT INFORMATION

1. Project Name
Bald Mountain Mine

2. Key Observation Point
KOP-8

3. VRM Class
III

4. Location Fort Ruby National Historic Landmark

Township

Range_____

5. Location Sketch

Please see Figure 3.19-1

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar mine landforms, angular mountains and wide planar valley floor.	Planar blanket of pinyon juniper, sagebrush and grasses.	Indistinct roads and buildings in the background.
LINE	Horizontal and angular mine landforms, horizontal valley and angular ridgelines.	Irregular pinyon juniper, sagebrush and grass patterns.	Indistinct roads and buildings in the background
COLOR	Light to medium reddish tan.	Dark olive green pinyon-juniper and light to medium silvery green sagebrush and light tan grasses.	Light tans and grays of distant roads and buildings
TEX-TURE	Smooth landforms.	Smooth, medium and coarse.	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar and rounded rock disposal and heap leach area	Change from removal of trees and shrubs to indistinct grasses	Indistinct new roads and buildings
LINE	Vertical, horizontal, and angular rock disposal and heap leach areas	Change from rounded trees and shrubs to horizontal grasses	Indistinct new roads and buildings
COLOR	Light, medium and dark browns	Change from dark olive trees and varied shrubs to homogenous light tan grasses	Indistinct new roads and buildings
TEX-TURE	Smooth	Change medium and coarse to smooth	Indistinct new roads and buildings

SECTION D. CONTRAST RATING ☐ SHORT TERM ☑ LONG TERM

DEGREE OF CONTRAST		FEATURES											
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form	X					X					X	
	Line	X						X				X	
	Color		X			X						X	
	Texture		X				X					x	

2. Does project design meet visual resource management objectives? ☐ **Yes** ☑ **No** **(Explain on reverse side)**

3. Additional mitigating measures recommended ☐ **Yes** ☐ **No** **(Explain on reverse side)**

Evaluator's Names	Date
M. Paulson	05/14/2013

Strong contrasts do not meet VRM Class III objectives.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date	04/12/2013
District	**Ely FO**
Resource Area	
Activity (program)	

SECTION A. PROJECT INFORMATION

1. Project Name **Bald Mountain Mine**	**4. Location** Fort Ruby National Historic Landmark **Township** **Range**_____	**5. Location Sketch** Please see Figure 3.19-1
2. Key Observation Point **KOP-9**		
3. VRM Class **III**		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar mine landforms, angular mountains and wide planar valley floor.	Planar blanket of pinyon juniper, sagebrush and grasses.	Indistinct roads and buildings in the background.
LINE	Horizontal and angular mine landforms, horizontal valley and angular ridgelines.	Irregular pinyon juniper, sagebrush and grass patterns.	Indistinct roads and buildings in the background
COLOR	Light to medium reddish tan.	Dark olive green pinyon-juniper and light to medium silvery green sagebrush and light tan grasses.	Light tans and grays of distant roads and buildings
TEX-TURE	Smooth landforms.	Smooth, medium and coarse.	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar and rounded rock disposal and heap leach area	Change from removal of trees and shrubs to indistinct grasses	Indistinct new roads and buildings
LINE	Vertical, horizontal, and angular rock disposal and heap leach areas	Change from rounded trees and shrubs to horizontal grasses	Indistinct new roads and buildings
COLOR	Light, medium and dark browns	Change from dark olive trees and varied shrubs to homogenous light tan grasses	Indistinct new roads and buildings
TEX-TURE	Smooth	Change medium and coarse to smooth	Indistinct new roads and buildings

SECTION D. CONTRAST RATING ☐ SHORT TERM ☑ LONG TERM

DEGREE OF CONTRAST		FEATURES											
		LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form	X					X					X	
	Line	X						X				X	
	Color		X			X						X	
	Texture		X				X					x	

2. Does project design meet visual resource management objectives? ☐ **Yes** ☑ **No** **(Explain on reverse side)**

3. Additional mitigating measures recommended ☐ **Yes** ☐ **No** **(Explain on reverse side)**

Evaluator's Names	**Date**
M. Paulson	05/14/2013

Strong contrasts do not meet VRM Class III objectives.

Form 8400-4
(September 1985)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date 05/15/2015

District Ely FO

Resource Area

Activity (program)

SECTION A. PROJECT INFORMATION

1. Project Name
Bald Mountain Mine – Western Redbird Modification Alt.

2. Key Observation Point
KOP-1

3. VRM Class
IV

4. Location NV SH 892
Pony Express Tr.
Township
Range_____
Section_____

5. Location Sketch
Please see Figure 3.19-1

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar mine landforms, angular mountains and wide planar valley floor.	Planar blanket of pinyon juniper, sagebrush and grasses.	Indistinct roads and buildings in the background.
LINE	Horizontal and angular mine landforms, horizontal valley and angular ridgelines.	Irregular pinyon juniper, sagebrush and grass patterns.	Indistinct roads and buildings in the background
COLOR	Light to medium reddish tan.	Dark olive green pinyon-juniper and light to medium silvery green sagebrush and light tan grasses.	Light tans and grays of distant roads and buildings
TEX-TURE	Smooth landforms.	Smooth, medium and coarse.	Smooth

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Planar and rounded rock disposal and heap leach area	Change from removal of trees and shrubs to indistinct grasses	Indistinct upgraded road
LINE	Vertical, horizontal, and angular rock disposal and heap leach areas	Change from rounded trees and shrubs to horizontal grasses	Indistinct upgraded road
COLOR	Light, medium and dark browns	Change from dark olive trees and varied shrubs to homogenous light tan grasses	Indistinct upgraded road
TEX-TURE	Smooth	Change medium and coarse to smooth	Indistinct upgraded road

SECTION D. CONTRAST RATING ☐ SHORT TERM ☑ LONG TERM

DEGREE OF CONTRAST		FEATURES: LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)			
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None
Elements	Form		X				X					X	
	Line		X					X				X	
	Color			X				X				X	
	Texture			X				X				x	

2. Does project design meet visual resource management objectives? ☑ **Yes** ☐ **No** **(Explain on reverse side)**

3. Additional mitigating measures recommended ☐ **Yes** ☐ **No (Explain on reverse side)**

Evaluator's Names	Date
M. Paulson	05/15/2015

See revegetation section.

Appendix I

Programmatic Agreement Regarding the Bald Mountain Mining District Project

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PROGRAMMATIC AGREEMENT

AMONG

THE BUREAU OF LAND MANAGEMENT, EGAN FIELD OFFICE

AND

THE NEVADA STATE HISTORIC PRESERVATION OFFICER

REGARDING THE BALD MOUNTAIN MINING DISTRICT PROJECT

WHEREAS, the Bureau of Land Management Egan Field Office (BLM) has determined that the authorization of mining operations at the Bald Mountain Mining District Project (BMMD or Project) for Barrick Gold, Inc. (Barrick) in White Pine County, Nevada, may have an effect on historic properties eligible for inclusion in the National Register of Historic Places (NRHP), and has consulted with the Nevada State Historic Preservation Officer (SHPO) pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA); and

WHEREAS, effects to historic properties in the Area of Potential Effect (APE) (Appendix A) cannot be fully determined and the Signatories desire to enter into this Programmatic Agreement (PA) to set forth procedures to be followed in satisfaction of BLM's Section 106 responsibilities of the National Historic Preservation Act, for the BMMD in the APE; and

WHEREAS, the BLM, the SHPO and the Advisory Council on Historic Preservation (ACHP) are Signatories to a PA governing all aspects of the development for the Project executed in December of 1995; and

WHEREAS, the BLM, the SHPO and the ACHP wish to terminate the existing Bald Mountain Mine PA effective on the day this document is executed and the BLM and the SHPO desire to enter into this PA; and

WHEREAS, BLM has invited Barrick to be a concurring party to this PA; and

WHEREAS, BLM has consulted with the ACHP pursuant to 36 CFR §800.14(b), to develop and execute this PA and the ACHP has elected not to formally enter consultation on the development of this PA; and

WHEREAS, Ely Shoshone and Duckwater Tribes may have an interest in the area and will be contacted and offered an opportunity to participate in the Section 106 process and those tribes requesting an opportunity to participate as concurring parties will be included in the process as provided in this PA; and

WHEREAS, BLM has a Nationwide Programmatic Agreement and a State Protocol Agreement between BLM and SHPO dated February 3, 2012 (Protocol) that govern all other undertakings

and historic properties that may occur within the APE and those agreements are hereby incorporated by reference into this PA; and

WHEREAS, the definitions given in the Protocol between the Nevada Bureau of Land Management State Director and the SHPO apply throughout this PA, unless specifically modified below; and

WHEREAS, this PA covers all aspects of authorized mining operations in the BMMD;

NOW, THEREFORE, the Signatories agree that the BMMD shall be administered in accordance with the following stipulations to ensure that historic properties will be treated to avoid or mitigate effects to the extent practicable, regardless of surface ownership, and to satisfy BLM's Section 106 responsibilities for all aspects of the BMMD.

I. ROLES AND RESPONSIBILITIES

A. BLM is responsible for administering this PA. This includes but is not limited to ensuring that all Signatories carry out their responsibilities; overseeing all cultural resource work; and assembling all submissions to the SHPO and consulting parties during the implementation of this PA. The Egan Field Manager is the BLM Authorized Officer for BMMD. The Authorized Officer, or their designee, is the BMMD point of contact for BLM.

B. Barrick's signatory, or their designees, will be the responsible point of contact for the BMMD and provide BLM with any and all information needed to implement this PA.

C. Barrick shall bear the expense of identification, evaluation, and treatment of all historic properties directly or indirectly affected by BMMD related activity. Such costs shall include, but not be limited to, pre-field planning, fieldwork, post-fieldwork analysis, research and report preparation, interim and summary report preparation, publications for the general public, and the cost of curating project documentation and artifact collections. If Barrick withdraws project applications, then Barrick shall incur no further expense except for completing fieldwork and post-fieldwork activities (production of final inventory, testing and data recovery reports covering the description and analysis of data, and the curation of materials) that has occurred as of the date of withdrawal.

D. BLM will be responsible for all submissions to SHPO and any other interested parties identified during the implementation of this PA for the BMMD. Any submission to SHPO or interested parties not from BLM will be considered as informational only and will not trigger any compliance timelines or other actions.

E. BLM shall ensure that ethnographic, historic, architectural, and archaeological work conducted pursuant to this PA is carried out by or under the direct supervision of persons meeting qualifications set forth in the Draft Secretary of the Interior's Professional Qualification Standards dated June 20, 1997 (62 FR 33707-33723) and who have been permitted for such work on public lands by BLM.

F. Barrick, in cooperation with BLM and SHPO, shall provide in-house training to ensure that all its personnel and all the personnel of its contractors and subcontractors are directed not to engage in the illegal collection of historic and prehistoric materials. Subsequent hires will also be required to be subject to similar training. Training can be in association with Barrick's safety and or related job training and project orientation. Barrick shall cooperate with BLM to ensure compliance with the Archaeological Resources Protection Act of 1979 (16 U.S.C. 470) on Federal lands and with Nevada Revised Statutes (NRS) 381 for private lands.

G. Barrick shall be responsible for costs of rehabilitation or mitigation, and may be subject to criminal penalties, should damage to cultural resources inside or outside the APE occur during the period of construction, mine operation or reclamation due to the unauthorized, inadvertent or negligent actions of Barrick, their employees, contractors or any other project personnel.

H. If the BMMD is sold or otherwise transferred to another proponent other than Barrick, the Signatories will determine within 90 days of the sale or transfer if the PA will remain in effect, be amended per Stipulation V, or be terminated per Stipulation VI. All provisions of the PA will remain in effect until such a determination is made.

II. STIPULATIONS

BLM ensure that the following stipulations are carried out:

A. Identification of Historic Properties

1. BLM shall involve interested parties and Tribes identified through the Section 106 process, as appropriate, in all activities carried out under this PA associated with the Project.

2. Identification and evaluation of historic properties shall be conducted on all lands identified within approved Plans of Operation and subsequent amendments on BMMD (Plans). Identification and evaluation may be phased to reflect BMMD's operational timelines.

3. BLM shall require the consulting archaeologists conduct records searches of General Land Office (GLO) plat maps, BLM's Master Title Plats/Historic Index, the GLO Land Records website (http://www.glorecords.BLM SWFO.gov/), the Nevada State Lands Patent Database Query (http://www.lands.nv.gov/patents/patents.htm), The Nevada Cultural Resources Information System (NVCRIS), the National and State Register of Historic Places, National Trail System, historic maps, BLM and SHPO cultural resources records, and pertinent historic records/publications and maps to identify historic properties as a part of the identification process.

4. Required identification activities shall be completed on Federal or private lands owned by Barrick. For privately held lands not owned by Barrick, Barrick shall exercise reasonable effort to obtain access from the landowner for the purpose of conducting inventory, eligibility, and adverse effects analysis. "Reasonable effort" for this purpose is defined as seeking to obtain landowner consent on reasonable, negotiated terms, without resort to any formal legal process or proceedings. After all such reasonable efforts have been made, if access cannot be obtained to private land not owned by Barrick and after consulting with BLM, Barrick shall use existing data to determine the types of resources that might be present and anticipated effects. Upon BLM determination that the intention of this section has been satisfied, BLM Authorized Officer may issue a Notice to Proceed (NTP) for any construction segment as prescribed in Stipulation II.G.

5. BLM shall allow Barrick's point of contact to receive the location of any historic properties that have been or are identified within the APE or in any part of the APE directly from the archeological contractor. Barrick shall protect, secure, and restrict access to this sensitive information to the point of contact. Barrick shall not share this information with others without prior consent in writing from BLM.

B. Eligibility

1. BLM, in consultation with SHPO, shall evaluate all cultural resources recorded under this PA for eligibility to the NRHP based on the following document: *Historic Context II, The Bald Mountain Historic Mining District, White Pine County, Nevada* (Kautz 2011). This document shall be reviewed for adequacy every three years or by the request of a Signatory.

2. BLM shall consult with the appropriate Tribes to evaluate the eligibility of properties of traditional religious and cultural importance within the APE.

3. A separate report will be prepared to document historic properties with standing architectural resources that qualify for the National Register under Criteria A, B, or C in order to expedite SHPO review.

4. To the extent practicable, NRHP eligibility determinations shall be based on documented inventory information. If the information gathered in the inventory is inadequate to determine eligibility, Barrick, through its contractor, may be required to conduct limited subsurface testing or other evaluative techniques to determine eligibility. Subject to approval by BLM, in consultation with SHPO, evaluative testing is intended to provide the minimum data necessary to define the nature, age, and distribution of materials in potential historic properties, to make final evaluations of eligibility, and to inform the development of a treatment plan should data recovery be deemed necessary. BLM requires Barrick's cultural resource contractor be approved for a testing Cultural

Resources Use Permit (CRUP) prior to subsurface probing, testing, data recovery, or surface material collection.

5. If any of the Signatories, Tribes, or other consulting parties disagree regarding eligibility of a cultural resource, BLM and SHPO shall work together with Tribes and interested parties (when appropriate) to seek a resolution on the determination of eligibility. If the dispute cannot be resolved, BLM shall seek a formal determination of eligibility from the Keeper of the National Register in accordance with 36 CFR 63.2. The Keeper's determination will be considered final.

6. Eligibility will be determined prior to the initiation of activities that may adversely affect those cultural resources. Eligibility will be determined in a manner consistent with the Protocol. The required evaluation activities shall be completed on Federal or private lands owned by Barrick. If Barrick cannot gain access to private land not owned by Barrick after a reasonable effort is made, the historic property shall remain unevaluated. Sites may remain unevaluated for the NRHP only with approval by BLM in consultation with SHPO.

C. Treatment

1. BLM shall ensure that BMMD avoids adverse effects to historic properties, whenever practical, through project design, or redesign, relocation of facilities, or by other means in a manner consistent with the Protocol.

2. When avoidance is not practical and data recovery is proposed to minimize or mitigate project related adverse effects to historic properties, BLM, in consultation with the SHPO, shall ensure that Barrick, through its contractor, develops a Data Recovery Treatment Plan (Plan) that is consistent with the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (48 FR 44716-37), *Treatment of Historic Properties: A Handbook* (Advisory Council on Historic Preservation 1980) and ACHP's Recommended Approach for Consultation on the Recovery of Significant Information from Archaeological Sites dated June 17, 1999. The required mitigation activities shall be completed regardless of the ownership (Federal or private lands owned by Barrick) of the lands involved. If Barrick cannot gain access to private lands not owned by Barrick through reasonable efforts, only the portions of the historic property directly affected by the project shall be treated. BLM shall submit the Plan to SHPO for review. Concurrently, BLM shall provide Tribes and other consulting parties, as appropriate, with a copy of the Plan with a fifteen (15) day review opportunity.

3. For historic properties eligible under criteria A through C, BLM will consider, in consultation with SHPO, mitigation other than data recovery in the Treatment Plan (e.g., oral history, historic markers, exhibits, interpretive brochures or publications, etc.). Where appropriate, the Treatment Plan shall include

provisions (content and number of copies) for a publication for the general public.

4. Pursuant to Stipulation F, BLM shall ensure as a condition of approval/special stipulation on any authorization or Notice to Proceed that Barrick, through its contractor, implement and complete the fieldwork portions of any final Treatment or Data Recovery Plan prior to initiating any activities that may affect those historic properties.

5. BLM shall ensure that all records and materials resulting from identification and treatment efforts are curated in accordance with 36 CFR 79 in an approved curation facility in Nevada. As defined in the Native American Graves Protection and Repatriation Act (NAGPRA) materials will be handled in accordance with 43 CFR 10. All materials collected will be maintained in accordance with 36 CFR 79 or 43 CFR 10, until the final treatment report is complete and collections are curated and/or returned to their owners. Barrick, or their contractor, shall provide proof of a current curation agreement to BLM within two (2) weeks of BLM acceptance of the final reports.

6. BLM shall provide to SHPO, Tribes, and other consulting parties as appropriate all final archaeological reports resulting from actions pursuant to this PA. All such reports shall be consistent with contemporary professional standards and the Secretary of Interior's Formal Standards for Final Reports of Data Recovery Programs (48 FR 44716-44740). Final reports will be submitted in both paper and electronic copies and will include digital copies of all associated data (e.g. GPS files, GIS data layers, digital photographs, etc.).

D. Other Considerations

1. Identification, evaluation, and treatment efforts may extend beyond the geographic limits of the APE when the resources being considered extend beyond the boundary of the construction activities. No identification, evaluation, or treatment efforts will occur beyond that necessary to gather data for the completion of the Section 106 process as agreed to in this PA.

2. Information on the location and nature of all cultural resources or information considered proprietary by a Tribe will be held confidential to the extent provided by Federal and state law.

E. Monitoring

1. Any Signatory may monitor actions carried out pursuant to this PA, provided that personnel undertaking monitoring activities shall comply with all applicable Barrick mine safety and health rules and requirements when visiting the mine. To the extent practicable, all monitoring activities conducted by SHPO, Tribes, or

other consulting parties will attempt to minimize the number of monitors involved in the Project.

2. Any areas that BLM, in consultation with the SHPO, identifies as sensitive will be monitored during related construction activities by a qualified individual (Monitor). Monitors shall be empowered to stop work to protect resources if that work is inconsistent with the terms of this PA or any corresponding treatment or monitoring plan.

F. Notices to Proceed

BLM may issue a NTP to Barrick for individual construction segments as defined by Barrick in their Plans, under any of the following conditions:

1. BLM, in consultation with SHPO, have determined that there are no cultural resources within the APE for that construction segment location; or

2. BLM, in consultation with SHPO, have determined that there are no historic properties within the APE for the construction segment locations; or

3. BLM, in consultation with the SHPO, Tribes, and other consulting parties as appropriate, has implemented an adequate Treatment Plan for the properties affected by the construction segment locations; and

   (a) Barrick has posted a surety as set forth in Stipulation H. 1.

   (b) The fieldwork phase of the treatment option has been completed; and

   (c) BLM has accepted a summary description of the fieldwork performed and a reporting schedule for that work; and

   (d) BLM shall provide an electronic copy of the summary to SHPO; and

   (e) SHPO shall review the summary and if the SHPO concurs or does not respond within two working days of receipt, BLM shall assume concurrence and issue the NTP; and

   (f) Barrick shall not begin any ground disturbing activities within the boundary of any historic property until BLM issues a NTP for the property.

G. Time Frames

1. BLM will review and comment on any report submitted by Barrick, through its contractor, within thirty (30) calendar days of receipt.

2. BLM shall submit the results of all identification, evaluation, effects assessment, and treatment efforts, including discovery situations, and Treatment or Data Recovery Plans to the SHPO. The SHPO will have thirty (30) calendar days from their receipt to

review and comment on any submission. In the event SHPO does not respond within thirty (30) calendar days from its receipt, BLM shall assume SHPO concurrence.

3. A draft final report of all identification, evaluation, treatment activities will be due to BLM from Barrick within nine (9) months after the completion of the fieldwork associated with the activity, unless otherwise negotiated. Final reports will be due sixty (60) days after receiving BLM comments.

H. Surety Bonds

1. Based on a written detailed cost estimate submitted by the Cultural Contractor and agreed to by Barrick and BLM, Barrick will post a surety bond with the BLM, not to exceed $500,000 to cover all costs associated with all data recovery fieldwork, analysis, research and report preparation, interim and summary reports, and curation of project documentation and artifact collections in an approved curation facility anticipated to run concurrently from the signing date of the PA to one calendar year from the signing date. The surety shall be posted prior to BLM issuing any NTP.

2. Portions of the surety bond posted shall be subject to forfeiture if the data recovery projects tasks are not completed within the time period established by the treatment option selected; provided, however, BLM and Barrick may agree to extend any such time periods. BLM shall notify Barrick that the surety is subject to forfeiture and shall allow Barrick thirty (30) calendar days to respond before action is taken to forfeit the surety.

3. The surety bond may be increased or decreased annually based on a written detailed cost estimate submitted by the Cultural Contractor and agreed to by Barrick and BLM for concurrently running data recovery projects anticipated for the following year. If the amount of concurrently running data recovery projects exceeds what is presented in the Cultural Contractor's cost estimate, the BLM shall meet with Barrick to increase the bond amount prior the required annual surety bond adjustment date.

J. Post-Review Discovery Situations

Stipulations of this PA and Protocol are intended to identify and mitigate historic properties. Unplanned discoveries of buried cultural resources are not anticipated. In the case of an unplanned discovery, the BLM will ensure that provisions in the Protocol (Section VI.B) and the following stipulations are met.

1. When previously unidentified cultural resources are discovered or an unanticipated impact situation occurs, all BMMD related activities within 100 meters of the discovery/impact will cease immediately. Barrick, through its contractor or its authorized representative, shall secure the location to prevent vandalism or other

damage. Barrick or its authorized representative shall immediately notify the BLM Authorized Officer of the discovery followed by written confirmation. Activity at the location shall be suspended until the discovery has been evaluated and any necessary mitigation measures completed.

2. BLM shall notify SHPO, Tribes, and other consulting parties as appropriate, within one (1) working day of the discovery or unanticipated impact notification, and consider their initial comments on the situation. Within two (2) working days after initial discovery, BLM shall notify SHPO or other parties, of the decision to either allow BMMD Activities to proceed or to require further evaluation and/or mitigation.

3. If BLM determines, in consultation with SHPO, that mitigation for discoveries or unanticipated impacts is required, BLM shall solicit comments from SHPO, Tribes, and other consulting parties, as appropriate, to develop mitigating measures. SHPO, Tribes, and other consulting parties, as appropriate, will have two (2) working days to provide BLM with comments on the nature and extent of mitigative efforts. Within seven (7) working days of initial SHPO notification, BLM will inform SHPO of the nature of the mitigation required, and ensure that such mitigative actions are implemented before allowing BMMD activities to resume.

4. BLM shall ensure that reports of mitigation efforts for discoveries or unanticipated impacts are completed in a timely manner and conform to the Department of Interior's Formal Standards for Final Reports of Data Recovery Program (42 FR 5377-79). Drafts of such reports shall be submitted to the SHPO for a fifteen (15) day review and comment period. BLM will submit final reports to the SHPO, other Signatories, Tribes, and other consulting parties, as appropriate for informational purposes.

5. Any disputes or objections arising during a discovery or unanticipated impact situation regarding the treatment of historic properties that cannot be resolved by BLM and SHPO shall be referred to the Nevada BLM State Office for consultation. The Nevada BLM State Office shall be given seven (7) days to provide BLM with comments.

6. BMMD related activities in the area of the discovery or unanticipated impact will be halted until Barrick is notified by the BLM Authorized Officer in writing that mitigation is complete and activities can resume.

III. Dispute Resolution

1. If any party to this PA, or any other consulting party, objects to any activities proposed pursuant to the terms of this PA, BLM shall consult with the objecting party and SHPO to resolve the issue.

2. An interested person or other consulting party can request participation by the ACHP should consultation not resolve the issue.

3. If there is an objection by SHPO to the manner in which the terms of this PA are implemented, SHPO will notify the Egan Field Manager in writing of the objection. BLM will consult with SHPO to resolve the objection. If BLM determines that the objection cannot be resolved, it shall request consultation by BLM Nevada State Office to help resolve the objection.

4. The Signatories may continue all actions under this PA that are not the subject of the dispute.

IV. Duration

This PA shall become effective on the date of the last signature below, and shall remain in effect for a period of ten years or until terminated as provided in Stipulation VI. If Barrick does not initiate the Project within the ten (10) year period, this PA will automatically terminate.

V. Amendment

Any Signatory to this PA may request that this PA be amended, whereupon the Signatories will consult to consider such amendment. The amendment will be effective on the date a copy signed by all of the Signatories is filed with the ACHP.

VI. Termination

Any Signatory may terminate this PA by providing written notice with cause to the other party. After notification by the initiating party, the other Signatory shall have thirty (30) calendar days to consult to seek agreement on amendments or any other actions that would address the issues and avoid termination. If such consultation fails, the termination will go into effect at the end of this thirty (30) calendar-day period, unless both parties agree to a longer period. The Signatories shall be required to meet any and all current or outstanding obligations the Signatories assumed under the terms of the PA.

EXECUTION of this PA and implementation of its terms evidences that the BLM has taken into account the effects of this undertaking on historic properties and afforded the ACHP an opportunity to comment.

SIGNATORIES:

2/8/13

Jill A. Moore, Egan Field Manager, Ely District, Bureau of Land Management DATE

2/15/13

Rebecca L. Palmer, Acting Nevada State Historic Preservation Officer DATE

Concurring Party:

2/19/2013

Amanda Steensen, Environmental Superintendent, Barrick Gold, Inc.

DATE

Bureau of Land Management
FEB 28 2013
RECEIVED
Ely, NV

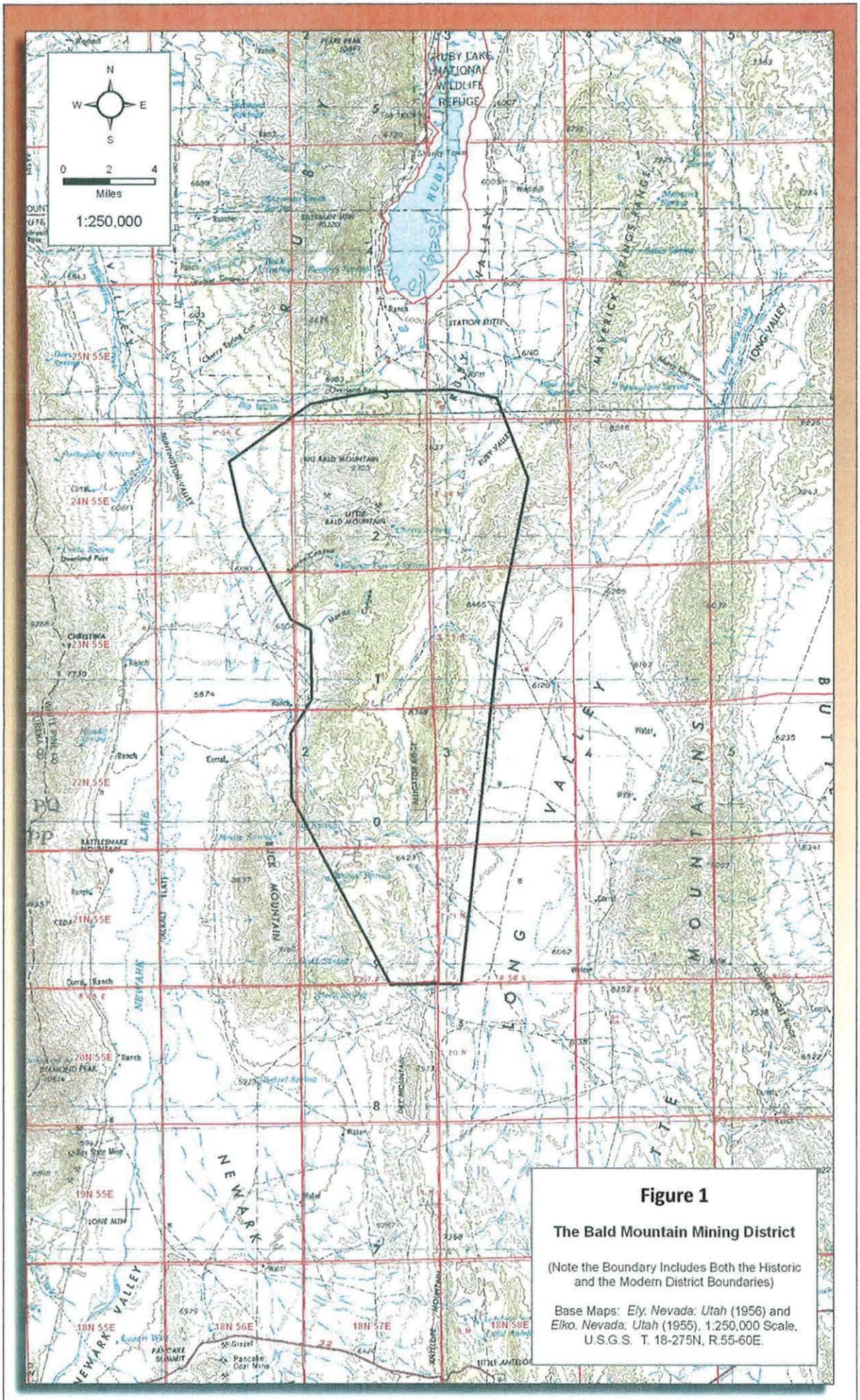

Figure 1

The Bald Mountain Mining District

(Note the Boundary Includes Both the Historic and the Modern District Boundaries)

Base Maps: *Ely, Nevada; Utah* (1956) and *Elko, Nevada; Utah* (1955), 1:250,000 Scale, U.S.G.S. T. 18-275N, R.55-60E.

Appendix J

Response to Comments

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J1.0 Response to Comments

This appendix contains public comments on the Bureau of Land Management's (BLM) Bald Mountain Mine North and South Operations Area Projects Draft EIS, along with responses to those comments. Comments were obtained through the NEPA public involvement process, which includes publishing a Notice of Availability (NOA) for the Draft EIS in the Federal Register, news releases, and public meetings. The comment period began with publishing the NOA on August 14, 2015, and spanning 45 days, ending on September 28, 2015. The comment period was later extended an additional 15 days, to October 13, 2015.

J1.1 Draft EIS Availability and Public Meetings Advertising

Advertising of the Draft EIS availability and public meetings advertising was accomplished through the following methods:

- Federal Register NOA of the Draft EIS, which was published August 14, 2015;
- BLM News Release announcing the availability of the Draft EIS, which was released on August 14, 2015;
- BLM News Release announcing a comment period extension to October 13, which was released on September 15, 2015;
- Legal notices in the following newspapers:
  - Elko Daily Press: September 9 and September 12, 2015;
  - Eureka Sentinel: September 10, 2015;
  - Ely Times: September 4 and September 11, 2015;
  - Reno Gazette Journal: September 9, 2015; and
- Flyer announcing the meetings placed in in BLM offices and other key locations.

The Federal Register notice announced the availability of the Draft EIS, summarized the alternatives and other key information presented in the Draft EIS, provided a link to the project website, provided the methods by which comments on the Draft EIS might be sent to the BLM, and noted a 45-day comment period in which comments must be received (this was later extended to 60 days). The press releases, flyer, and legal notices provided similar information as well the dates and venue information for four public meetings. **Attachment 1** provides copies of the Federal Register NOA, BLM news releases, sample legal notice, and meeting flyer.

In addition to posting links to the Draft EIS, the BLM project website also posted meeting information and comment methods and deadlines.

J1.2 Public Meetings

The BLM held four public meetings for the Draft EIS. The meetings were held in communities where the greatest impacts from the project might be experienced, as well in the community where key federal agencies and nongovernmental organization (NGO) are headquartered. Meeting dates and locations were as follows:

- Tuesday, Sept. 15, 2015, Elko Nevada
- Wednesday, Sept. 16, 2015, Reno, Nevada

- Thursday, Sept. 17, 2015, Eureka, Nevada
- Friday, Sept. 18, 2015, Ely, Nevada

The open house format provided attendees with the opportunity to review displays describing the project and summarizing the impacts by alternative, discuss key issues with BLM and Barrick staff, and provide written comments. There were 13 people in attendance at the Elko meeting. The Reno meeting was attended by 6 people. The Eureka meeting was attended by 8 people. The Ely meeting was attended by 7 people.

J1.3 Formal Submissions

During the formal 60-day comment period, the BLM received a total of 65 unique submissions, in the form of letters and emails. Each submission submittal varied in content, and ranged from one to several comments that contained technical information, suggestions for improving the content of the Draft EIS, as well as personal opinions. **Table J-1** identifies the affiliation of each unique submission.

Table J-1 Number of Individual and Form Plus Submittal by Entity

Submittals by Entity	Count
Individual	38
Federal Agency	3
State Agency	4
Local Agency	2
NGO/Special Interest	12
Business	4
TOTAL	**65**

Total does not include form letters, which are largely-- but not exclusively --from individuals.

In addition to unique submissions, the BLM received approximately 7,700 form letters (i.e., letters containing identical or near identical text submitted by different people). These form letters were submitted by the constituents of several nongovernmental organizations (NGOs). Form letter submission began in February 2015, prior to the formal Draft EIS comment period, and continued into the formal comment period. There were two form letters submitted for this project. The first form letter was primarily concerned with mule deer. The second form letter dealt primarily with wild horses. For each form letter, a “master” form letter was created and the comments were coded as discussed in Section J1.4, below. Contact information or entity affiliation information was not gathered from form letter submissions.

J1.4 Content Analysis

Content analysis is a method developed for analyzing public comment. This method employs both qualitative and quantitative approaches. It is a systematic process designed to: 1) extract concerns from each submission; 2) group similar concerns from different submissions; and 3) identify a comprehensive list of specific topics of concern to be addressed in the EIS. The goals of the content analysis process are to:

- Ensure that every submission is considered;
- Identify the concerns raised by all respondents; and
- Represent the breadth and depth of the public's viewpoints and concerns as fairly as possible.

Once received, the comments were coded to specific categories aimed to help facilitate efficient distribution among resource specialists for response. Categories were created for each resource within the Draft EIS, as well as other portions of the document such as Wildlife Resources, Alternatives, Purpose and Need, etc. In some cases single comments addressed multiple issues. For example, a comment that related to the deer hunting tags may be coded to Wildlife and Recreation. There were a total of 444 distinct comments extracted from submissions. Of those comments, 96 comments were given a secondary code, meaning that the comment may require the review and response of multiple resource specialists.

After each unique submission and form letter "masters" were coded, the comments were entered into a database. This system allows for each of the comments to be properly distributed to the specific resource specialists to which the comments were coded. Once all comments were entered, organized, and distributed to the resource specialists, they were carefully considered and provided a response to address the concerns presented by the commenter. **Table J-2** provides a count of comments by resource or EIS issue.

Table J-2 Comments by Resource or EIS Issue

Resource	Primary Code	Secondary Code
Executive Summary	7	3
Chapter 1.0 of the EIS (Purpose and Need)		
Purpose and Need	6	2
Process	14	1
Chapter 2.0 of the EIS (Proposed Action and Alternatives)		
Proposed Action	18	1
Reconfiguration Alternative	5	2
WRM Alternative	20	5
New Alternative	0	1
Alternatives Eliminated	1	0
Summary of Impacts Table	1	0
Chapter 3.0 of the EIS (Affected Environment and Environmental Consequences, by resource)		
Introduction (Section 3.1)	0	0
Geology/Minerals/ Paleo (Section 3.2)	2	0
Water (Section 3.3)	44	7
Soils (Section 3.4)	2	0
Vegetation (Section 3.5)	7	2
Noxious Weeds (Section 3.6)	1	0
Wildlife (Section 3.7)	78	19
Special Status Species (Section 3.8)	36	4
Livestock Grazing/Range Resources (Section 3.9)	4	0
Wild Horses (Section 3.10)	50	16
Paleontological Resources (Section 3.11)	0	0

Table J-2 Comments by Resource or EIS Issue

Resource	Primary Code	Secondary Code
Cultural Resources (Section 3.12)	4	0
Native American Traditional Values (Section 3.13)	10	0
Air Quality (Section 3.14)	6	1
Land Use and Access (Section 3.15)	5	0
Recreation (Section 3.16)	2	0
Socioeconomics (Section 3.17)	8	0
Environmental Justice (Section 3.18)	0	0
Visual Resources (Section 3.19)	4	2
Hazardous Materials/Public Health & Safety (Section 3.20)	4	1
Short-term Use – Long-term Productivity (Section 3.21)	0	1
Irreversible and Irretrievable Impacts (Section 3.22)	1	2
Greenhouse Gases (Climate Change, Section 3.23)	10	1
Non-resource-specific Analysis Comments		
Mitigation	1	1
Cumulative Impacts	5	0
Figures	3	9
Editorial	5	4
Chapter 4.0 of the EIS (Consultation and Coordination)		
Public Involvement	1	0
Tribal and Section 106 Consultation	5	0
Comment Period	10	1
Opinion Only	**57**	**9**
Other	**4**	**1**
Out of Scope	**3**	**0**
TOTAL	**444**	**96**

J1.5 Comments and Responses

In accordance with NEPA guidelines, the BLM is required to formally respond to all public comments identified as substantive. A substantive comment is one that reasonably questions the accuracy and/or adequacy of information presented in the Draft EIS, presents reasonable alternatives to meet the purpose and need of the proposed action, questions the merit of the alternative(s), causes changes or revisions to the proposed action, or questions the adequacy of the planning process itself. A non-substantive comment generally presents an unsupported personal preference or opinion, or may provide information not directly related to Draft EIS content. Although non-substantive comments, including personal preferences and opinions, may be considered by the decision-maker as he or she chooses the agency's Preferred Alternative, they generally will not affect the analysis. The BLM has reviewed and responded to all non-substantive comments.

Attachment 2 displays each of the coded comments and their responses. Comments are grouped into the general categories described in **Table J-2**, above.

Attachment 1

Federal Register NOA, BLM News Releases, Sample Legal Notice, and Meeting Flyer

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cannot guarantee that we will be able to do so. The minutes and list of attendees for each scoping meeting will be available to the public and open for 30 days after the meeting to any participant who wishes to clarify the views he or she expressed. The BLM will evaluate identified issues to be addressed in the plan, and will place them into one of three categories:

1. Issues to be resolved in the plan amendment;
2. Issues to be resolved through policy or administrative action; or
3. Issues beyond the scope of this plan amendment.

The BLM will provide an explanation in the EA as to why an issue was placed in category two or three. The public is also encouraged to help identify any management questions and concerns that should be addressed in the plan. The BLM will work collaboratively with interested parties to identify the management decisions that are best suited to local, regional, and national needs and concerns.

The BLM will use an interdisciplinary approach to develop the plan amendment in order to consider the variety of resource issues and concerns identified. Specialists with expertise in the following disciplines will be involved in the planning process: rangeland management, minerals and geology, outdoor recreation, visual resource management, archeology, paleontology, wildlife, botany, lands and realty, hydrology, soils, sociology and economics.

Authority: 40 CFR 1501.7 and 43 CFR 1610.2.

Carol Benkosky,

Prineville District Manager.

[FR Doc. 2015–20060 Filed 8–13–15; 8:45 am]

BILLING CODE 4310–33–P

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[LLNVL01000. L51100000.GN0000. LVEMF1501180 241A; MO# 4500069201]

Notice of Availability of the Draft Environmental Impact Statement for the Proposed Bald Mountain Mine North and South Operations Area Projects, White Pine County, NV

AGENCY: Bureau of Land Management, Department of Interior.

ACTION: Notice.

SUMMARY: In compliance with the National Environmental Policy Act (NEPA) of 1969, as amended, and the Federal Land Policy and Management Act (FLPMA) of 1976, as amended, the Bureau of Land Management (BLM) Egan Field Office, Ely, Nevada has prepared a Draft Environmental Impact Statement (EIS) for the proposed Bald Mountain Mine North and South Operations Area Projects (Project) and by this notice is announcing the opening of the comment period.

DATES: To ensure comments will be considered, the BLM must receive written comments on the Bald Mountain Mine North and South Operations Area Projects Draft EIS within 45 days following the date the Environmental Protection Agency publishes their Notice of Availability in the **Federal Register**. The BLM will announce any public meetings or other public involvement activities at least 15 days in advance through public notices, media releases, and/or mailings.

ADDRESSES: You may submit comments related to the Bald Mountain Mine North and South Operations Area Projects Draft EIS by any of the following methods:

- Email: *BLM_NV_EYDO_Barrick_Bald_EIS@blm.gov*.
- Fax: 775–289–1910.
- Mail: BLM Ely District, Egan Field Office, HC 33 Box 33500, Ely, NV 89301.

Copies of the Bald Mountain Mine North and South Operations Area Projects Draft EIS are available in the Ely District Office at the above address and on the Ely District's Web page at *http://www.blm.gov/nv/st/en/fo/ely_field_office/blm_programs/minerals/mining_projects/bald_mountain_mine0.html*.

FOR FURTHER INFORMATION CONTACT: For further information contact Miles Kreidler, Project Lead, telephone: 509–536–1222; address: 702 North Industrial Way, Ely, NV 89301; email: *mkreidler@blm.gov*. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1–800–877–8339 to contact the above individual during normal business hours. The FIRS is available 24 hours a day, 7 days a week, to leave a message or question with the above individual. You will receive a reply during normal business hours.

SUPPLEMENTARY INFORMATION: Barrick Gold U.S. Inc. (Barrick) proposes to expand, construct, and operate an open-pit gold mining operation located in the Bald Mountain Mining District in White Pine County, Nevada, approximately 65 miles northwest of the Town of Ely. The proposed development and expansion would create an additional 6,891 acres of disturbance, which would be located primarily on public land managed by the BLM. The projected mining period is 21 years, but the life of the mine would extend for 80 years, including construction, operation, reclamation, closure, reclamation monitoring, and post-closure monitoring.

The Draft EIS describes and analyzes the proposed project site-specific impacts (including cumulative) on all affected resources. The DEIS describes four alternatives: approval of the project as proposed by Barrick (the Proposed Action), the North and South Operations Area Facilities Reconfiguration Alternative, the Western Redbird Modification Alternative, and the No Action Alternative. The North and South Operations Area Facilities Reconfiguration Alternative was developed to address potential impacts to mule deer migration; greater sage-grouse leks and associated Preliminary Priority Habitat (PPH) and Preliminary General Habitat (PGH); visual impacts affecting the cultural setting of the Pony Express National Historic Trail, Ruby Valley Pony Express Station, and Fort Ruby National Historic Landmark; and visual impacts affecting visitor aesthetics at the Ruby Lake National Wildlife Refuge. The North and South Operations Area Facilities Reconfiguration Alternative would result in a decrease of 3703 acres (−54 percent) of disturbance compared to the Proposed Action. The Western Redbird Modification Alternative was developed to further address potential impacts to mule deer migration and would result in a decrease of 4,339 acres (−63 percent) of disturbance compared to the Proposed Action. Several other alternatives were considered but eliminated from further analysis. These alternatives eliminated from further consideration are discussed in Chapter 2 of the Draft EIS. Mitigation measures are considered to minimize environmental impacts and to assure the Proposed Action does not result in unnecessary or undue degradation of public lands.

On April 16, 2012, a Notice of Intent was published in the **Federal Register** inviting scoping comments on the Proposed Action. A legal notice was prepared by the BLM and published in the Elko *Daily Free Press,* Ely *Times,* Eureka *Sentinel,* and Reno *Gazette-Journal* informing the public of the BLM's intention to prepare the Bald Mountain Mine North and South Operations Area Projects EIS. Public scoping meetings were held May 7–10 in Ely, Eureka, Elko, and Reno, Nevada. A total of 25 comment submittals containing 180 individual comments were received. The comments are

incorporated in a Scoping Report and were considered in the preparation of this Draft EIS.

Concerns raised during scoping include: potential degradation of surface water or groundwater quality and potential depletion to groundwater from pit lakes and/or water withdrawals for mine operations; potential impacts to mule deer habitat and migration corridors; potential impacts to greater sage-grouse habitat and strutting grounds; potential impacts to Wild Horse Herd Management Areas (HMAs), including herd access to surface water sources; potential air quality impacts from fugitive dust containing mercury, arsenic, or other contaminants; and potential impacts to visual resources including the visual setting of the Pony Express Trail and the Ruby Lake National Wildlife Refuge. The North and South Operations Area Facilities Reconfiguration Alternative was developed to help reduce impacts to mule deer, greater sage-grouse, and visual resources. The Western Redbird Modification Alternative was developed to help further reduce impacts to mule deer. Mitigation measures have also been included to show how impacts on resources could be minimized.

The BLM has prepared the Draft EIS in conjunction with its five Cooperating Agencies: Nevada Department of Wildlife, U.S. Fish and Wildlife Service, State of Nevada Sagebrush Ecosystem Program, Eureka County, and White Pine County.

Please note that public comments and information submitted, including names, street addresses, and email addresses of persons who submit comments will be available for public review and disclosure at the above address during regular business hours (7:30 a.m. to 4:30 p.m.), Monday through Friday, except holidays.

Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Authority: 40 CFR 1501 and 43 CFR 3809.

Jill A. Moore,

Field Manager, Egan Field Office.

[FR Doc. 2015–19924 Filed 8–13–15; 8:45 am]

BILLING CODE 4310–HC–P

INTERNATIONAL TRADE COMMISSION

[USITC SE–15–025]

Sunshine Act Meeting

AGENCY HOLDING THE MEETING: United States International Trade Commission.

TIME AND DATE: August 18, 2015 at 11:00 a.m.

PLACE: Room 101, 500 E Street SW., Washington, DC 20436, Telephone: (202) 205–2000.

STATUS: Open to the public.

MATTERS TO BE CONSIDERED:

1. Agendas for future meetings: none
2. Minutes
3. Ratification List
4. Vote in Inv. No. 731–TA–1070A (Second Review) (Crepe Paper from China). The Commission is currently scheduled to complete and file its determination and views of the Commission on August 31, 2015.
5. Outstanding action jackets: none

In accordance with Commission policy, subject matter listed above, not disposed of at the scheduled meeting, may be carried over to the agenda of the following meeting.

Issued: August 11, 2015.

By order of the Commission.

William R. Bishop,

Supervisory Hearings and Information Officer.

[FR Doc. 2015–20173 Filed 8–12–15; 11:15 am]

BILLING CODE 7020–02–P

DEPARTMENT OF JUSTICE

[OMB Number—1121–NEW]

Agency Information Collection Activities; Proposed eCollection eComments Requested; New Collection of Information; Beneficiary Referral Request

AGENCY: Office of Justice Programs, Department of Justice.

ACTION: 60-Day notice.

SUMMARY: The Department of Justice (DOJ), Office of Justice Programs will be submitting the following information collection request to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995.

DATES: Comments are encouraged and will be accepted for 60 days until October 13, 2015.

FOR FURTHER INFORMATION CONTACT: If you have additional comments especially on the estimated public burden or associated response time, suggestions, or need a copy of the proposed information collection instrument with instructions or additional information, please contact Eugene Schneeberg, Director, Center for Faith-based & Neighborhood Partnerships, U.S. Department of Justice, Washington, DC 20531 (phone (202) 305–7462)).

SUPPLEMENTARY INFORMATION: Written comments and suggestions from the public and affected agencies concerning the proposed collection of information are encouraged. Your comments should address one or more of the following four points:

—Evaluate whether the proposed collection of information is necessary for the proper performance of the functions of the Office of Justice Programs, including whether the information will have practical utility;
—Evaluate the accuracy of the agency's estimate of the burden of the proposed collection of information, including the validity of the methodology and assumptions used;
—Evaluate whether and if so how the quality, utility, and clarity of the information to be collected can be enhanced; and
—Minimize the burden of the collection of information on those who are to respond, including through the use of appropriate automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, *e.g.,* permitting electronic submission of responses.

Overview of this information collection:

1. *Type of Information Collection:* This is a new information collection, which requires the collection and identification of types of information that the Department does not currently collect.

2. *The Title of the Form/Collection:* Beneficiary Referral Request.

3. *The agency form number, if any, and the applicable component of the Department sponsoring the collection:* The applicable component within the Department of Justice is the Office of Justice Programs.

4. *Affected public who will be asked or required to respond, as well as a brief abstract:* The proposed rule includes two new paperwork requirements for faith-based or religious organizations. The proposed rule would require faith-based or religious organizations to give beneficiaries (or prospective beneficiaries) notice informing them of their protections under the regulation. The proposed rule would also require

U.S. DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT NEWS RELEASE**
Ely District Office

Release Date: 08/14/15
Contacts: Chris Hanefeld, 775-289-1842, chanefel@blm.gov

News Release No. ELY 2015-035

BLM Seeks Public's Comments on the DEIS for the Proposed Bald Mountain Mine North and South Operations Area Projects Northwest of Ely

Ely – The Bureau of Land Management (BLM) Ely District, Egan Field Office is asking the public to review and provide comment on a Draft Environmental Impact Statement (DEIS) for the Barrick Gold U.S Inc. (Barrick) proposed Bald Mountain Mine North and South Operations Area Projects (Project), an open-pit gold mine expansion that would be located in the Bald Mountain Mining District in White Pine County, Nevada, approximately 65 miles northwest of the Town of Ely. A 45-day public comment period ends **Monday, September 28, 2015**.

The BLM has scheduled four public comment meetings at locations in Elko, Reno, Eureka and Ely, Nevada, from 5:30 p.m. to 7:30 p.m. The dates and locations are:

- Tuesday, Sept. 15, 2015, Elko Convention Center, 700 Moran Way, Elko
- Wednesday, Sept. 16, 2015, Best Western Airport Plaza, 1981 Terminal Way, Reno
- Thursday, Sept. 17, 2015, Eureka County Opera House, 31 S. Main St., Eureka
- Friday, Sept. 18, 2015, BLM Ely District Office, 702 N. Industrial Way, Ely

The proposed Project would be located on BLM-administered lands and include expansion of the Bald Mountain Mine North and South Operations Areas for an additional 6,903 acres of disturbance.

North Operations Area
Combining and expanding the existing Bald Mountain Mine North Operations Area (NOA) Plan of Operations (Plan) boundary and the existing Casino/Winrock Mine Plan boundary into a unified Plan boundary called the proposed NOA Project would increase the total surface disturbance from 9,381 acres to 13,727 acres and add four new heap leach pads.

South Operations Area
In the South Operations Area (SOA), the existing Alligator Ridge Mine and Yankee Mine plans would be expanded and combined into a unified Plan called the proposed South Operations Area (SOA) Project, which would increase the total surface disturbance from 939 acres to 3,496 acres. The South Operation Area Project Plan of Operations would also include an electrical transmission line and an access road between the North and South operations areas.

The DEIS describes four alternatives: the Proposed Action, the Reconfiguration Alternative, the Western Redbird Modification Alternative, and the No Action Alternative. The North and South Operations Area Facilities Reconfiguration Alternative was developed to address potential impacts to mule deer migration; greater sage-grouse leks and associated Preliminary Priority Habitat (PPH) and Preliminary General Habitat (PGH); visual impacts affecting the cultural setting of the Pony Express National Historic Trail, Ruby Valley Pony Express Station, and Fort Ruby National Historic Landmark; and visual impacts affecting visitor aesthetics at the Ruby Lake National Wildlife Refuge. The Western Redbird Modification Alternative was developed to further address potential impacts to mule deer migration.

Under the Reconfiguration Alternative, the proposed additional surface disturbance for the NOA and SOA projects would be approximately 5,175 acres and approximately 1,986 acres of authorized disturbance would be withdrawn, which represents a 3,703-acre (54 percent) decrease in comparison to the Proposed Action.

Under the Western Redbird Modification Alternative, the proposed additional surface disturbance for the NOA and SOA projects would be approximately 4,773 acres and approximately 2,220 acres of authorized disturbance would be withdrawn, which represents a 4,339-acre (63 percent) decrease in comparison to the Proposed Action.

The DEIS evaluates the potential impacts that the proposed operation and alternatives may have on human, natural and cultural resources, as well as determine what measures would be necessary to mitigate or reduce the impacts. Issues identified during the scoping period and analyzed in the DEIS include:

- Potential for degradation of surface water or groundwater quality;
- Potential depletions to groundwater from pit lakes and/or water withdrawals for mine operations;
- Potential impacts to mule deer habitat and migration corridors;
- Potential impacts to greater-sage grouse habitat and strutting grounds;
- Potential impacts to Wild Horse Herd Management Areas (HMAs), including herd access to surface water sources;
- Potential air quality impacts from fugitive dust containing mercury, arsenic, or other contaminants; and
- Potential impacts to visual resources, including the visual setting of the Pony Express Trail (Visual Resource Management [VRM] Class II) and the Ruby Lake National Wildlife Refuge (NWR).

Interested individuals should address all written comments to the BLM Ely District, HC 33 Box 33500, Ely, NV 89301, Attn: Stephanie Trujillo or fax them to Stephanie Trujillo at (775) 289-1910. Comments may be submitted to the following e-mail address: BLM_NV_EYDO_Barrick_Bald_EIS@blm.gov. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

The Draft EIS is available online at http://on.doi.gov/14R9rZ8 and additional information is available at http://on.doi.gov/14vXckC.

For more information, contact Miles Kreidler, BLM Mining Engineer at (509) 536-1222 or mkreidler@blm.gov, or Stephanie Trujillo, BLM Ely District Project Manager, at (775) 289-1831 or strujill@blm.gov.

The BLM manages more than 245 million acres of public land, the most of any Federal agency. This land, known as the National System of Public Lands, is primarily located in 12 Western states, including Alaska. The BLM also administers 700 million acres of sub-surface mineral estate throughout the nation. The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under our mandate of multiple-use and sustained yield. In Fiscal Year 2014, the BLM generated $5.2 billion in receipts from public lands.

--BLM--

U.S. DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT NEWS RELEASE**
Ely District Office

Release Date: 09/15/15
Contacts: Chris Hanefeld, 775-289-1842, chanefel@blm.gov

News Release No. ELY 2015-040

BLM Extends Comment Period for Bald Mountain Mine North and South Operations Area Projects DEIS

Ely – The Bureau of Land Management (BLM) Ely District, Egan Field Office has extended until **Tuesday October 13, 2015**, the public comment period for the Draft Environmental Impact Statement (DEIS) for Barrick Gold U.S Inc.'s proposed Bald Mountain Mine North and South Operations Area Projects. The open-pit gold mine expansion would be located in the Bald Mountain Mining District in White Pine County, Nev., approximately 65 miles northwest of Ely. The BLM extended the 45-day public comment period to provide the public an additional 15 days to review and provide comments on the DEIS, which is available online at http://on.doi.gov/14R9rZ8.

The BLM has scheduled four separate public comment meetings at locations in Elko, Reno, Eureka and Ely, Nevada, from 5:30 p.m. to 7:30 p.m. The dates and locations are:

- September 15, 2015, Elko Convention Center, 700 Moran Way, Elko
- September 16, 2015, Best Western Airport Plaza, 1981 Terminal Way, Reno
- September 17, 2015, Eureka County Opera House, 31 S. Main St., Eureka
- September 18, 2015, BLM Ely District Office, 702 N. Industrial Way, Ely

The proposed Project would be located on BLM-administered lands and include expansion of the Bald Mountain Mine North and South Operations Areas for an additional 6,903 acres of disturbance.

Interested individuals should address all written comments to the BLM Ely District, HC 33 Box 33500, Ely, NV 89301, Attn: Stephanie Trujillo or fax them to Stephanie Trujillo at (775) 289-1910. Comments may be submitted to the following e-mail address: BLM_NV_EYDO_Barrick_Bald_EIS@blm.gov. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

For more information, contact Miles Kreidler, BLM Mining Engineer at (509) 536-1222 or mkreidler@blm.gov, or Stephanie Trujillo, BLM Ely District Project Manager, at (775) 289-1831 or strujill@blm.gov.

The BLM manages more than 245 million acres of public land, the most of any Federal agency. This land, known as the National System of Public Lands, is primarily located in 12 Western states, including Alaska. The BLM also administers 700 million acres of sub-surface mineral estate throughout the nation. The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under our mandate of multiple-use and sustained yield. In Fiscal Year 2014, the BLM generated $5.2 billion in receipts from public lands.

--BLM--

The newspapers of **Nevada** make public notices from their printed pages available electronically in a single database for the benefit of the public. This enhances the legislative intent of public notice - keeping a free and independent public informed about activities of their government and business activities that may affect them. Importantly, Public Notices now are in one place on the web (www.PublicNoticeAds.com), not scattered among thousands of government web pages.

County: Washoe
Printed In: Reno Gazette-Journal
Printed On: 2015/09/08

" BLM Seeks Public's Comments on the DEIS for the Proposed Bald Mountain Mine North and South Operations Area Projects Northwest of Ely E-The Bureau of Land Management (BLM) Ely District, Egan Field Office is asking the public to review and provide comment on a Draft Environmental Impact Statement (DEIS) for the Barrick Gold U.S Inc. (Barrick) proposed Bald Mountain Mine North and South Operations Area Projects (Project), an open-pit gold mine expansion that would be located in the Bald Mountain Mining District in White Pine County, Nevada, approximately 65 miles northwest of the Town of Ely. A 45-day public comment period ends Monday, September 28, 2015. The BLM has scheduled four public comment meetings at locations in Elko, Reno, Eureka and Ely, Nevada, from 5:30 p.m. to 7:30 p.m. The dates and locations are: Tuesday, Sept. 15, 2015, Elko Convention Center, 700 Moran Way, Elko Wednesday, Sept. 16, 2015, Best Western Airport Plaza, 1981 Terminal Way, Reno Thursday, Sept. 17, 2015, Eureka County Opera House, 31 S. Main St., Eureka Friday, Sept. 18, 2015, BLM Ely District Office, 702 N. Industrial Way, Ely The proposed Project would be located on BLM-administered lands and include expansion of the Bald Mountain Mine North and South Operations Areas for an additional 6,903 acres of disturbance. North Operations Area Combining and expanding the existing Bald Mountain Mine North Operations Area (NOA) Plan of Operations (Plan) boundary and the existing Casino/Winrock Mine Plan boundary into a unified Plan boundary called the proposed NOA Project would increase the total surface disturbance from 9,381 acres to 13,727 acres and add four new heap leach pads. South Operations Area In the South Operations Area (SOA), the existing Alligator Ridge Mine and Yankee Mine plans would be expanded and combined into a unified Plan called the proposed South Operations Area (SOA) Project, which would increase the total surface disturbance from 939 acres to 3,496 acres. The South Operation Area Project Plan of Operations would also include an electrical transmission line and an access road between the North and South operations areas. The DEIS describes four alternatives: the Proposed Action, the Reconfiguration Alternative, the Western Redbird Modification Alternative, and the No Action Alternative. The North and South Operations Area Facilities Reconfiguration Alternative was developed to address potential impacts to mule deer migration; greater sage-grouse leks and associated Preliminary Priority Habitat (PPH) and Preliminary General Habitat (PGH); visual impacts affecting the cultural setting of the Pony Express National Historic Trail, Ruby Valley Pony Express Station, and Fort Ruby National Historic Landmark; and visual impacts affecting visitor aesthetics at the Ruby Lake National Wildlife Refuge. The Western Redbird Modification Alternative was developed to further address potential impacts to mule deer migration. The DEIS evaluates the potential impacts that the proposed operation and alternatives may have on human, natural and cultural resources, as well as determine what measures would be necessary to mitigate or reduce the impacts. Issues identified during the scoping period and analyzed in the DEIS include: Potential for degradation of surface water or groundwater quality; Potential depletions to groundwater from pit lakes and/or water withdrawals for mine opera tions; Potential impacts to mule deer habitat and migration corridors; Potential impacts to greater-sage grouse habitat and strutting grounds; Potential impacts to Wild Horse Herd Management Areas (HMAs), including herd access to surface water sources; Potential air quality impacts from fugitive dust containing mercury, arsenic, or other contaminants; and Potential impacts to visual resources, including the visual setting of the Pony Express Trail (Vi sual Resource Management [VRM] Class II) and the Ruby Lake National Wildlife Refuge (NWR). Interested individuals should address all written comments to the BLM Ely District, HC 33 Box 33500, Ely, NV 89301, Attn: Stephanie Trujillo or fax them to Stephanie Trujillo at (775) 289-1910. Comments may be submitted to the following e-mail address: BLM_NV_EYDO_Barrick_Bald_EIS@blm.gov. Before including your address, phone

number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment - including your personal identifying information - may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so. The Draft EIS is available online at http://on.doi.gov/14R9rZ8 and additional information is available at http://on.doi.gov/14vXckC. For more information, contact Miles Kreidler, BLM Mining Engineer at (509) 536-1222 or mkreidler@blm.gov, or Stephanie Trujillo, BLM Ely District Project Manager, at (775) 289-1831 or strujill@blm.gov. The BLM manages more than 245 million acres of public land, the most of any Federal agency. This land, known as the National System of Public Lands, is primarily located in 12 Western states, including Alaska. The BLM also administers 700 million acres of sub-surface mineral estate throughout the nation. The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under our mandate of multiple-use and sustained yield. In Fiscal Year 2014, the BLM generated $5.2 billion in receipts from public lands. --BLM, Ely District Office702 North Industrial Way, Ely, NV 89301 No 62380 September 9, 2015 "

Public Notice ID:

Bald Mountain Mine Project
Environmental Impact Statement

BLM

Public Meetings

The Bureau of Land Management (BLM) invites you to attend a public meeting to learn more about the Bald Mountain Mine Project and provide your written comments on the Draft Environmental Impact Statement (EIS):

Tuesday, September 15: Elko Convention Center, 700 Moren Way, Elko

Wednesday, September 16: Best Western Airport Plaza, 1981 Terminal Way, Reno

Thursday, September 17: Eureka Opera House, 31 S Main St, Eureka

Friday, September 18: BLM Ely District Office, 702 N. Industrial Way, Ely

All meetings will be held from 5:30 to 7:30 pm

The project would expand the Barrick Bald Mountain Mine located in White Pine County, Nevada, about 70 miles northwest of Ely and 30 miles northeast of Eureka. Your involvement is important. We hope you will attend and provide your comments on the proposed project.

Project information is also available on the BLM website: http://on.doi.gov/14R9rZ8

Ely District - Egan Field Office, Nevada

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Attachment 2

Comment and Response Table

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Comment ID	Submittal ID	Comment Text	Response Text	Last Name	First Name	Org Name
83	39	Bald Mountain Mine currently holds Class II Air Quality Operating Permit AP1041-1362.02. Section VII of that operating permit addresses Surface Area Disturbance Conditions for 6,596 acres for the Bald Mountain Mine. And, the facility has indicated that fugitive dust will be controlled in accordance with the dust control plan entitled “Fugitive Dust Control Plan”, as submitted on February 11, 2013. If this new project is not covered by the current operating permit, Bald will need to submit a revision. Alternatively, Bald can apply for a stand-alone Surface Are Disturbance Operating Permit.	Comment noted.	KINDER	JEFFREY	NDEP, BUREAU OF AIR POLLUTION CONTROL
254	51	We could not find a section on air quality, yet potential fugitive emmissions, such as mercury, deserves analysis.	Emissions of mercury and other air pollutants are discussed in Section 3.14 Air Quality, in Volume II of Draft EIS.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
451	65	Before this EA or FONSI is signed or agreed upon, there must first be a complete evaluation (validated by independent scientifically proven information) of the following specific points: The effects of diesel heavy mining equipment on air quality and human health. Increased air pollution that would negatively affect the general area in the vicinity of the project Increased air pollution that would negatively affect the general area in the vicinity of the project noise (horns, rumbling, etc.) due to the mining equipment and operation.	It should be noted that this is an EIS and therefore does not require a signed FONSI before issuing a Record of Decision. Mobile source tailpipe emissions were included in the dispersion modeling analysis (Air Sciences June, 2013). Text of Section 3.14.2 is revised and includes estimated fugitive and point source mercury emissions from the mine. The primary NAAQS were promulgated to protect human health, and the secondary standards were promulgated for human welfare, including impacts on environmental resources. Impacts to air quality and human health is determined by comparison of modeling results with NAAQS, which were originally developed, and are periodically updated, based on substantiated research on the epidemiological and ecological impacts of air pollution, atmospheric dynamics and other issues. Noise impacts are disclosed in Section 3.20.	OSTER	SHERRY	
423	62	Mercury Analysis The DEIS does not discuss impacts from fugitive emissions off of heap leach, tailings, and waste rock facilities. There is an estimation of the fugitive mercury emission of about 80 pounds per year into the air, but there appears to be no discussion of the implications of this release of mercury. In addition there should be information in the DEIS the extent of mercury in the various open to the environment facilities. If fugitive mercury emission can be estimated then there must be the data to report on mercury content as well.	Text of Section 3.14.2 is revised and includes estimated fugitive and point source mercury emissions from the mine property, calculation of mercury deposition rates in the three adjacent watersheds, and a comparison of those deposition rates to "global background" (e.g., caused by mercury emitted outside of the U.S. Canada and Mexico) deposition rates estimated by the EPA in 2008. The BMM expansion would contribute 0.2% to 2.1% of the total mercury deposition from all sources to the immediate watersheds in the project area, including Ruby Valley that contains Ruby Lake/Marsh, based on EPA REMSAD modeling. Mercury deposition to Ruby Lake/Marsh is negligible from the proposed expansion. Total process and fugitive mercury emissions from BMM was calculated to be 84.37 lbs per year, quite low for gold mining operations and other industrial operations such as coal-fired power plants.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
426	63	Equally, it will be important to consider what effect any dewatering of the Refuge might have on ambient air quality. The effects of dust storms from dry lakes in other parts of the Interior West are well known. BLM should consider how dewatering might affect the Ruby valley.	The Proposed Project would not result in a dewatering of the Refuge. Please see Section 3.3.2 Environmental Consequences, Water Quality and Quantity for a detailed description of the project impacts on surface waters.	DE FREITAS	PATRICK	
394	60	The impact analysis in the DEIS indicates that the proposed mining activities would release up to 80 pounds of airborne mercury per year. Refuge springs and marshes are downwind from the mine and some of this mercury is likely to accumulate in Refuge waters potentially affecting fish, wildlife, and people who harvest fish and wildlife from the Refuge. Elevated mercury levels have been shown to affect reproductive success in wildlife, and would limit the public's ability to harvest and enjoy fish and wildlife from the Refuge. The Service does not consider 80 pounds of airborne mercury per year to be "negligible." The effects of mercury are cumulative and long-lasting. Accumulated mercury in Refuge wetlands could devastate fish and wildlife resources for decades or longer. A full impact analysis would include and disclose: - A scientific analysis of the direct, indirect, and cumulative effects of mercury and other emissions on the environment including physical, biological, and socioeconomic resources. - A description of the context and intensity of the effect of the mercury and other emissions. - The fate of the mercury emission; the effect of the prevailing northerly winds on dispersion to the refuge to the north of the project sites and how the effects were determined (e.g., specify the model used). - The potential for mercury bio-availability in the marsh ecosystem that is at a lower elevation in the watershed than the source of the mercury emission.	Text of Section 3.14.2 is revised and includes estimated fugitive and point source mercury emissions from the mine property, calculation of mercury deposition rates in the three adjacent watersheds, and a comparison of those deposition rates to "global background" (e.g., caused by mercury emitted outside of the U.S., Canada and Mexico) deposition rates estimated by the EPA in 2008. Mercury deposition from the BMM expansion to the watersheds in the immediate project area would be equivalent to 0.2% to 2.1% of the global background deposition to those watersheds (which was determined based on EPA REMSAD modeling), including Ruby Valley, where the Ruby Lake/Marsh is located. Based on these findings, mercury deposition to Ruby Lake/Marsh attributable to the proposed expansion would be considered negligible.	SEDLACEK	NICOLE	U.S. FISH AND WILDLIFE SERVICE
19	8	The Purpose and Need Statement should be modified to reflect a "Need" to preserve Sage Grouse Habitat, Mule Deer migration, pronghorn habitat, groundwater resources and visual resources from the impacts of large open pit mines. There are far too many of these on public lands and the BLM does a poor job of mitigating the impacts.	The purpose and need as defined in the EIS is correct as it describes the BLM purpose and need for the action and follows CEQ regulations (40 CFR 1502.13) and BLM NEPA Handbook H-1790-1 guidance.	EMMERICH	KEVIN	BASIN AND RANGE WATCH
81	37	Additionally, the applicant is responsible for all other permits that may be required, which may include, but not be limited to: - Dam Safety Permits - Division of Water Resources - Well Permits - Division of Water Resources - 401 Water Quality Certification - NDEP - 404 Permits - U.S. Army Corps of Engineers - Air Permits - NDEP - Health Permits - Local Health or State Health division - Local Permits - Local Government	Comment noted.			NDEP, Bureau of Water Pollution Control

Comment ID	Submittal ID	Comment Text	Response Text	Last Name	First Name	Org Name
159	18	In Volume I, Table 1-1 "Major Permits and Approvals" add "Road Maintenance Agreement."	Revised as indicated.	MILLER	WILLIAM	WHITE PINE COUNTY ROAD DEPARTMENT
458	66	3.12 Cultural Resources 3.12.1 Affected Environment 3.12.2 Environmental Consequences There are no mention in regard to Cultural Resources or Environmental Consequences	An analysis of impacts to Native American Cultural and Physical Concerns was conducted as part of the EIS and is contained as Section 3.13. No additional clarification of this comment was received.			DUCKWATER SHOSHONE TRIBE
283	53	In addition, Section 3.12.1.3. Numic Expansion (CA. 1,000 B.A.) states that the Shoshone moved onto the land approximately 1,000 years ago. I contest this conclusion. The Fremont Tribe is known to have traveled and lived on these lands for thousands of years, as well as other ancestors of Western Shoshone. This history is manifested in oral tales and mythology. The Fremont were cousins to the Shoshone, Comanche, Ute, and other Numic speaking Tribes. The Shoshone also lived in these lands for thousands of years but their culture, tools, housing, and customs differed from the modem Western Shoshone, but they are still our cousins. If an artifact or other government approved significant finding associated with the Western Shoshone has not been discovered by archeologists that does not mean the Western Shoshone did not live in the project area over 1,000 years ago. This is an issue that should be addressed by the State of Nevada SHIPO office and the Nevada Tribes.	The paragraph in question has been revised to add this phrase to the beginning of the paragraph…"Current scientific research suggests that…."	BANUELOS	CLIFFORD	ELKO BAND COUNCIL
88	42	In order to facilitate comparison of the four alternatives' potential impacts to cultural resources, it might be helpful if future DEIS and FEIS documents prepared a table that visually summarized the information provided across numerous pages in a single location. Such a table could readily get to the heart of the matter with columns including such variables as (1) Alternative Name, (2) Number of Acres of Surface Disturbance, (3) Number of Historic Properties(and not sites or cultural resources)--and this figure should include both eligible as well as unevaluated resources given the fact that the latter will be treated as eligible under all four Significance Criteria for purposes of the undertaking, (4) Likely/Potential Direct Effects, (5) Likely/Potential Indirect Effects (naming the type of indirect effects as well as the historic properties likely to experience those effects), and (6) Likely/Potential Cumulative Effects. Such a table, which does not differ significantly from tabular data provided for other sorts of resources assessed in the DEIS, could readily present the quantitative differences among the four alternatives considered in this document.	A table comparing the alternatives has been added to the analysis as requested.	ERNSTEIN	JULIE	STATE HISTORIC PRESERVATION OFFICE
89	42	In Section 3.12.2.1 where the potential effects of the Proposed Action are discussed, there is reference in the third paragraph to "auditory elements" and "associated auditory emissions." That is the only time in the chapter the phrases are used, and further elaboration on what those auditory elements might consist of, their likely duration, as well as any differences in auditory effects among the four alternatives would be valuable.	The analysis has been revised to include an expanded discussion of noise impacts by alternative.	ERNSTEIN	JULIE	STATE HISTORIC PRESERVATION OFFICE
345	56	The cumulative effects of the proposed mine expansion in light of climate change are not adequately analyzed in the DEIS. Reduction of forage and water for wildlife could negatively affect other human uses such as hunting and bird watching, which must be analyzed in addition to the direct reduction the proposed mine expansion will have on these same activities. BLM management approaches should include managing and decreasing non-climate stressors, such as mine operations and infrastructure. The DEIS fails to address this important impact analysis. Failure to consider the impacts of the proposed mine expansion in light of the impacts of climate change renders the analysis in the DEIS inadequate.	An expanded discussion of climate change was added to the Final EIS.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
346	56	The impacts of recent (e.g., Blue Jay Fire of 2015) and reasonably foreseeable future fires on forage for livestock and wildlife, including wild horses, has not been adequately disclosed or analyzed. The BLM should consider the impacts of fire on forage outside the study area when those fires impact the forage of species (domestic or wild) that can and will traverse the project area.	The affected environment sections for vegetation, livestock and wild horses describe the current affected environment as an aggregate condition based on past natural events and human actions (See Section 6.8.3.5 of the BLM NEPA Handbook H-1790-1). Please note that cumulative impacts analysis is mandated to disclose the impacts of past, present, and reasonably foreseeable future actions, not spontaneous natural events such as wildland fire. A reasonably foreseeable future action is one for which: • There is an existing proposal (such as a permit application); • There is a commitment of resources, such as funding; • There is a Federal action for which the NEPA process has begun; Further, disclosing impacts of reasonably foreseeable future fires on forage is not possible as those the frequency, extent, and duration of future wildland fire cannot be predicted and is therefore speculative.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
400	62	Great Basin Resource Watch (GBRW) remains very concerned with the cumulative impacts of the Bald Mountain mine. The footprint of the Bald Mountain mine is very significant and the expansion of the mine and its exploration fingers is a region-wide impact. Therefore, GBRW supports the No Action alternative, and the next best option is the West Redbird Modification Alterative.	Comment noted.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
407	62	Drought is considered a significant factor in resource management in the Great Basin, and is only mentioned one time in the DEIS (p. 2-135) where it is said that drought could delay revegetation under reclamation. Studies regarding drought and water resources in the Great Basin, probably other aspects of the affected environment, should have been consulted and discussed in the cumulative impacts assessment.	Each resource's cumulative impacts analyses has been updated to consider climate change, as appropriate	HADDER	JOHN	GREAT BASIN RESOURCE WATCH

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130	49	Chapter 2, Section 2.7.2.2, Page 2-227, Table 2.7-3: It is unclear what is meant in table columns titled "Past and Present Disturbance After Reclamation" and "Total Past and Present Disturbance Acreage" since the references to this table in Section 2.7.2.2 state that disturbance acreage not reclaimed is throughout the analysis areas is identified through SWReGAP data and is included in Table 2.7-3. Please clarify.	In Table 2.7-3, "Past and Present Disturbance After Reclamation" includes total disturbance minus those mining areas that have been successfully reclaimed and revegetated (from Table 2.7-2). "Total Past and Present Disturbance Acreages" includes the sum total of "Past and Present Disturbance After Reclamation" plus the "Acres of Road" identified in the adjacent column for each resource. Table header revised and table footnote 2 revised to better clarify this.	ERICKSEN	BETH	BARRICK GOLD U.S.
113	49	Page 2-120, Table 2-4-54: Remove the "A" from the AWRMP throughout the text, tables, and figures because the management is now prescriptive and not adaptive per Tom Olsen's direction. Tom Olsen stated in his email of Oct 28, 2014 that, "I am not looking for an Adaptive Management scenario with respect to waste rock, I need very specific identified criteria that establishes PAG from NPAG rock". The criteria have been established through the new mitigation measures that were developed after Oct. 2014. As such, the waste rock management plan has been updated to reflect the requirements as outlined in Mitigation Measures WR-3 and WR-4. With the NNP less than 0 for PAG management, then there are no adaptive requirements since the yellow waste will be managed as PAG. A meeting is scheduled on September 16, 2015 with the BLM to present the WRMP.	Revised as indicated.	ERICKSEN	BETH	BARRICK GOLD U.S.
116	49	Chapter 2, Section 2.4.4.6, Page 2-151: First paragraph, last sentence - correct spelling of "proper"	Cannot find the word referenced by this comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
125	49	Chapter 2, Section 2.5.2.2, Page 2-212:Change format to underline for "Yankee Area"	Revised as indicated.	ERICKSEN	BETH	BARRICK GOLD U.S.
134	49	Chapter 3, Section 3.3.1.6, Page 3-24: Correct the spelling of "kinetic" - it is shown as "kinitic"	Revised as indicated.	ERICKSEN	BETH	BARRICK GOLD U.S.
144	49	Page 3.7-40: In the effectiveness paragraph change 'min' to 'mine'	Revised as indicated.	ERICKSEN	BETH	BARRICK GOLD U.S.
129	49	Chapter 2, Section 2.6.5, Page 2-219: Elimination of Winrock Heap Leach Facility - the Winrock HLF has already been eliminated, so this alternative could be eliminated from the section.	Elements of the "Elimination of the Winrock Heap Leach Facility" in Section 2.6.5 have been incorporated into the Reconfiguration Alternative and the WRM Alternative. Both of these alternatives to the Proposed Action do not have the Winrock Heap Leach Facility as part of the mine plan. Therefore, Section 2.6.5 Elimination of the Winrock Heap Leach Facility was deleted.	ERICKSEN	BETH	BARRICK GOLD U.S.
177	50	should read…"on Buck Mountain and along US 50 in the vicinity of Antelope Summit."	Revised as indicated.	LESMEISTER	LINDSEY	NDOW
178	50	should read…Impacts under the proposed action would be somewhat mitigated by the mule deer design features.	Revised to say "reduced" as compared to the Proposed Action.	LESMEISTER	LINDSEY	NDOW
179	50	should read….Successful implementation of these design features under the Proposed Action would potentially facilitate deer migration through disturbed areas and would provide assistance to deer in traversing haul roads. This would in some way mitigate for impacts to migrating mule deer but would not entirely remove the risks described above.	Revised to say the measures would reduce impacts to migrating mule deer (instead of "mitigate"). The proposed change to "potentially facilitate" not made since that is already implied in the wording "successful implementation"	LESMEISTER	LINDSEY	NDOW
180	50	should read…..The availability of migration corridors throughout the Project Area and successful implementation of design measures and adaptive management is considered a key factor in the long-term……	Revised as indicated.	LESMEISTER	LINDSEY	NDOW
245	51	NvBHA, of course, would prefer no action, thereby no mine expansion to impact our mule deer, sage grouse, antelope and other wildlife. That said, the WRM, offers greater beneficial adjustments and mitigation mea-sures than those that currently exist, which potentially will decrease negative impacts presently occurring at the existing site. The fact that the WRM alternative would have more positive benefits to the mule deer herd than the other alternatives, needs be highlighted in the description. At the same time, recognition must be made that design features and mitigation measures will potentially facilitate deer migration. Benefits depend upon successful implementation of those measures, plus monitoring, coupled with adaptive management. The summary lacks acknowledgement that mitigation measures can only ever be partial. There is no way to completely mitigate for loss of habitat, loss of migration routes, narrowing of migration routes, loss of seeps, springs and other water sources	Comment noted. Note revision in response to comment 180. Section also revised to note that these measures would not entirely remove the risks to mule deer.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
315	55	Especially in light of BLM's emergency action to rescue wild horses from perilous water scarcity, the DEIS insufficiently discusses the effects of the Proposed Project on the wild horses' water sources within the HMA. The DEIS fails to recommend or detail any mitigation measures to ensure that wild horses do not suffer further reductions in water availability due to mining activities, where any such reductions would clearly put the herds in jeopardy of survival. BLM identified in the environmental scoping process that HMA "herd access to surface water sources" was an issue to be reviewed in the DEIS. DEIS, Introduction, 1.5. And in the DEIS, BLM describes that the Proposed Project "would potentially eliminate 25 miles of ephemeral streams from the Triple B HMA." Id., 3.10-3. "However, this reduction is anticipated to be minimal as ephemeral streams provide access to water only during runoff events and do not serve as consistent water sources." Id. The DEIS also disclosed that three springs, South Water Canyon, JBR No. 14 and Willow springs, were "within the 10-foot drawdown area located within the NOA under the Proposed Action." DEIS, Executive Summary, ES1.6.2. BLM determined that two of those springs "would potentially be affected by groundwater pumping" and "likely would experience a reduction in baseflow. Depending on the severity of these reductions in flow, this could result in drying up of springs and reducing the size of their associated wetland area." Id. As summarized, the DEIS identifies potential significant impacts to several water sources for wild horses in the HMA and then minimizes and dismisses those impacts without any consideration of the current drought conditions in the region.	Refer to Section 3.3 regarding Water Quality and Quantity. No water of critical concern are located within the proposed area. The range of alternatives in the EIS varies in terms of impacts to Wild Horses. While the Proposed Action would potentially eliminate 25 miles of ephemeral streams from the Triple B HMA; these impacts are reduced to about 18 miles under the Reconfiguration alternative and to about 16 miles under the WRM alternative. Additionally, groundwater drawdown under the WRM Alternative is not anticipated to impact springs and associated wetlands utilized by wild horses in the project area. The proposed project area is less than 1% of the total acreage of the Triple B HMA; so the overall impact to wild horses habitat would be minimal. It is also anticipated that wild horses will likely avoid any of the major human activity which will further reduce any potential impacts.	WAGMAN	BRUCE A	SCHIFF HARDIN
318	55	BLM summarily states that "[t]he effects to wild horse distribution also would affect the utilization of available forage. Indirect impacts may include the introduction or spread of noxious weeds and invasive species potentially resulting in the reduction of available forage quality and quantity." DEIS, Executive Summary, ES1.6.9; id., 3.10-1. This summary statement simultaneously admits the untold dangers of these actions while at the same time does not provide the public with a basis for assessing whether BLM has taken a hard look at the effects and their likely consequences before promoting and approving the Proposed Project.	Refer to section 3.10 of the DEIS. The proposed project area is less than one percent of the total acreage of the Triple B HMA; so the overall impact to wild horses habitat would be minimal. It is also anticipated that wild horses will likely avoid any of the major human activity which will further reduce any potential impacts.	WAGMAN	BRUCE A	SCHIFF HARDIN

Comment ID	Submittal ID	Comment Text	Response Text	Last Name	First Name	Org Name
13	7	you've produced a huge document and, as someone seeing my very first DEIS, I am troubled by the short timeline for comments. This appears to be a very large project and the resulting enormous amount of information presented here means it will be very difficult to review and make pertinent and useful comments within the current 45 days comment period. Please expand the comment period to 90 days.	In response to comments, the comment period was extended to October 13, 2015.	DE FREITAS	PATRICK	
14	8	You must extend the comment period to 90 days. 45 days is too short.The impacts of a large strip mine are only recoverable with geologic time. The Bald Mountain mine is complex with numerous references to supporting document that are necessary to review for a complete understanding of the impacts of this project.	In response to comments, the comment period was extended to October 13, 2015.	EMMERICH	KEVIN	BASIN AND RANGE WATCH
22	10	The introduction of the DEIS states, "this analysis tiers off of the 2009 Final Environmental Impact Statement for the Bald Mountain Mine North Operations Area Project, which included the expansion of the BMM and consolidation of the BMM and Mooney Basin Project into one PoO (NVN-82888). Since that time, there have been three amendments to that PoO, two of which were determined to be adequately covered under existing NEPA analysis, while the third PoO amendment was analyzed under an Environmental Assessment (EA), Mooney Heap and Little Bald Mountain Expansion Project." (DEIS 1-1) Thus, we envision some review of these previous documents, which are considerable in size as well, as part of our and the general public's comment process. The 45 day comment period is much too brief. The complexity and sheer scope of this project requires a 90 day comment period for the public to have time to assemble materials and assess them. Even our organization, accustomed to reviewing EIS documents like this, will be hard pressed to be able to fully analyze the DEIS in less than 90 days let alone the average citizen in the region. In addition, public will need more time after the EIS meetings to digest and evaluate what they have learned and follow-up with the technical documents. Altogether, GBRW requests that the BLM allow a bare minimum of 90 days for review of the DEIS and fully involve the public and register their comments.	In response to comments, the comment period was extended to October 13, 2015.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
40	15	Considering the Bald Mountain Mine's Draft EIS is a comprehensive 900 pages, please help facilitate the doubling of the comment period from 45 days to 90 days which would be fairer to all stakeholders.	In response to comments, the comment period was extended to October 13, 2015.	DEAN	JANETTE	
46	20	I am asking that you extend the 45 day comment period on the Bald Mtn. Expansion to 90 days. The 45 day comment period is way too short to completely digest all the nuances of the expansion.	In response to comments, the comment period was extended to October 13, 2015.	JONES	MARY	
51	22	The draft EIS is very long. Pleas eextend the comment period to 90 days.	In response to comments, the comment period was extended to October 13, 2015.	LEEDER	NANCYANN	
54	25	Your current draft EIS is considerable over some 900 pages of technical text, and 45 days is not enough to give it the best review of background documents that the current draft EIS. The complexity and sheer scope of this project requires a 90 day comment period for the public to have time to assemble materials and assess them. There is considerable concern among people in the region, and other government agencies regarding certain aspects of the Bald Mountain mine and its expansion proposal. The public will need more time after the EIS meetings to digest and evaluate what they have learned and follow-up with the technical documents.	In response to comments, the comment period was extended to October 13, 2015.	FRANCISCO GERLACH	CHRISTIAN	SAVE NEVADA'S WATER
55	26	I urge you to extend the public review and comment period for the draft Environmental Impact Statement (DEIS) for the Bald Mountain Mine North and South Operations Area Projects. It is clear that considerable time will be required by the public to fully comment on the DEIS and the associated documents. The DEIS and the documents that it tiers off of describe a series of interrelated projects, and the scope and complexity of the Bald Mountain mine and its expansion really demand a more thorough examination from the public than the brief 45 days allows for.	In response to comments, the comment period was extended to October 13, 2015.	FELDMAN	JANE	SOUTHERN NEVADA GROUP OF THE SIERRA CLUB
56	27	I agree with the Great Basin Mine Watch that a longer 90-day review period for Bald Mt. Mine EIS is needed. The shear scope (900 pages) of the EIS seems to require this, among other matters. Please see that the deadline for comments is extended another 45 days.	In response to comments, the comment period was extended to October 13, 2015.	VON SEGGERN	DAVID	SIERRA CLUB, TOIYABLE CHAPTER
57	28	I am distressed about the short time interval you have allowed the public to comment on this, however. I intend to attend the Sept. 16th meeting about this proposal in Reno, and with the current timeline, that would only give me and others only 12 days to read and comment. Could you please change the comment period to 90 days?	In response to comments, the comment period was extended to October 13, 2015.	JUETTEN	SUSAN	
154	49	Chapter 2, Section throughout, Figures: Ensure the existing transmission lines are shown in entirety. Some are missing from the figures.	Figures have been checked and corrected.	ERICKSEN	BETH	BARRICK GOLD U.S.
155	49	Chapter 2, Section throughout, Figures: Mooney North Heap area has a road and a met station totaling about 2 acres that truncates just west of the county road. This disturbance is existing, however not captured as such.	This disturbance has been resolved with Barrick and has been included in the Reconfiguration and Western Redbird Modification alternatives.	ERICKSEN	BETH	BARRICK GOLD U.S.
166	18	Include a section of approximately 10.8 miels of W.P. #73 from SR 892 to W.P. #54 and all of W.P. #54 to W.P. #3 as access routes to the Vantage and Yankee locations. Include W.P. #1006 from W.P. #54 to the Yankee location. Identify the route of W.P. #4 from W.P. #3, approximately 6.7 miles south to the "No Name Road". The "No Name Raod" will then run south to W.P. #54 approximately 6.6 miles.	This issue has been addressed, and the maps display the appropriate roads.	MILLER	WILLIAM	WHITE PINE COUNTY ROAD DEPARTMENT

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280	53	This public comment is provided to the BLM by the Elko Band Environmental Department as stakeholder input and should be used to assist with the determination of the Alternative proposed in the draft EIS, and in no way denotes official consultation between the Te-Moak Tribe of Western Shoshone or the Elko Band Council of the Te-Moak Tribe of Western Shoshone.	BLM concurs that government-to-government consultation is occurring outside of the EIS process. No change to document.	BANUELOS	CLIFFORD	ELKO BAND COUNCIL
435	64	BLM is in direct communication to the tribes.	BLM concurs that government-to-government consultation is occurring outside of the EIS process.	SCHULZ	SUSAN	ELY SHOSHONE TRIBE
132	49	Chapter 3, Section 3.2, Page 3.2-12, Line 8-13: Suggest change sentence in lines 5-7: "The reduction in the area of disturbance associated with RDAs could reduce effects associated with potential future access to any mineral resources that may lie beneath areas that would have been covered by RDAs under the Reconfiguration Alternative." Suggested replacement sentence as seen with new words in red: "The reduction in the area of disturbance associated with RDAs could reduce effects associated with potential future access to any mineral resources that may lie beneath areas that would have been covered by RDAs under the Reconfiguration Alternative, but backfilling may reduce availability of resources beneath the pit bottoms."	EIS text revised in response to comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
133	49	Chapter 3, Section 3.3.1.6, Page 3.3-23, Line 17-19: Suggested change in sentence: 'The waste rock is ground to a finer size than would be used in the RDA to accelerate the reactions due to the increased surface area of the finer particles." Suggested replacement sentence with new words in red: ' 'The waste rock is ground to a finer average grain size than would be used in the RDA to accelerate the reactions due to the increased surface area of the finer particles."	EIS text revised as suggested.	ERICKSEN	BETH	BARRICK GOLD U.S.
306	54	The Draft EIS provides few details in describing the heap leach draindown predictions. The draindown management needs are unclear because the site-specific data used and timeframes analyzed are not provided in the Draft EIS. This information should be clearly disclosed, as it relates to the impacts of the mine proposal, and would be important in facility closure and reclamation activities. Recommendation: Include in the Final EIS the modeling calculations and parameters used for the determination of heap leach facility draindown characteristics and constituent concentrations over time, especially focusing on the inclusion of Bald Mountain Mine site-specific data currently available.	Section 3.3.2.1, under the heading "Heap Leach and Other Process Facilities" was revised to include an expanded summary of the estimated flow, leachate chemistry and management strategy for any HLF leachate generated during the closure and postclosure for the proposed heap leach facilities. Additional details, including the methodology, parameters and results of the HLDE model, and estimated constituent concentrations are provided in the report: "Closure/Post-Closure Draindown Management, Rates and Chemistry" (SRK-Schafer 2015) that is incorporated by reference in the FEIS.	MARTYN GOFORTH	KATHLEEN	USEPA
291	54	The most recent draft Adaptive Waste Rock Management Plan (A WRMP) for the proposed project was produced in June 2012. During inter-agency administrative reviews, EPA commented on the draft AWRMP, and BLM responded to comments on April 11, 2014 and October 24, 2014. The Draft EIS identifies mitigation measures relevant to waste rock management, but it is unclear whether they are consistent with, or included in, the draft A WRMP because an updated, all-inclusive A WRMP is not included in the Draft EIS. Recommendation: Include the Adaptive Waste Rock Management Plan in the Final EIS as a consolidated, comprehensive document that identifies, in one place, how better understanding and characterization of the site geochemistry will be incorporated into waste rock management throughout mine life. Depending on the length, EPA recommends that either the entire or an abridged version of the A WRMP be incorporated into the Final EIS as an appendix, not just as a reference.	The BLM intends to require that the AWRMP (or WRMP) be revised to include the provisions stated in mitigation measure WR-3 after the BLM finalizes the Record of Decision that indicates the BLM selected alternative and prior to initiation of construction of the project.	MARTYN GOFORTH	KATHLEEN	USEPA
307	54	According to the Draft EIS, post-closure fluid monitoring would continue for a minimum of five years for each closed component. While it is helpful to know the minimum monitoring requirements, it is most important to also consider the maximum requirements for the purpose of determining long-term treatment; corresponding operations, maintenance, and monitoring requirements; and respective bonding. Recommendation: Adopt a conservative approach to long-term requirements, including those for monitoring and treatment, as necessary, as long as draindown solutions or leachate are discharged, for the purposes of closure planning and bond determination. Address this issue in the Final EIS.	Comment noted. In accordance with Nevada regulation governing design, construction, operation and closure of mining operations, 445A.446 Permanent Closure of Facilities "The time required for monitoring the facility following permanent closure depends upon the particular site and process characteristics, but in no event may the time required exceed 30 years." Bond determination will be addressed in a separate process in accordance with 3809 regulations.	MARTYN GOFORTH	KATHLEEN	USEPA
301	54	On December 18, 2014, the Council on Environmental Quality released revised draft guidance for public comment that describes how Federal departments and agencies should consider the effects of greenhouse gas emissions and climate change in their National Environmental Policy Act reviews. We believe the CEQ revised draft guidance outlines a reasonable approach, and we recommend that the BLM use that draft guidance to help outline the framework for its analysis of these issues.	The two main principles conveyed by the draft guidance are that an agency's NEPA review should consider: (1) the potential effects of a proposed action on climate change as indicated by its greenhouse gas emissions and (2) the implications of climate change for the environmental effects of a proposed action. Section 3.23 includes GHG estimates for the proposed action and alternatives. The analysis for each resource has been augmented to include a discussion of the impact of climate change on that resource. This analysis is included in the cumulative impacts subsection.	MARTYN GOFORTH	KATHLEEN	USEPA
302	54	EPA appreciates that the Draft EIS addresses the subject of climate change and includes a calculation of the project's approximate C02 emissions. While the Draft EIS states that "the tools necessary to quantify incremental climate impacts of specific activities associated with those factors are presently unavailable" and "as a consequence, impact assessment of effects of specific anthropogenic activities cannot be performed", we note that the estimated GHG emissions can serve as a reasonable proxy for climate change impacts.	Comment noted. GHG emission are included as Table 3.23-1. This paragraph was revised to note that estimated GHG emissions can serve as a reasonable proxy for climate change impacts.	MARTYN GOFORTH	KATHLEEN	USEPA
304	54	Recommendations: Utilize the estimated GHG emissions as a reasonable proxy for climate change impacts when comparing the proposal and alternatives.	Comment noted. GHG emissions for the Proposed Action are included as Table 3.23-1; as noted in the text, annual emission associated with the action alternatives would be similar but would last for 10 years instead of 20 years. No change to document.	MARTYN GOFORTH	KATHLEEN	USEPA
343	56	Potential effects of climate change analysis should include decreased surface water quality (see Garfin et al. 2013). The potential decrease in forage and water available for livestock could require significant decreases in stocking numbers which could negatively affect the economic viability of ranching, which could have a direct negative impact on wild horse populations.	A discussion of the potential effects of climate change and how it could effect surface water sources and vegetation have been added to the text in the wild Horse and livestock grazing analyses.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION

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351	56	Consider these resources: Craig RK (2010) "Stationarity is Dead" – Long Live Transformation: Five Principles for Climate Change Adaptation Law. Harvard Environmental Law Review, 34 (1): 1-57. Garfin G, Jardine A, Merideth R, Black M, LeRoy S, eds. (2013) Assessment of climate change in the Southwest United States: A report prepared for the National Climate Assessment. A report by the Southwest Climate Alliance. Washington, D.C.: Island Press.	A discussion of the potential effects of climate change and how it could effect surface water sources and vegetation have been added to the text in the wild Horse and livestock grazing analyses. Additional references have been incorporated in each section as appropriate.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
422	62	Although section 3.23.2 of the DEIS discusses and acknowledges the probable effects of GHG from the proposed projects, it states that "tools necessary to quantify incremental impacts of specific activities…are presently unavailable…qualitative and quantitative evaluations of …factors within the study area are included where appropriate and practicable." 3.23.3 goes on to discuss the GHG generated by this proposal but states "there is no effective mitigation to prevent these emissions". GBRW disagrees. BLM and the industry need to explore energy conservation practices and alternative fuels and energy sources. It is only in section 3.5.14 regarding vegetative resources that climate change is mentioned, despite the claim that evaluations are included where appropriate. Surely data exists to measure the effect of higher temperatures on water resources, wildlife etc. such as at least one quoted resource in the References. Naugle, D.E., K.E. Doherty, B.L. Walker, H.E. Copeland, M.J. Holloran, and J.D. Tack. 2011a. Sagegrouse and cumulative impacts of energy development. Pp 55-70 in D.E. Naugle, editor. Energy development and wildlife conservation in western North America. Island Press, Washington, D.C., USA. Naugle, D.E., K.E. Doherty, B.L. Walker, M.J. Holloran, and H.E. Copeland. 2011b. Energy development and greater sage-grouse. Pp 489-503 in S.T. Knick and J.W. Connelly, editors. Greater sage-grouse: ecology and conservation of a landscape species and its habitats. Studies in Avian Biology vol. 38. University of California Press, Berkeley, California, USA.	See response to comment 305 regarding mitigation. A discussion of the potential effects of climate change and how it could effect surface water sources and vegetation have been added to the text in the wild Horse and livestock grazing analyses. Additional references have been incorporated in each section as appropriate.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
340	56	Given the reality of changing climate and increased non-climate stressors on the natural environment, the BLM's analysis of projects in light of climate change should focus on managing human use and interaction in ways that retain and improve ecological function and resiliency so there is no loss of quality of life across generations. However, there is no discussion in the DEIS about how a rapidly changing climate and environment will affect wildlife or wildlife habitat, nor how the impacts of the mine expansion would further affect wildlife or habitat.	The analysis for each resource has been augmented to include a discussion of the impact of climate change on that resource. This analysis is included in the cumulative impacts subsection.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
341	56	The BLM seems to be viewing the landscape as relatively unchanging. "Stationarity," the concept that ecosystems remain relatively stable over long periods of time and that current protocols are adequate to measure them, is untenable in a changing climate (see Craig 2010). Recent warming in the Southwest is the most rapid in the Nation and significantly more than global averages in some areas. Average daily temperatures for the 2001-2010 decade were the highest in the Southwest from 1901 – 2010 and the period since 1950 has been warmer than any period of comparable length in at least 600 years (Garfin et al., 2013). Additionally, Garfin et al. (2013) found that recent drought in the Southwest has been unusually severe relative to droughts of the last century. Projected future climatic changes identified by Garfin et al. (2013) that need to be considered when analyzing the impacts of reduced wildlife waters caused by drawdown from mining activities include: - Decrease in spring precipitation (median 9-29%) with a confidence level of medium-high; and - Increase in drought severity (which will be coupled with warmer summer temperatures) leading to depletion of June 1 soil moisture and a lower total stream flow – confidence level of medium-high. Ecological implications of climate change in the Southwest include long-term shifts in vegetation patterns. Garfin et al. (2013) indicated that significant land cover changes are likely. Cold-tolerant species may move upward or die, and the same is true for precipitation-dependent species at lower elevations in desert and grassland areas. It is likely that all life forms (including shrubs, herbaceous perennials, and annuals) will be affected.	The analysis for each resource has been augmented to include a discussion of the impact of climate change on that resource. This analysis is included in the cumulative impacts subsection.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
303	54	Lastly, the Draft EIS does not discuss potential mitigation measures for reducing or minimizing greenhouse gas emissions.	See response to Comment 305.	MARTYN GOFORTH	KATHLEEN	USEPA

Comment ID	Submittal ID	Comment Text	Response Text	Last Name	First Name	Org Name
305	54	Recommendations: Consider potential mitigation measures for reducing greenhouse gas emissions. Identify, in the Final EIS, all relevant, reasonable mitigation measures that could reduce greenhouse gas emissions, even if they are outside the jurisdiction of the BLM, and thus would not be committed to as part of BLM's Record of Decision. We offer the following potential measures for the BLM's consideration: - Incorporate energy efficiency measures and appropriate alternative energy components into the project, such as on-site solar and/or geothermal power generation; - Use conveyors rather than haul trucks wherever feasible, e.g., for transporting ore to processing areas and the heap leach facility; and - Offer ride sharing or shuttle opportunities for mine employees commuting to the site from both nearby and distant communities.	Energy: Barrick promotes a culture of energy efficiency into work activities. The approach taken is that if there is sustained power demand in a part of the world where there is also an abundant source of renewable power, such as wind or geothermal, then goals may be achieved in that location. In White Pine County Nevada and at the mine, there are not significant cost-effective renewable energy opportunities. However, at a mine site level, solar power is used to run a component of the wireless network system. Furthermore, at Bald Mountain Mine, energy efficiency measures are employed by various departments that include: discouraging light vehicle engine idling, in-process conversion to LED lights, new installations are equipped with LED lights, photocells on external buildings, and no heating is used in the main areas of the process plants (space heaters only). In 2015 alone, Bald Mountain Mine spent approximately $15,000 on LED replacements in one plant. Furthermore, the mine employs waste minimization practices which create opportunities for waste to be broken down and used to produce new materials, thus conserving raw materials. For example, the mine recycles batteries (e.g. NiCad batteries, truck batteries), cardboard, and scrap metal. Also, used oil and used antifreeze is separated and sent off for recycling. Conveyors: Bald Mountain Mine has been a conventional open pit mining truck and shovel operation since it starting operating in the mid 1980's. The capital outlay for a truck and shovel operation have already been addressed and the fleet is in place with a support system for maintenance and training. To install conveyors is not only a major capital investment, but maintenance on the belts and equipment would be additional expenses that are not already part of the operations. To build a conveyor, corridors would be established that would result in maintenance roads, power distribution, water lines for dust suppression and potential fencing to prevent public and wildlife/livestock access. Furthermore, ore would need to be run through a crusher prior to conveyor transport. The capital investment for a crusher would increase the costs to establish the crusher and conveyor system. Furthermore, the crusher and crushed ore will be a source of dust emissions. In fact, based on other conveyor systems operating in Nevada (e.g. Cortez Hills Expansion Project; BLM 2008), modeled dust emissions from a crusher and conveyor were comparable to emissions from truck transport of ore. A conveyor and crusher system is economically inferior to a truck and shovel operations involving low grade ore. Ride Sharing and/or Shuttle: BMM provides transportation to all employees as a safe and efficient means to arrive to and from work. There are three BMM-provided bus routes from Ely, Elko and Spring Creek that run daily. BMM also issues light duty vehicles to several employees who are encouraged to	MARTYN GOFORTH	KATHLEEN	USEPA
334	56	Additionally, the BLM must analyze the impacts the proposed mine expansion will have on current and future grazing leases. The impacts to cattle/grazing leases must be viewed in light of the mine expansion and the impacts from possible changes to grazing leases must be analyzed as they affect wild horses and available forage for wildlife. The DEIS fails to address this important impact analysis.	Section 3.9.2.1 summarizes impacts to grazing leases from the Proposed Action Alternative stating that the Warm Springs Allotment would have a two percent temporary loss of AUMs (20 years) and a one percent permanent loss of AUM. The Maverick Springs Allotment would have a one percent temporary loss of AUMs and a less than one percent permanent loss of AUMs. The Reconfiguration Alternative and the Western Redbird Alternative would result in fewer AUMs lost compared to the Proposed Action Alternative.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
333	56	The analysis of Reasonably Foreseeable Future Actions (RFFAs) and impacts associated with grazing leases is wholly inadequate. The “acres for livestock grazing leases” is listed as “unknown” and therefore impossible to analyze, rendering the Cumulative Effect Study Area (CESA) analysis inadequate. (DEIS at page 3.10-5). Because livestock grazing has a significant impact on the forage availability for wild horses the BLM must quantify and specifically analyze the cumulative impacts current and future grazing leases will have, in conjunction with the impacts of the propose mine expansion.	Livestock grazing lease acreage has been included. It is the entire Triple B HMA.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
344	56	Potential effects of climate change analysis should include decreased surface water quality (see Garfin et al. 2013). The potential decrease in forage and water available for livestock could require significant decreases in stocking numbers which could negatively affect the economic viability of ranching, which could have a direct negative impact on wild horse populations.	A discussion of the potential effects of climate change and how it could effect surface water sources and vegetation have been added to the text.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
149	49	Chapter 3, Page 3.9-11: MM LG-2 This area is not accessed by livestock, please consider removal of this mitigation measure, LG-2. Alternatively, if the measure is not removed, then modification to the measure such that it reads: If springs flow at JBR #14 and South Water Canyon is significantly reduced or eliminated as a result of mining, water will be provided for livestock use in an alternate location determined by the BLM.	Mitigation Measure LG-2 has been modified as suggested.	ERICKSEN	BETH	BARRICK GOLD U.S.

Comment ID	Submittal ID	Comment Text	Response Text	Last Name	First Name	Org Name
38	14	Ultimately, because Barrick is in the process of SELLING Bald Mountain, NO REPRESENTATIONS ADVANCED BY BARRICK REGRADING THE SAFE AND RESPONSIBLE OPERATION OF THE MINE SHOULD BE TAKEN INTO CONSIDERATION! THE EIS ADVANCED BY BARRICK SHOULD NOT BE APPROVED, OR EVEN ENTERTAINED, BECAUSE BARRICK IS IN THE PROCESS OF SELLING THE MINE. THERE ARE NO GUARENTEES THAT BARRICK CAN ENSURE THAT THE PROMISES MADE WILL BE FULFILLED. For instance, Jerritt Canyon was recently purchased from Yukon Gold, by Sprott Mining, as a subsidiary. Only a few weeks after the mine was turned over, there was a miner killed, and there was a fire in the roaster, which caused concerns regarding the operators' lack of hazardous materials emergency plan and resources. Jerritt Canyon Gold did not have the appropriate HAZ-Mat or firefighting equipment, and public resources were used to help mitigate the disaster, which had the potential of being disastrous (Cyanide, and other flammable and toxic materials). Nonetheless, when companies transfer an operation to another operator, the promises and expectations that were made by the predecessor are apparently NOT always upheld. - The mine complex was bought in June by Jerritt Canyon Gold LLC, which is owned by Sprott Mining. The private company is owned by Eric Sprott, a Canadian billionaire and one of the largest gold equity holders in North America. http://elkodaily.com/mining/jerritt-canyon-roaster-shut-down-after-fire/article_48ef08f9-f750-5b06-be95-0ff4c0ed1c84.html - County firefighters arrived at the mine site at about 8 p.m. and did not clear the scene until 4:35 a.m., Bingaman said. http://elkodaily.com/mining/jerritt-canyon-roaster-shut-down-after-fire/article_48ef08f9-f750-5b06-be95-0ff4c0ed1c84.html - She said the mine site did not have its own firefighting equipment. http://elkodaily.com/mining/jerritt-canyonroaster-shut-down-after-fire/article_48ef08f9-f750-5b06-be95-0ff4c0ed1c84.html	Barrick sold the Bald Mountain Mine to Kinross Gold Corporation (Kinross) in January 2016. Kinross as the new operator of the Bald Mountain Mine would be required to follow the approved Plan of Operations (PoO) and the conditions for approval (e.g. mitigation measures) or they would need to modify the PoO. Kinross would be required to provide an acceptable replacement financial guarantee on all obligations and conditions created by Barrick under regulation 43 CFR 3809.116. This information has been added to Chapter 1.	BOGDON	JAKE	
93	44	I take great umbrage and offense that the Bureau of Land Management would sacrifice the health of my irreplaceable public lands for such a frivolous purpose as the expansion of gold mining operations on those lands.	Comment noted. Federal law authorizes exploration and development of minerals on Federal lands open to mining claim location.	LYNCH	JANET	
347	56	the impacts of potential fires caused by mining operations is not adequately disclosed or analyzed.	Lightning is the primary cause of fires at or in the area of Bald Mountain Mine (BMM). The BMM firefighting personnel are appropriately trained to assist with fighting wildfires in the area. Furthermore, the BMM firefighting personnel are involved with the community and agencies including the BLM to help manage wildfires. For example, BMM's firefighting personnel participate in Local Emergency Planning Committees (LEPC's) which include the involvement of White Pine, Elko and Eureka counties. BMM's firefighting training consists of basic wild land firefighting, basic structural firefighting and equipment firefighting and are on site 24-hours a day 365 days a year. The firefighting personnel have appropriate firefighting equipment that require monthly inspections and must meet the requirements of regulatory agencies such as MSHA and State of NV MSHA. In addition, the mine site has available water sources that can be utilized to aid in wildfire management.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
369	58	My family and I are Down Winders again just look at some of the you tube videos on the I-80 Dust Bowl, I checked the NOAA satelite images on the days of the worst dust storms it was alarming to see what came off of the mines and you are afraid of Burning Man they are a small fraction compared to the Mercury filled dust from the mines. stop issuing permits that poison me and my family. I live most of the year in Ruby Valley Nevada my grand father had most Gold claims on Bald Mountain at one time and is now rolling in his grave because of the destruction caused by the Giant Foreign corporation like Barrick. I have already lost one Kidney to Cancer caused by exposure mining type toxins, many others down wind of these mines are sick and can't or won't complain. Look at the law suits from Idaho against our mines. If the fish are no longer safe to consume and water not safe to drink then may be we should stop adding to the problem.	Section 3.14 has been revised to include additional information regarding mercury deposition.	GILBERT	SHAUN	
153	49	Chapter 3, Section 3.22, Page 3.22-5, Table 3.22-1: In the Cultural row in the Proposed Action column, add "by previous disturbance" after "been destroyed".	Revised as indicated.	ERICKSEN	BETH	BARRICK GOLD U.S.
161	18	We need to add W.P. #6 (Overland) from W.P. #3 to W.P. #1000 as an access route.	WP #6 has been added to Figure 2.4-6 as a public access route, and has been added to Figure 3.15-1 as a route in the area. However, Barrick has not identified this as a route for employee access or transportation of hazardous materials, so the text has not been revised to discuss this road in terms of mining traffic.	MILLER	WILLIAM	WHITE PINE COUNTY ROAD DEPARTMENT
432	64	Noted access to the public around the mine.	Comment noted.	SCHULZ	SUSAN	ELY SHOSHONE TRIBE

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163	18	The language needs to be changed that identifies the road surface ofW.P. #3. W.P. #3 has approximately 30 miles of paved road beginning at U.S 50~ The remaining miles to the main access point on the eastern portion of the study area is a graveled road maintained by the County.	Revised as indicated.	MILLER	WILLIAM	WHITE PINE COUNTY ROAD DEPARTMENT
164	18	The language on the road surface condition of W.P. #54 (Alligator Ridge I Buck Pass) is a partially paved I partially graveled road.	Revised as indicated.	MILLER	WILLIAM	WHITE PINE COUNTY ROAD DEPARTMENT
165	18	Include a section of approximately 10.8 miles of W.P. #73 from SR 892 to W.P. #54 and all of W.P. #54 to W.P. #3 as access routes to the Vantage and Yankee locations. Include W.P. #1006 from W.P. #54 to the Yankee location. Identify the route of W.P. #4 from W.P. #3, approximately 6.7 miles south to the "No Name Road". The "No Name Raod" will then run south to W.P. #54 approximately 6.6 miles.	Revised as indicated.	MILLER	WILLIAM	WHITE PINE COUNTY ROAD DEPARTMENT
441	64	Would native representation be viable in field work with mine?	Monitoring opportunities are readily available for Tribal Members who meet the Secretary of the Interior's standards	SCHULZ	SUSAN	ELY SHOSHONE TRIBE
205	50	Reduced groundwater and surface expresssion at spring/seeps may increase the potential for noxious weed invasion and result in substantially reduced wildlife habitat and long-term requirements for monitoring and management. Springs/seeps that are impacted by groundwater pumping and at-risk for noxious weed invasion should be addressed in the noxious weed plan and discussion should be included in the DEIS text.	Section 3.6 has been revised to include a description of the impacts resulting from potential proliferation of noxious weeds due to groundwater drawdown.	LESMEISTER	LINDSEY	NDOW
59	30	Jobs for people needing them in Nevada is more important to me than the loss of Just a few thousand acres for horses. I know the mines are pretty consciences about keeping wildlife safe and they are also very safe on the cyanide use as well. If you and the mines neighbours and neighboring ranches are fine with this expansion then I am all for it as well.	Comment noted.	WURDINGER	KAREN L	
399	61	At the upcoming Wednesday, October 14, 2015 meeting of the White Pine County Commission, our Commissioners will ratify a prior decision by County Commission Chairman to support the Bald Mountain Mine Project's Environmental Impact Statement referencing Barrack Gold's mining project located in White Pine County, Nevada. The White Pine County Board of County Commissioners supports Barrack Gold's request for a proposed expansion of the North Operations Area and the South Operations Area as identified in the Proposed Action Statement and/or the Western Redbird Modification Alternative of the EIS under public review with the understanding that they must comply with all State and Federal air quality requirements and all conditions established within the proposed project scope.	Comment noted. The BLM has identified the Western Redbird Modification Alternative as the Agency Preferred Alternative.	PEREA	GARY	WHITE PINE COUNTY BOARD OF COMMISSIONERS
52	23	It is our position that the Western Redbird Modification Alternative be selected as the preferred alternative. This alternative represents the best possible outcome for Nevada's wildlife, and especially mule deer, while meeting the project's Purpose and Need as identified by the BLM. Significant coordination has occurred between the proponent, state and federal agencies and non-governmental organizations to develop this alternative. It shows that compromise between parties in the name of wildlife conservation can be achieved while still allowing for multiple use management on our public lands. Within the parameters of this alternative we ask that you please consider minimizing impacts to mule deer to the extent possible and that the BLM and the proponent continue to maintain a positive working relationship throughout the remainder of the EIS process and following the Record of decision.	Comment noted. The BLM has identified the Western Redbird Modification Alternative as the Agency Preferred Alternative.	CEFALU	CHRIS	NEVADA BIGHORNS UNLIMITED
74	36	The Western Redbird Modification (WRM) should be adopted as the preferred alternative. The WRM mitigates impacts to wildlife much more than even the No Action Alternative. Under the WRM the period of mining is limited to eighteen (18) months, so that it is unlikely that a devastating snow accumulation would take place during this interval of activity. The pit size has been decreased and the adjacent waste rock stockpile has been moved to create a wider migration corridor. Fill slopes of the waste rock stockpile have been laid back to a 3:1 (horizontal to vertical) so that mule deer will utilize this slope, even before re-vegetation matures, as part of their migration corridor.	Comment noted. The BLM has identified the Western Redbird Modification Alternative as the Agency Preferred Alternative.	MULTIPLE		
78	36	Under the WRM Alternative, implementation of the design measures and adaptive management will provide for deer migration at levels greater than the Proposed Action or No Action alternatives. These measures would help facilitate deer movement during severe winters, and must be coordinated with NDOW.	Comment noted. The BLM has identified the Western Redbird Modification Alternative as the Agency Preferred Alternative.	MULTIPLE		
79	36	It must be clear that the proposed mine expansion will have negative impacts on mule deer and other wildlife resources; the WRM Alternative is everyone's attempt at minimizing these impacts.	Comment noted. The BLM has identified the Western Redbird Modification Alternative as the Agency Preferred Alternative.	MULTIPLE		
106	41	The EIS proposes several alternatives. The latest alternative, the Western Redbird Alternative (WRA) 2.5.2, disturbs the least acreage, proposes a reduction in time for the project, and makes other recommendations beneficial to wildlife. This alternative is preferable as being the least intrusive; however, the results depend on the mule deer reaction.	Comment noted. The BLM has identified the Western Redbird Modification Alternative as the Agency Preferred Alternative.	VON SEGGERN	DAVID	SIERRA CLUB, TOIYABLE CHAPTER

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168	41	The Toiyabe Chapter supports the recommendations in the WRA designed to minimize disturbance for mule deer. The project bisects critical mule deer migration routes. Mule deer need to feel comfortable moving through the mining operations property. According to the NDOW, the WRA proposal as compared to earlier proposals is the best by offering - reduced acreage disturbance of 63% from other alternatives - providing passageways through berms by reducing or eliminating them along key migration routes, - maximizing the width of corridors which ideally should be 2,000 ft wide with no impediments, - facilitating migration in a hard winter by compacting the snow - reduced noise and human disturbance during the migration period, and - the shortest time occupying the property.	Comment noted. The BLM has identified the Western Redbird Modification Alternative as the Agency Preferred Alternative.	VON SEGGERN	DAVID	SIERRA CLUB, TOIYABLE CHAPTER
176	50	From a wildlife perspective the Western Redbird Modification Alternative is significantly more beneficial than the No Action Alternative. NDOW supports the WRM Alternative as the preferred alternative for the project moving into the FEIS phase.	Comment noted. The BLM has identified the Western Redbird Modification Alternative as the Agency Preferred Alternative.	LESMEISTER	LINDSEY	NDOW
263	51	Clearly, the WRM alternative, with the lowest degree of proposed dewatering, is the best choice to minimize impacts to all water resources.	Comment noted. The BLM has identified the Western Redbird Modification Alternative as the Agency Preferred Alternative.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
277	51	the WRM alternative, with co-ordination and consultation of NDOW, will potentially provide wildlife benefits beyond the current situation, despite our regret that it comes with a further mine expansion. It needs be fully recognized that despite mitigation, there will still be negative impacts to our valuable deer herd, SG and other wildlife species.	Comment noted. The BLM has identified the Western Redbird Modification Alternative as the Agency Preferred Alternative.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
289	53	I choose the Western Redbird Modification Alternative. This option addresses the mule deer, sage grouse, visual impact, water concerns (3.3.2.3), and cultural concerns, without stopping a business project from Barrick that may have a profoundly positive impact on the economics in the Elko area. Barrick will continue to mine in the proposed area, and the impact on the environment is lessened under the Western Redbird Modification Alternative.	Comment noted. The BLM has identified the Western Redbird Modification Alternative as the Agency Preferred Alternative.	BANUELOS	CLIFFORD	ELKO BAND COUNCIL
290	54	The Proposed Action would disturb 6,903 acres in addition to the 10,515 acres previously approved by BLM. Compared to the Proposed Action, the Western Redbird Modification Alternative would decrease the planned new surface disturbance by 63%. The corresponding reduction of impacts to vegetation, wildlife habitat, visual, paleontological and cultural resources would be directly proportional to the predicted decrease in proposed surface disturbance, which would also avoid and minimize potential impacts related to reclamation efforts needed in the area in the future. Significantly, the Western Redbird Alternative is the only alternative evaluated in the DEIS that would not include mining operations below the groundwater table. Compared to the Proposed Action, this would avoid the loss of 32.88 acres of wetland vegetation, as well as an unidentified acreage of phreatophytic vegetation. Additionally, the decreased surface disturbance would allow for the widest mule deer migration pathway. Recommendation: Select an alternative that would minimize surface disturbance and avoid mining operations below the groundwater table.	Comment noted. The BLM has identified the Western Redbird Modification Alternative as the Agency Preferred Alternative.	MARTYN GOFORTH	KATHLEEN	USEPA
403	62	GBRW is concerned about the South Water Canyon Seep and JBR-14 spring, since their location is critical to mule deer migration and are believed to be the source of a public water reserve, HV-164, which is federally protected. Only under the No Action or West Redbird Modification are these seeps and springs well away from the expected 10 foot drawdown and are preferred from a water depletion perspective.	Comment noted. Potential impacts to the South Water Canyon Seep, JBR-14 spring, and public water reserve HV-164 are discussed in the DEIS in the Water Quality and Quantity chapter in sections 3.3.2.1 (Proposed Action), 3.3.2.2 (Reconfiguration Alternative), and 3.3.2.3 (Western Redbird Modification Alternative) and in the Wildlife and Fisheries chapter in sections 3.7.2.1, 3.7.2.2, and 3.7.2.3.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
2	2	Please do not approve the removal of over 1200 acres of scarce vegetation in order to add to gold mining. Don't we have enough poisoned land and water from mining activities in the west. Leave the land, the horses and the other wildlife alone and they will be just fine.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	BLACKBURN	CATHERINE	

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20	8	A No Action Alternative should be selected for this project.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	EMMERICH	KEVIN	BASIN AND RANGE WATCH
26	13	As a taxpayer and member of the public who has a stake in the public lands managed by the Egan Field Office, I ask the BLM to reject the expansion of the Bald Mountain Mine. By the BLM's own admission, this mining project will involve the loss of valuable wildlife habitat, and in effect jeopardize the well-being of wild horses who call the Triple B Herd Management Area (HMA) home. We know that this project will cause further destruction of the sensitive desert landscape and the inevitable pollution of aquifers and surface and subsurface areas…this is what mining does. The Draft EIS acknowledges this fact, and clearly states that this pollution will harm our wildlife, including our federally protected wild horses.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	HUNT	DEBRA	
30	13	The BLM may be of the opinion, that despite drought conditions, profits from commercial entities takes priority over our wildlife and our wild areas because America needs these resources, but this type of thinking is not managing our public lands for the betterment of all, but instead destroying them. Therefore, again I ask that the BLM reject the expansion of the Bald Mountain Mine for the good of the land and the wildlife that call it home.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	HUNT	DEBRA	
41	16	THIS IS A HORRIBLE PROPOSAL. THIS LAND IS OWNED BY EVERY CITIZEN IN TEH USA. THEY HAVE JUST SEEN THE ANIMAMUS RIVER TURN YELLOW FRO MINE OPERATIONS. WE DON'T WANT EARTH DESTROYED LIKE THIS. THEY ARE NOT MAING MORE LAND ON EARTH SO WE NEED TO PRESERVE AND PROTECT THE LAND WE HAVE. I SEE NO REASON TO ALLOW THIS DESTRUCTION WHICH WILL KILL SO MANY ANIMAL AND BIRDS SPECIES. AND DESTROY THE LAND SO IT CANT EVER BE USED AGAIN. WE HAVE SEEN HOW MINES DESTROY. ABSOLUTELY NO WAY CAN WE ALLOW THIS EARTH DESTRUCTION. THIS PRPOSAL IS DISGUSTING. NO SUCH APPROVAL SHOULD BE GIVEN TO BARRICK. THEY ARE JUST FULL OF GREED AND ANIMAMUS TO LIFE ON EARTH.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	PUBLIC	JEAN	
58	29	No	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	BAGGURU	THE	
90	43	Please protect these wild horses' land from destructive mining practices. I'm sure it's due to make everyone a lot of money. Please think of the Eart and those horses FIRST. When everything is destroyed, we can't eat money.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	SULLIVAN	ERIKA	

Comment ID	Submittal ID	Comment Text	Response Text	Last Name	First Name	Org Name
92	44	I am urging you in the strongest terms possible to reject the expansion of the Bald Mountain Mine. This ill-advised mining project would have devastating long-term environmental consequences including, by the BLM's own admission, the loss of valuable wildlife habitat, widespread toxic mercury and cyanide contamination, massive draw-down of water resources in the area, and the endangerment of wild horses who call the Triple B Herd Management Area (HMA) home.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	LYNCH	JANET	
95	44	The BLM would therefore be derelict in its mandate to protect public lands and manage them for multiple uses by granting the expansion of the Bald Mountain Mine, taking into account the vast quantities of water the project would both foul and consume. Indeed, granting this ill-advised, unnecessary and frivolous expansion would run counter to the Federal Lands Policy and Management Act, for granting an expansion of gold mining in this area would essentially preclude ALL other uses and render the land unfit for anything at all once the gold is mined out, as water resources would be lost for all other purposes, including but not limited to environmental health, recreation, wild horses and other wildlife.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	LYNCH	JANET	
96	44	It would be inexcusable and indeed criminal for the BLM to expand this intensive water-consuming mine for the benefit of private interests which would destroy the land for the American Public and for all other multiple uses, in clear violation of FLPMA, for generations to come. It is even worse that the proposed expansion is in a designated wild horse Herd Management Area, and especially at this time, considering that much of the West is experiencing severe drought conditions and operating under serious water restrictions.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	LYNCH	JANET	
99	44	I remind you that the 1976 Federal Land Policy and Management Act states, in part, that "The Congress declares that it is the policy of the United States that— … the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use;" (43 U.S.C. §1701 (a) (8); emphasis added). The language of the FLPMA is perfectly clear in its meaning: BLM must not authorize activities on the nation's public lands which will as a practical matter destroy those lands for the other uses for which the American Public rely on those lands.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	LYNCH	JANET	
101	44	the real value of the land here is not the elemental gold which may lie under its surface, but rather its living values as a functioning ecosystem with adequate and clean water resources. Neither man nor beast needs elemental gold to survive, but neither man nor beast, nor indeed the land itself, can survive without adequate and clean water resources. Your agency is responsible for the long-term management of large areas of living environmental resources on our nation's public lands. You must not shirk that duty by selling away large segments of these publicly-owned resources for the unsustainable short-term financial gain of private corporations, to the long-term detriment of the American Public and our public lands.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	LYNCH	JANET	
102	46	I understand that it is currently being considered to expand the mine that will further encroach onto territory reserved for wild horses. Please can proposal be rejected? We all need to protect the wildlife in whatever form it takes.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	SOLLORY	JANE	

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103	47	This stuff needs to stop NOW!!! This public land paid for by me and all other taxpayers. We pay for it WE need to have a say in what happens with it and the affects it causes on wildlife etc	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	MC CORD-CROOKS	STACEY	
105	48	I saw on Facebook about expanding the area for mining in your area at the expense of wild mustangs, burros, and native wildlife. Why? What could possibly be more important that leaving the wild as wild. Haven't we encroached enough in our nation into the wild lands and desecrated the environment so that some species are now extinct or nearly so? Don't you think it's about time we prioritized what's really important here? I think you should leave things the way they are. It's already bad enough as it is with the present mining.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	JETT	SUE	
158	45	My name is Kristin Andersen and I am writing to you in hopes of stopping the Bald Mountain Mine North and South Operations Project. I believe the impacts on the environment will not only impact the gorgeous land but the air we breath, people and animals. I was under the impression that the sage-grouse was already protected. This would interfere with this and many other animals and their safety. What about the Pony Express Trail? A part of our history. Ruby Valley Pony Express station and Fort Ruby a Historic Land Mark. What about the mule deer migration? Are we so vain that we think nothing of ruining the beauty mother nature gave to us. Destroying our history and letting go of our heritage. To me there are countless reasons this mine should not be allowed. The risks are too high the negative impact too great.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	ANDERSON	KRISTIN	
288	53	I am against the Proposed Action Alternative. In my opinion, the loss of such vital vegetation, and in such a destructive manner, will permanently harm the environment. I understand that the reduction of fire fuel is an objective of the BLM and there are relevant public safety concerns, but at what cost to our environment? I consider this a poor, shortterm reactionary action by the BLM. We need to consider the other results of clear cutting of trees; the increase of dust and impact due to storm water and the resulting land erosion will have negative long term impacts to our environment. The pinion and juniper are also home to animals and insects that have an important role in the Nevada ecosystem.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	BANUELOS	CLIFFORD	ELKO BAND COUNCIL
442	65	This mining project will jeopardize the well-being of wild horses that call the Triple B Herd Management Area (HMA) home and, by the BLM's own admission, will involve the loss of valuable wildlife habitat.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	OSTER	SHERRY	
443	65	the project will cause further destruction of the sensitive desert landscape and the inevitable pollution of aquifers and surface and subsurface areas. This pollution will harm wildlife, including federally protected wild horses.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	OSTER	SHERRY	

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456	65	Barrick Gold Corporation is NOT an American company and America does not reap the benefits from this or any other foreign-owned mining operation. They take American resources for a mere pittance while polluting Public Lands. They do NOT pay taxes nor do they add to the wealth and well-being of our Nation. They have taken enough.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	OSTER	SHERRY	
323	56	During the scoping period we and more than 3,800 members of the public who share our perspective submitted comments asking the BLM to select the No Action Alternative. To date, more than 6,800 citizens have submitted comments in response to the DEIS. The proposed expansion, under any action alternative, will expand the massive destruction of the sensitive desert landscape and will increase pollution of aquifers and reduce surface and subsurface flow of waters necessary for wildlife. The harm to wildlife, including federally-protected wild horses, and will have a negative impact to the human environment for decades long after the mine is closed. The BLM would be derelict in its mandate to protect public lands and manage them for multiple use by permitting the expansion of the Bald Mountain Mine due to the large amounts of water the project will consume, contamination of land and water sources from the mining operation and the increased activity which will endanger not only wild horses, but threatened species and animals such as sage grouse which are currently being considered for Endangered Species Act (ESA) protection.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
324	56	AWHPC once again urges the Ely District and Egan Field Offices to reject the proposed expansion of the Bald Mountain Mine and to select the No Action alternative. The proposed mining expansion will jeopardize the well-being of wild horses, which the agency is mandated to “protect” under federal law, and exacerbate the loss of valuable wildlife habitat in this area.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
326	56	Expansion of the Bald Mountain Mine, under any of the action alternatives, would negatively impact wild horse herds. Due to the documented and unavoidable contamination which results from gold mining operations and further disturbance to the human environment, AWHPC and its supporters would suffer if this proposal is approved due to the negative impacts such an operation would have on individual wild horses and wild horse herds as a whole.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
350	56	Please do not choose the interests of the Barrick Gold over protection of the public lands, the interests of the American public and America's wild horses.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
354	57	I urge selection of the No Action alternative -- no expansion.	Preference noted.	DEVLIN	MARYBETH	
356	57	Given the detrimentla effects involved with the PA, RA, and WRM alternatives, the No Action Alternative is the indicated alternative."	Preference noted.	DEVLIN	MARYBETH	

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357	57	To mine the gold, Barrick excavates large-scale open-pits. But the gold-at-issue is not readily accessible. It is embedded in the ore as microscopic flecks. The process to extract the gold requires huge amounts of water -- billions of gallons per year. The water is mixed with cyanide, and the solution is then sprayed on the heaps of ore -- the leach-heaps, or heap-leach facilities -- soaking the ore to separate out the tiny specks of gold. Water is scarce as it is, and cyanide should never be used in a wild-horse habitat. Therefore, the correct action is No Action. No expansion. No more wasting of water. No more cyanide.	Comment noted. Barrick has appropriated water rights for pumping of groundwater for mining operations, a designated beneficial use of water in the State of Nevada. Average annual groundwater pumping rates will vary depending on the alternative. For example, average annual pumping rates will range from 37 gpm to a maximum of 1,658 gpm for the Proposed Action (See Section 3.3, Water Quality and Quantity). A dilute sodium cyanide solution is used on the heap leach pad to extract gold from the ore as described in EIS Section 2.4.1.13, Ore Processing Overview. The heap leach pads would be designed to have geosynthetic liners and drainage collection systems to collect the pregnant cyanide solution containing gold per NDEP regulations to prevent soil/groundwater contamination. The pregnant solution would be piped to covered solution tanks or lined process solution ponds that would be fenced to keep wildlife, cattle, and horses out per NDOW Industrial Artificial Pond Permit. The pregnant solution would be pumped through carbon columns to extract the gold from the solution that would be recirculated back to the heap leach pad. WAD cyanide would be monitored in groundwater wells downgradient from heap leach pads/processing facilities according to the NDEP Water Pollution Control Permit. These measures are sufficient to protect the environment.	DEVLIN	MARYBETH	
358	57	Barrick pays no royalties on the wealth that it extracts from our public lands. Thus, America's taxpayers receive no benefit from this plundering our of national resources. Barrick keeps the gold and leaves US with ... The blight of abandoned open pits, A depleted aquifer and a lowered water-table, Contaminated ponds that continously take up more groundwater, Erosion and habitat-fragmentation, and Heaps of toxic tailings that will leach poisons for centuries. Let's not have any greater "legacy" than the one that Barrick is already dumping on US. Choose No Action.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	DEVLIN	MARYBETH	
359	57	Just a few years ago, Barrick was authorized to expand the North Operations site. Now it applies again for even greater expansion. These incremental increases illustrate why it is best to just say "No" in the first place to mining projects. They are initially permitted based on a relatively small footprint that, little-by-little, grows into a monster. Once a site is established, subsequent requests to enlarge it are harder to deny. But BLM must deny Barrick's application in order to save the environment from degradation and the water-resource from profligate waste and pollution.	Comment noted. A mining company may amend a Plan of Operations (PoO) and expand an existing mine based on exploration results and market conditions. The amended PoO would require agency approval and would result in additional NEPA as part of the environmental review process.	DEVLIN	MARYBETH	
362	57	As previously mentioned, the gold is extracted chemically from the ore by using a cyanide leaching process. In addition to the cyanide from the "heap leach facilities" or HLFs, the gold mine will leave behind toxic mercury waste in the mountainous rock piles -- known as "rock disposal areas" or RDAs. Even though the leach heaps and contaminated tailings are supposed to to kept isolated, somehow cyanide, sulfuric acid, and other toxic substances eventually seem to make their way into the surrounding land, surface water, and groundwater. Open-pit leach mining has no place on the range. It is not a suitable neighbor to others that share the public lands.	Comment noted. See response to comment #357 regarding cyanide. The mercury bound in rock in the Rock Disposal Areas (RDAs) is the same mercury found in native soils and rock formations in the region. See Section 3.14.2, Air Quality Environmental Consequences, for the estimated fugitive mercury emissions resulting from the proposed RDAs, heap leach facilities, and open pits. There are no tailings associated with the proposed project. Section 3.3 Water Quality and Quantity provides an analysis of the environmental impacts of the proposed project and alternatives, including the geochemistry of the rock to be mined, the potential for acid rock drainage and metals release, waste rock management plan, and mitigation measures designed to avoid, eliminate, or reduce impacts to the environment.	DEVLIN	MARYBETH	
363	57	The Bald Mountain Mine is located in the Triple B Herd Management Area (HMA). Water is scarce in this HMA. According to BLM's webpage, the area is composed of "... semi-arid lands where evaporation potential exceeds precipitation throughout the year." It is "... dry with few perennial waters. The majority of the limited water resources are small seeps and springs that are found mainly in the mountains." BLM must deny the Bald Mountain expansion project in order to protect the wild horses' habitat. Despite its multiple-use management approach, BLM is not bound to approve every use. Mining is an incompatible use in an HMA.	The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under the mandate of multiple-use and sustained yield. The Proposed Action Alternative (which is the most impactful of the three alternatives) would impact less than one percent of the total acreage within the Triple B HMA and would not result in rounding up or moving wild horses.	DEVLIN	MARYBETH	
365	57	It can be projected that seeps and springs in the HMA would stop flowing. All wildlife that inhabit this area, not just wild horses, would be adversely affected. Given the limited water-recharge through precipitation, it is contraindicated to have leach mining-and-recovery in Nevada	Comment noted. Based on the groundwater modeling results for the project and other data, flows in the South Water Canyon Seep and JBR Spring #14 and associated wetlands potentially could be reduced by groundwater pumping under the Proposed Action and Reconfiguration Alternative. The BLM is developing mitigation to address this impact of potential reduced spring flow should either alternative be selected as the preferred alternative. No impacts to springs and wetlands are anticipated to occur under the Western Redbird Modification Alternative (WRM Alternative).	DEVLIN	MARYBETH	

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367	57	Photographs of the current Bald Mountain Mine site and other Barrick open-pit gold mines reveal a look that is eerily similar to the mountain-top removal and strip mines in states such as West Virginia. The gold mines have that same stark, surreal, nightmarish appearance -- industrialized zones where the land has been blasted and scraped bare. Lifeless. Ruined. I urge BLM to stop further destruction of this fragile, desert environment. Choose Alternative 4 -- No Action. I call upon the BLM Ely District Office to decisively deny Barrick Gold US, Inc.'s application to expand its operations on the Bald Mountain Mine site. Please stand strong against any more degrading of the environment and put an end to the mine's profligate water consumption and pollution. BLM's mission is "to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations." This project is antithetical to BLM's mission. Please reject the expansion.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	DEVLIN	MARYBETH	
373	58	To invest in gold is to invest against America our economy only does good if Gold goes down in price, by issuing permits to Barrrick you encourage investors to drive up the price.	Comment noted. The impact on the US economy as a whole from the result of permit approval is speculative and beyond the scope of this EIS.	GILBERT	SHAUN	
374	59	I strongly oppose authorization of an expansion of drilling activities in the Triple B HMA as it would significantly and negatively impact federally-protected wild horses as well as other wildlife and the environment. The Triple B HMA is a legally-designated wild horse habitat where wild horses were intended to be the principal users of the area and their space, forage and water must not be threatened by commercial activities authorized by an agency mandated to protect them -- not special interests. In fact, mining operations have no business in a legal wild horse HMA to begin with.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	HENNESSY	EILEEN	
375	59	If approved, the BLM would green-light the disturbance of a legal habitat for the 2015 “guesstimated” population of 1,460 wild horses, who would suffer the negative effects of this Project, including all of the disruptive and destructive impacts to the mustangs and to the environment that go along with mining exploration activities -- such as road construction expansion, increased vehicle traffic and the use of heavy equipment including excavators, trucks and drilling rigs as well as drilling activities -- which would threaten the welfare of these protected animals and, according to the BLM’s own admission, lead to loss of critical valuable wildlife habitat. Mining expansion would also cause further destruction the sensitive desert landscape. The Draft EIS also confirms resultant negative impacts that would be harmful to wildlife -- including federally-protected wild horses -- such as pollution of aquifers and surface and subsurface areas. As you know, mines negatively impact surface water availability by draining water from aquifers and our government’s own scientists estimate it could take more than 200 years to replenish the groundwater removed by mining operations.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	HENNESSY	EILEEN	
378	59	there is no justification for the BLM to expand this intensive water-guzzling mine in a legal HMA especially when precious water is scarce enough for the wild horses who rely upon it for their survival as many western states continue to experience severe drought conditions forcing water restrictions.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	HENNESSY	EILEEN	
380	59	In light of the myriad negative impacts anticipated from expanded mining in this area, the risk appears too great for the wild horses and other wildlife living in the Triple B HMA to even consider such a proposal. Clearly, the BLM must reject expansion of the Bald Mountain Mine as such an action would further impinge upon the wild horses’ precious range and resources if expanded drilling exploration were approved anywhere near the Triple B HMA. The BLM does not have the right to sacrifice this heritage herd to appease the greed of a small group of gold diggers? America’s wild horses are more precious than gold.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	HENNESSY	EILEEN	

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381	59	the "multiple use" mandate in no way requires the BLM to expand mining operations or to approve every single mining proposal submitted to them especially if it's approval would severely compromise, threaten, or impede the other "multiple uses" of the lands that would be affected by it. Lest the agency forget, wild horses are to be managed as the PRINCIPAL users of their rightful, legally-designated herd areas, meaning THEIR needs must come first.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	HENNESSY	EILEEN	
388	60	The Service has multiple concerns about significant adverse effects to the Ruby Lake National Wildlife Refuge as well as adverse impacts to wildlife and people in the surrounding area. The Service provided extensive comments previously (attached for reference) and we reiterfile those concerns once again. Reconsider DEIS comments previously submitted by USFWS June 2015.	The BLM has previously addressed the USFWS comments submitted on the June 2015 Preliminary Draft EIS. The BLM's responses to cooperators' comments, including the June 2015 USFWS comments, were provided to Peter Schmidt of the USFWS in an Excel Workbook dated July 30, 2015. The BLM updated the relevant sections of the Draft EIS pertaining to June 2015 USFWS comments where the BLM believed an update was necessary to address the comment. The BLM believes it is not necessary to revisit the June 2015 comments because they were previously addressed. The earlier comments and responses to comments may be found in the Administrative Record.	SEDLACEK	NICOLE	U.S. FISH AND WILDLIFE SERVICE
398	60	In closing, for the reasons detailed above and in our comments, the Service cannot support any of the alternatives because the analysis in the DEIS does not adequately address the project's impacts to fish and wildlife trust resources, their habitats, water quality and quantity, or the viewshed of our national treasures.	Comment noted. The EIS analysis has been updated to address specific comment regarding impacts to these resource issues.	SEDLACEK	NICOLE	U.S. FISH AND WILDLIFE SERVICE
424	62	GBRW does not support the proposed action. Even the DEIS cites numerous potential negative affects on the wildlife in the region. Our view is that the mine should not expand further and land managers need to work towards improving conditions on the ground. It will be difficult to arrest the existing problem if expansion occurs. However, under the expansion scenarios, the West Redbird Modification alternative is the best option from our perspective.	Comment noted. The BLM has identified the Western Redbird Modification Alternative as the Agency Preferred Alternative.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
10	5	clearing your wild horses so you can grab land for ranchers is very short sighted. This is the age of the internet and we can all see what you are doing. It's wrong. You will find less demand for your beef if you don't get your proprieties right.	Comment noted. Wild horse roundup are out of scope of this EIS. The removal of wild horses and burros from public rangelands is carried out to ensure rangeland health, in accordance with land-use plans that are developed in an open, public process. These land-use plans are the means by which the BLM carries out its core mission, which is to manage the land for multiple uses while protecting the land's resources. Animals for which there is no adoption demand will be placed in long-term pastures where they will be humanely cared for and retain their "wild" status and protection under the 1971 Wild Free-Roaming Horses and Burros Act. The BLM does not sell or send any horses to slaughter.	CHILVERS	JUDE	
21	9	IN THE USA TODAY, THERE IS A WAR ON HORSES. A HOLOCAUST! IT MUST STOP. SOMEONE HAS TO STAND UP & SAY ENOUGH. EVERY WEEK 4000 CROSS OUR BORDERS CRAMMED INTO TRUCKS TO BE BUTCHERED ALIVE! FOR HUMAN CONSUMPTION. YOU CAN STOP IT BLM, YOU CAN STOP IT. JUST SAY NO!!!!!!!!!!!!!!!	Comment noted.	FRIEDMAN	DONNA	
447	65	In Nevada, 90% of mining is from gold, and 90% of gold mined is from two transnational mining conglomerates, Barrick and Newmont. Not surprisingly, their campaign contributions dwarf those of all other mining corporations combined. The Nevada Mining Association is the 3rd-largest contributor. They made big investments in lawmakers in 2012 and are now expecting to be repaid by having SJR 15 killed in the 2013 session.	Comment noted.	OSTER	SHERRY	
167	41	Because this reduced footprint leaves in the ground known gold deposits subject to a future EIS, we remain concerned the ultimate final footprint in the form of a future expansion on this vulnerable property and ask that that the Nevada Department of Wildlife's (NDOW) earlier comments on the entire project should remain attached to comments on this amended draft.	The BLM previously addressed NDOW's comments on earlier versions of the EIS document. These earlier comments and responses to comments are not be included in the Final EIS but may be found in the Administrative Record.	VON SEGGERN	DAVID	SIERRA CLUB, TOIYABLE CHAPTER

Comment ID	Submittal ID	Comment Text	Response Text	Last Name	First Name	Org Name
308	54	The adequacy and viability of the reclamation bond and any additional financial assurance can be a critical factor in whether or not a project is environmentally acceptable - especially in considering longterm post closure operations, maintenance and monitoring. Recommendation: Identify in the Final EIS the bond amounts for each closure and reclamation activity at all of the proposed project facilities. Specify who would be responsible for any postclosure cleanup actions should they be necessary. Discuss in the Final EIS whether long-term post-closure operations and maintenance or monitoring may be necessary, describe these activities, indicate the projected costs for these activities, and discuss any requirements BLM would impose on the mine operator to establish a trust fund or other funding mechanism to ensure post-closure care, in accordance with 43 CFR 3809.552(c). The financial assurance necessary to fund post-closure activities must be kept current as conditions change at the mihe, and BLM should ensure that the form of the financial assurance does not depend on the continued financial health of the mine operator or its parent corporation. If a trust fund would be needed, the Final EIS should include a general description of the trust fund. The mechanics of the fund are critical to determining whether sufficient funds would be available to implement the post-closure plan and reduce the possibility of long-term contamination problems.	Comment noted. It is not the BLM's policy to include estimated costs of the bond, reclamation, or long-term maintenance in NEPA documents. Information on the RCE and/or the financial guarantee amount, while public information, is not included in the environmental analysis. The RCE and financial guarantee amount are not required components of a complete Plan of Operation but are part of the BLM's enforcement program. The public comment period should focus on the Plan of Operations and the associated environmental analysis (H-3809-1 Surface Management Handbook 9/17/2012; page 4-37 [BLM 2012a]). Reclamation and closure costs are time-sensitive, which is why the BLM Authorized Officer in accordance with the 43 CFR 3809 regulations has the authority to review and require cost updates at any time to ensure bond adequacy. In addition, as provided for in 43 CFR 3809.552(c), the BLM Authorized Officer has the authority to require additional bonding and/or a long-term trust. The BLM routinely reviews the reclamation cost estimate and bond during the life of the Project. If the need arises, the BLM Authorized Officer can determine that a long-term trust is needed and required, in which case a long-term trust would be established to address the specified need. Under the 43 CFR 3809 regulations, there is no limitation on the time-frame for the BLM to require monitoring, maintenance, or treatment of facilities at a mine site. The timeframe is indefinite or as long as it takes. No change to the text of the FEIS has been made to address this comment.	MARTYN GOFORTH	KATHLEEN	USEPA
457	65	The list of violations is endless. WHY should any corporation with such a record be allowed to continue profiting from the destruction of America's Public Lands? Consider data included in these articles: http://www.reviewjournal.com/news/water-environment/epa-fines-barrick-gold-nevada-mine-record-violations http://protestbarrick.net/downloads/DebunkBarrick-Report_fnl_web_single.pdf	Comment noted. This EIS is focused on the NEPA process and evaluation of impacts associated with Barrick's proposed Plan of Operations Amendment and Reclamation Permit application for the Proposed Action and alternatives for the Bald Mountain Mine. The information included in the links you provided is outside the scope of this EIS.	OSTER	SHERRY	
370	58	When you issue a permit it falls on the state to monitor it, that never works out for the public as both sides just point fingers. The State of Nevada will look the other way and let these mines monitor their own emissions Barrick has been fined so many times it is just the price of doing business, so they pay their fines with credits for Sage Hen habitat on their ranches and grazing allotments.	Comment noted. Monitoring requirements and responsibilities are clearly defined by the BLM and State of Nevada regulations.	GILBERT	SHAUN	
107	49	Chapter 2, Section 2.1.1.10, Page 2-78: Under Proposed Open Pits, remove Saga from the last full line in the paragraph as the Saga Pit will be mined.	"Saga" was deleted from the text per comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
108	49	Chapter 2, Section 2.4.1.12, Page 2-84, Line 13-15: Suggested change in sentence: "Additionally, the steeper slope angle would minimize water infiltration into the RDAs, increase run-off, and limit the potential to generate acid rock drainage by minimizing water contact with PAG material." Suggested replacement sentence, adding what is shown in red: "Additionally, the steeper, inter-bench slope angle would minimize water infiltration into the RDAs, increase run-off, and limit the potential to generate acid rock drainage by minimizing water contact with any incidental PAG material."	Text edit made per comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
109	49	Chapter 2, Section 2.4.1.12, Page 2-84, Line 22-23: Suggested change in sentence: "Growth media includes salvaged material to be used for covering facilities during reclamation." Suggested replacement sentence adding what is shown in red: "Growth media includes salvaged material suitable to be used for covering facilities during reclamation."	Text edit made per comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
110	49	Chapter 2, Section 2.4.1.12, Page 2-89, Figure 2-4-9: Revise figure to remove the gold solution flow lines and refinery as there is no refinery or if the desire is to show a typical process flow diagram, the update the note in the legend to reflect that the gold solution flow does not occur at the permitted facilities.	The legend of the figure was modified to state that the gold solution flow does not occur at the permitted facilities.	ERICKSEN	BETH	BARRICK GOLD U.S.
111	49	Chapter 2, Section 2.4.2.3, Page 2-97: Universal comment -Add "Gator" to the title.	"Gator" added to the title per comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
112	49	Page 2-120, Table 2-4-54: Remove the "A" from the AWRMP throughout the text, tables, and figures because the management is now prescriptive and not adaptive per Tom Olsen's direction. Tom Olsen stated in his email of Oct 28, 2014 that, "I am not looking for an Adaptive Management scenario with respect to waste rock, I need very specific identified criteria that establishes PAG from NPAG rock". The criteria have been established through the new mitigation measures that were developed after Oct. 2014. As such, the waste rock management plan has been updated to reflect the requirements as outlined in Mitigation Measures WR-3 and WR-4. With the NNP less than 0 for PAG management, then there are no adaptive requirements since the yellow waste will be managed as PAG. A meeting is scheduled on September 16, 2015 with the BLM to present the WRMP.	The Revised Waste Rock Management Plan (Tetra Tech 2016) was developed specifically for the Western Redbird Modification Alternative and incorporates the specific criteria that BLM identified that distinguishes PAG from non-PAG waste rock. Because the Revised Waste Rock Management Plan is specific to the Western Redbird Modification Alternative, the Adaptive Waste Rock Management Plan (Schafer 2012a, b) is still applicable to the Proposed Action and Reconfiguration Alternatives, and mitigation measures WL-3 and WL-4 apply to the Proposed Action and Reconfiguration Alternative. Mitigation measures WL-3 and WL-4 do not apply to the Western Redbird Modification Alternative because these measures were incorporated into the Revised Waste Rock Management Plan. Chapter 2 has been modified accordingly.	ERICKSEN	BETH	BARRICK GOLD U.S.
114	49	Page 2-129, Table 2-4-54: The ACM on p. 2-129 second bullet that states " The proposed NOA and SOA Projects would comply with the statutes governing spill prevention… SARA, Section 304" is not a Barrick ACM from the 2012 PoO and should be deleted. Additionally, the previous bullet indicated how materials would be managed in accordance to the regulations. The NDEP and NDOT have promulgated Nevada-specific regulations to address spill prevention and emergency response which take primacy over the statues referenced in the second bullet. This measure does not accurately reflect the scope of Barrick's commitments. The remaining text that starts with "Temporary on-site hazardous waste storage …." can be combined with the first bullet in this section.	Text edits made per comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
115	49	Page 2-130, Table 2-4-54: Modify the third bullet on p. 130 for the ACM starting with "Prior to commencing chemical control programs …" - to "Prior to commencing herbicide programs …"	Text edit made per comment	ERICKSEN	BETH	BARRICK GOLD U.S.

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160	18	On the map (Figure 2.4-6) it shows White Pine County road #1 going north from S.R. 892 to the Elko county line. W.P. #1 will not be utilized by BMM. W.P. #1000 will be the main access point on the western portion of the study area from BMM to the Elko County line.	Figure edits made per comment.	MILLER	WILLIAM	WHITE PINE COUNTY ROAD DEPARTMENT
162	18	We need to add W.P. #6 (Overland) from W.P. #3 to W.P. #1000 as an access route.	Figure edits made per comment	MILLER	WILLIAM	WHITE PINE COUNTY ROAD DEPARTMENT
185	50	Please state that the mule deer design features are common to all alternatives except the No Action Alternative.	The introduction to Section 2.5, Alternatives to the Proposed Action, already mentions that all design features and applicant-committed measures described for in the Proposed Action would, as applicable, be required for the Reconfiguration Alternative and the WRM Alternative. No change to the EIS was made.	LESMEISTER	LINDSEY	NDOW
186	50	We would suggest that temporary facilities, such as trailers, light plants, and parked equipment would not be located not only within mule deer migration corridors but should not be location adjacent to mule deer migration corridors.	Comment noted. Barrick has committed to not locating temporary facilities within designated mule deer corridors during the active migration periods. Barrick will take into consideration the potential locations of required temporary facilities outside of, but adjacent to, designated mule deer corridors, but needs to maintain flexibility in the operations. No change to the EIS was made.	LESMEISTER	LINDSEY	NDOW
187	50	Please add bitterbrush to the list of shrub species in the 7,000' and below seed mix.	Antelope bitterbrush added to the recommended seed mixture below 7000 feet per comment.	LESMEISTER	LINDSEY	NDOW
246	51	p. 134: Any temporary facilities should not be located within or adjacent to mule deer migration corridors. These would include trailers, parked equipment, light plants, etc. These should be well outside the corridors. NDOW consultation should provide the science as to distance.	See response to comment #186.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
247	51	p. 134: seed mix for elevations below 7000 ft. should include bitterbrush, a preferred and key browse for deer.	Antelope bitterbrush added to the recommended seed mixture below 7000 feet per comment.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
293	54	In Table 2.4-54, there are references to both "WRMP" and "A WRMP". Recommendation: If these acronyms both describe the same plan, revise this table to ensure consistency and clarity. If these acronyms describe different plans, include further detail in the Final EIS to differentiate between the two.	Table 2.4-54 and the FEIS was updated such that the acronym AWRMP applies to the Adaptive Waste Rock Management Plan (Schafer 2012a, b) that is applicable to the Proposed Action and Reconfiguration Alternative. A Revised Waste Rock Management Plan (Tetra Tech 2016) that is specific to the Western Redbird Modification Alternative was prepared by Barrick for the FEIS. The acronym RWRMP refers to the Revised Waste Rock Management Plan. See response to comment 112.	MARTYN GOFORTH	KATHLEEN	USEPA
355	57	A BLM press-release that was posted in the Elko Daily Free Press indicated that there would be 4 new heap-leach pads in the NOA. However, the DEIS reflects 3 new HLFs -- 2 in the NOA, 1 in the SOA. Could Barrick have modified its application recently, and did BLM not yet have a chance to amend the DEIS accordingly? Or was the press-release in error? http://elkodaily.com/mining/blm-seeks-comments-on-bald-mountain-project/article_3cdda8ca-60d c-5d94-876d-74accc96e550.html#utm_source=elkodaily&utm_campaign=/emails/dailyheadlines/&utm_medium=email&utm_content=headline This discrepancy needs to be resolved. Further, BLM should reveal by how much existing pits, HLFs, and RDAs would be expanded.	As stated in the Proposed Action Section 2.4.1 North Operations Project, the proposed activities in the NOA Project would include modification of three existing HLFs (Winrock, LBM and BMM 2/3 HLFs) and one associated process facility (BMM 2/3 process area), and development of two new HLFs (North and South Poker Flats HLFs) and four associated process facilities (North Poker Flats, South Poker Flats, Winrock, and LBM process areas). Sections 2.4, 2.5.1, and 2.5.2 describe which facilities are expanded or new for the Proposed Action, Reconfiguration Alternative, and Western Redbird Modification Alternative, respectively.	DEVLIN	MARYBETH	
421	62	Table 2.4-54 (DEIS p. 2-123 and 2-125) In discussing herbicide application, the DEIS does not consider types of herbicides, and their effects on wildlife, insects and desirable plant life. As for Special Status species, it says that noxious weed control would not be conducted within .5 mile of eagle nests and further, that their application would be carefully considered, hand spraying to be used when possible, around special status species in breeding season. The distance and timing are insufficient to protect eaglets. Suggest removal of noxious weeds by hand for the special status species as well as in other sensitive areas.	Herbicide treatment would be applied only when necessary and would be selected in consultation with the BLM and the Tri-County Weed Control Group to take into consideration sensitive species and timing according to the Noxious Weed Management Plan. No changes were made to the EIS.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
325	56	In our scoping comments we expressed concerns about the size of the proposed project and mine expansion, as well as the accuracy of the information provided to the public by the Bureau of Land Management (BLM) and the discrepancy between the BLM information and that provided by the Franco-Nevada Corporation website. We asked the BLM to clarify any and all discrepancies between the information the agency is releasing to the public and the information the mining company is providing to the agency.	The BLM has verified all information that it has released. Release of information by the Franco-Nevada Corporation is outside of the scope of this EIS or the BLM's control. However, this comment has been passed on the Barrick. No change to document.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
29	13	We know that the BLM's "multiple use" mandate does not require the agency to expand mining operations. We know that the BLM's "multiple use" mandate does not require the agency to approve each and every mining proposal that is submitted. We know that the BLM's "multiple use" mandate can and should be managed smartly, especially when it would severely compromise, undermine, or restrict the other "multiple uses" of the lands that would be affected by it. That is why the BLM must say NO to the Bald Mountain Mine expansion in order to fulfill their mandate to protect the wild horses who are currently living in the Triple B HMA, the other wildlife and the land.	The BLM is responsible for management of public lands based on the principles of multiple uses set forth in FLPMA and other Federal laws. The General Mining Law of 1872, as amended, allows exploration and development of valuable mineral deposits on those Federal lands that are open for mining claim location. Barrick has located mining claims and has submitted a Plan of Operations and Reclamation Plan for the project to BLM and the State of Nevada for review to meet 43 CFR Subpart 3809 regulations and State regulations to prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws. This EIS fully analyzes and discloses the impacts of the proposed project and alternatives on the affected resources, including mitigation designed to avoid, reduce, minimize, or eliminate impacts.	HUNT	DEBRA	

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35	14	Because Barrick is intending to sell Bald Mountain in the near future, some may think that it may be more appropriate for the new operators to provide the EIS, and Barrick's promises and representation made in the EIS would only hold them accountable for a very short amount of time before the mine is sold. How can the community, and the citizens be sure that Bald Mountain would be managed in the responsible way that Barrick purports to?	Barrick sold the Bald Mountain Mine to Kinross Gold Corporation (Kinross) in January 2016. Kinross as the new operator of the Bald Mountain Mine would be required to follow the approved Plan of Operations (PoO) and the conditions for approval (e.g. mitigation measures) or they would need to modify the PoO. Kinross would be required to provide an acceptable replacement financial guarantee on all obligations and conditions created by Barrick under regulation 43 CFR 3809.116. This information has been added to Chapter 1.	BOGDON	JAKE	
37	14	Furthermore, any job-creation claims made by Barrick should not be entertained, as they have recently moved around their local workforce, reduced staff, failed to hire residents, AND, there are no guarantees that employees will be able to retain their jobs once the mine is sold. Barrick Director of Communications for North America, Lou Schack, stated the following: "More recently, we announced that our Finance and Supply Chain management functions would also move from SLC to Henderson," Schack said. "This affects about 30 positions between the two groups. Employees who do not relocate to Henderson are offered severance. Many of those eligible for severance will stay on through the third quarter or the end of the year in some cases." "Exploration has reduced about 50 positions, most of which were contract geologists and geotechnical engineers. The reductions also included about 15 salaried staff positions. Barrick's U.S. exploration group now employs about 65 people, Schack said" http://elkodaily.com/mining/barrick-details-workforce-reductions/article_30e70ad2-a3f7-5601-9943-9d86f40441ba.html Consequently, ANY JOB CREATION ARGUMENTS PUT FORTH BY BARRICK, IN AN EFFORT TO ENCOURAGE THE APPROVAL OF THE EIS, SHOULD BE DISCREDITED!	Barrick operates several gold mines in Nevada and understands the number of workers required to construct, operate, and close a mine. The workforce numbers provided by Barrick for the proposed expansion over the life of the project are reasonable when compared with the existing workforce and other mine expansions of similar size in the region. Disclosure of the estimated workforce as part of the socioeconomics evaluation is one item out of many factors and resources where impacts are evaluated as part of the EIS. The ROD for the EIS and Plan of Operations is not contingent on workforce estimates.	BOGDON	JAKE	
39	14	Again, because Barrick is in the process of selling the mine – according to statements made by Barrick's Executive Management Team to Investors – the EIS submitted by Barrick should not be approved at this time. If Barrick is Not looking to sell the mine, then Barrick's Executive Management Team Needs to inform investors, and other stakeholders. Until then, it seem premature to approve an EIS for a company who nobody knows will be operating the mine, or responsible for the area, in the next few weeks or months.	Barrick sold the Bald Mountain Mine to Kinross Gold Corporation (Kinross) in January 2016. Kinross as the new operator of the Bald Mountain Mine would be required to follow the approved Plan of Operations (PoO) and the conditions for approval (e.g. mitigation measures) or they would need to modify the PoO. Kinross would be required to provide an acceptable replacement financial guarantee on all obligations and conditions created by Barrick under regulation 43 CFR 3809.116. This information has been added to Chapter 1.	BOGDON	JAKE	
189	50	It is understood that should the WRM Alternative be selected that some of the previously authorized disturbance would not be developed/disturbed and some of the existing disturbance would undergo concurrent reclamation. The question is whether these previously authorized developments would be put on hold in perpetuity unless a subsequent, future analysis and ROD brought them back on the table? If this is correct it should be indicated for the WRM and Reconfiguration alternatives.	Previously authorized disturbance that would not be developed under the WRM Alternative would not be developed under this NEPA action. The operator could decide in the future to submit a modified PoO to develop some or all of these previously authorized disturbance areas, and/or new areas, and this would trigger another NEPA action that would evaluate the impacts of the action. No change was made to the EIS.	LESMEISTER	LINDSEY	NDOW
202	50	Would the necessary NEPA analysis for these two guzzlers be covered in this EIS? If not, please identify that the mine operator would be responsible for the necessary additional NEPA on the construction of the two additional guzzler replacements.	Yes, the NEPA analysis for the two guzzlers impacted by mine expansion would be included in this EIS.	LESMEISTER	LINDSEY	NDOW
284	53	In regards to the water evaluation and methodology, I have no comments. I do not believe I am technically qualified to comment on these sections but my reluctance to comment points out a need of technical assistance for the Tribes when we read and comment on EIS's.	Comment noted. The BLM would be happy to address any comments the tribes may have on water resources or any other resources potentially affected by the project.	BANUELOS	CLIFFORD	ELKO BAND COUNCIL
309	54	Applicant-Committed Environmental Protection Measures EPA notes that Table 2.4-54 on page 2-116 identifies several design features and Applicant-committed Environmental Protection Measures that are tied to the existing mine owner Barrick Gold U.S., Inc. Absent these Applicant-committed Environmental Protection measures, the environmental impacts associated with the proposed project would be greater for a number of resource areas. It is important to also note that the Draft EIS' analysis of potential direct and indirect impacts from the Proposed Action assumed the implementation of design features and Applicant-committed Environmental Protection Measures. Recommendation: Include all Applicant-committed Environmental Protection Measures discussed in the Draft EIS as enforceable commitments in the Final EIS and Record of Decision.	Comment noted. The Applicant-committed Environmental Protection Measures in the FEIS will be enforceable commitments as part of the ROD for the Project.	MARTYN GOFORTH	KATHLEEN	USEPA
311	55	As a general note, the environmental impacts and cumulative effects that BLM identifies and analyzes in the DEIS must reflect the full 30-year trajectory of the Proposed Project.	Comment noted. The EIS evaluates short-term and long-term impacts of the project, including cumulative impacts. Section 3.1 Introduction to the Affected Environment and Environmental Consequences section mentions that unless otherwise noted on a resource specific basis, for the Proposed Action, short-term impacts are defined as the 25-year construction and operational life, including the initial years of reclamation. Long-term impacts would include the remainder of reclamation and continue post-reclamation, beyond 25 years for the Proposed Action. Consideration of closure and post-closure monitoring would extend the project timeline beyond 30 years for the Proposed Action.	WAGMAN	BRUCE A	SCHIFF HARDIN
454	65	Before this EA or FONSI is signed or agreed upon, there must first be a complete evaluation (validated by independent scientifically proven information) of the following specific points: Can the BLM enforce rules on the proponent to eliminate impacts?	The BLM has included several additional mitigation measures for some resources to reduce or eliminate environmental impacts beyond the Applicant-committed Environmental Protection Measures identified in Chapter 2 of the EIS. The mitigation measures will be part of the ROD and will be enforceable. Not all impacts can be entirely eliminated.	OSTER	SHERRY	

Comment ID	Submittal ID	Comment Text	Response Text	Last Name	First Name	Org Name
383	59	Full disclosure and analysis of all environmental impacts of the proposed action on the environment must be included, such as the amount of water that would be used daily and annually and the estimated increase of traffic and related details like truck types and frequency of use, as well as any other salient details concerning proposed activities that would affect the environment.	The EIS fully discloses and analyzes all impacts from the Proposed Action, Reconfiguration Alternative, WRM Alternative, and the No-action Alternative.	HENNESSY	EILEEN	
401	62	GBRW does thank BLM for the 15 day comment period extension. However, as expected it was not enough time for GBRW to fully review the DEIS, and we are sure that the general public was also at a loss here. The need to refer to the 2009 EIS and supporting documents required that Bureau of Land Management (BLM) allow a 90-120 day comment period. The initial issuance of 45 days for comment is just ridiculous. GBRW is aware that BLM is under pressure by the industry and maybe some of our Nevada politician to move mine siting along more quickly. The Bald Mountain mine is too large and significant in the region to cut off the comment period to less than 90 days. To most people the information in the document is all new unlike BLM and the industry who have been discussing the EIS for at least a year before the notice of release of the DEIS. The BLM has a service to provide to the public and obligation under the National Environmental Policy Act for public understanding, transparency, and thoughtful commentary. Time is required to digest and assimilate the information formulate meaningful and useful feedback to the federal agency.	Comment noted. The BLM extended the comment period for an additional 15 days for a total of 60-days to allow for public comment on the DEIS. The BLM believes that 60-days (two months) was sufficient time to review the document and provide constructive comments.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
434	64	Noted ground disturbance approval and proper procedure to seek consultation with BLM.	Comment noted.	SCHULZ	SUSAN	ELY SHOSHONE TRIBE
436	64	NEPA process does help resolve problematic agreements.	Comment noted.	SCHULZ	SUSAN	ELY SHOSHONE TRIBE
117	49	Chapter 2, Section 2.5.1.1, Page 2-177: Both GMSs need to be added to the list of facilities under the Royale Area. Update narrative, Table 2.5-1, Table 2.5-15, and acres in text to reflect that the Royale area will have 2 GMSs that won't be built.	Growth media stockpiles (GMSs) were added to Royale Area section of facilities that would not be constructed under the Reconfiguration Alternative.	ERICKSEN	BETH	BARRICK GOLD U.S.
156	49	Chapter 2, Section throughout: For the Reconfiguration Alternative and the Western Redbird Modification Alternative, the larger Top Pit would be mined however there will not be enough leach pad capacity to accommodate Top Pit ore without developing the proposed LBM Heap Leach Facility (HLF) and LBM associated facilities. The LBM HLF has a capacity for approximately 84 million tons of ore and a proposed disturbance footprint of 238 acres. The required associated LBM facilities would include: the LBM Process Area, LBM Ancillary, growth media stockpiles, haul roads, and the waterline and powerline corridors for a grand total of 392 acres. As described in the Plan of Operations, the proposed LBM HLF would include the material from the reclaimed and released LBM Heap. The LBM HLF would be 250 feet in height.	The LBM HLF components were included in the updated Reconfiguration Alternative and Western Redbird Modification Alternative sections of the Final EIS.	ERICKSEN	BETH	BARRICK GOLD U.S.
184	50	We understand that Barrick will request the addition of the proposed LBM Heap Leach Facility (HLF and LBM associated facilities to both the Reconfiguration and Western Redbird Modification altermatives. This proposal would include the associated LBM facilities identified in the proposed action with the exception of the haul road from the LBM HLF to the Bida Pit complex. NDOW is concerned about the impacts to sage grouse habitats as well as secondary impacts to mule deer (habitat and patterns of movement). We would like Barrick to consider the option of using existing facilities such as in Mooney Basin to stack and process ore. The ability to do such may reduce the impact of or the eliminate the need for development of the LBM HLF. We welcome the removal of the haul road between the LBM HLF and the Bida Pit complex.	Comment noted. The LBM HLF components were inadvertently left off the redesign of the Proposed Action for the Reconfiguration Alternative and Western Redbird Modification Alternative by Barrick in the Draft EIS. Barrick has considered other options to the LBM HLF components, but the LBM HLF addition is the only one that works for the project. There will not be enough leach pad capacity to accommodate Top Pit ore without developing the proposed LBM Heap Leach Facility (HLF) and LBM associated facilities. Haul distances to other HLFs are too great to be economical.	LESMEISTER	LINDSEY	NDOW
188	50	In the discussion referencing NDOW recommendations for the number of migration corridors we need to state that the recommendation was 2 existing and utilized corridors per side were desirable but no fewer that 3 existing corridors for the entire width of the project. This is an important distinction to make in the conversation concerning migration corridors and justifies the additional measures presented in the WRM alternative.	Comment noted. The second paragraph under Section 2.5 Alternatives to the Proposed Action on page 2-154 of the Draft EIS clearly states that "Furthermore, recommendations within the report [NDOW 2012a] expressed the need for multiple existing corridors with no fewer than 3 existing corridors for the entire width (12 miles) of the project...." The existing language in the Draft EIS is sufficient to convey NDOW's recommendations to have multiple corridors. No changes were made to the EIS.	LESMEISTER	LINDSEY	NDOW
279	52	Barrick Mining has recently requested that BLM include the Little Bald Mountain heap leach pad in the selected alternative of the Bald Mountain EIS. Reportedly the mine has concluded it has inadequate leach facilities for the ore produced by the Top Pit quarry without the addition of the Little Bald Mountain leach facility. We recommend the feasibility of hauling Top Pit ore to one of the existing heap leach pads be analyzed in lieu of constructing a new heap leach facility that would destroy valuable sage grouse habitat.	Comment noted. The LBM HLF components were inadvertently left off the redesign of the Proposed Action for the Reconfiguration Alternative and Western Redbird Modification Alternative by Barrick in the Draft EIS. Barrick has considered other options to the LBM HLF components, but the LBM HLF addition is the only one that works for the project. There will not be enough leach pad capacity to accommodate Top Pit ore without developing the proposed LBM Heap Leach Facility (HLF) and LBM associated facilities. Haul distances to other HLFs are too great to be economical.	JOHNSON	LARRY J	THE COALITION FOR NEVADA'S WILDLIFE
175	41	The state of Nevada depends on income derived from hunting and fishing opportunities to underwrite the costs of wildlife management in Nevada. The Nevada State Legislature's contribution to NDOW's management program is minimal. The income derived from the "opportunity to hunt" this migrating mule deer herd is a significant contributor to meeting Nevada's wildlife management responsibilities.	Reference to this has been added to the analysis, but in general, the economic impact of hunting is discussed in Section 3.17, Socioeconomics, not Recreation.	VON SEGGERN	DAVID	SIERRA CLUB, TOIYABLE CHAPTER
182	50	In describing the potential effects on the WRM alternative on recreation, I don't follow the logic provided. Since the WRM alternative would lead to less infrastructure development and a better outcome for the mule deer herd wouldn't it stand to reason that there would be less impacts on recreation that the other alternatives?	The ES statement revised to better disclose the similarity and differences between the Reconfirmation Alternative and the WRM alternative in terms of impacts to recreation, and in particular, mule deer.	LESMEISTER	LINDSEY	NDOW
53	24	As federal administrator of the Pony Express National Historic Trail (NHT), the National Park Service (NPS) is interested in the visual impacts of these proposed expansion projects as they would be seen from key NHT resources. The NPS historic trails office, National Trails Intermountain Region (NTIR) asks to be a Section 106 consulting party and to participate in development of the cultural resources treatment plan. The NPS, through NTIR, further asks to be notified and invited to consult any time a proposed project is determined to have potential to adversely affect the Pony Express, California, and Oregon National Historic Trails. NTIR's point of contact is Lee Kreutzer, Archeologist\Cultural Resources Specialist, who can be reached at Lee_Kreutzer@nps.gov, by surface mail at 324 S. State Street, Ste. 200, Salt Lake City, UT 84111, and by telephone at (801) 741-1012 ext. 118.	In consultation with the State Office, opportunities to consult are always available and the BLM will reach out to the NPS to be a consultant rather than rewrite the current PA. No change to document.	LEE	MARTHA J	NATIONAL PARK SERVICE

Comment ID	Submittal ID	Comment Text	Response Text	Last Name	First Name	Org Name
87	42	The statements regarding the provisions of the Programmatic Agreement among the Bureau of Land Management, Egan Field Office and the Nevada State Historic Preservation Officer Regarding the Bald Mountain Mining District Project (executed February 2013 with a 10-year duration clause), its provisions, as well as the status of cultural resources inventory within the area of potential effect (APE) are all accurate. Inclusion of that PA as an appendix will prove useful to understanding the provisions in place for ensuring compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended.	The PA was included in the Draft EIS as appendix H. It is included in the Final EIS as Appendix I.	ERNSTEIN	JULIE	STATE HISTORIC PRESERVATION OFFICE
281	53	One of my primary concerns involves the "Programmatic agreement Among the Bureau of Land Management, Egan Field Office and the Nevada State Historic Preservation Officer Regarding the Bald Mountain Mining District Project". At the October 2, 2015, visit to the Bald Mountain Mining Site, the Barrick employee who conducted our safety training and Informational session let it be known that Barrick is actively looking to sell the mine. My concern is whether the stipulations and other terms of that agreement laid out in the programatic agreement transfer over to a new owner or whether a new agreement needs to be written after the sale to ensure that the concerns of the Tribes are addressed by the mine and BLM, Nevada SHIPO, and other oversight and compliance agencies.	Barrick sold the Bald Mountain Mine to Kinross Gold Corporation (Kinross) in January 2016. Kinross as the new operator of the Bald Mountain Mine would be required to follow the approved Plan of Operations (PoO) and the conditions for approval (e.g. mitigation measures and Programmatic Agreement) or they would need to modify the PoO. Kinross would be required to provide an acceptable replacement financial guarantee on all obligations and conditions created by Barrick under regulation 43 CFR 3809.116. This information has been added to Chapter 1.	BANUELOS	CLIFFORD	ELKO BAND COUNCIL
36	14	Without any promises that Barrick would continue to operate the mine once it is sold, the EIS should not be entertained. Because Barrick is currently in the process of selling Bald Mountain, and several other mines – in the near future – it seems too premature to approve, or even entertain the EIS, because Barrick will not be operating the mine once it is sold.	Barrick sold the Bald Mountain Mine to Kinross Gold Corporation (Kinross) in January 2016. Kinross as the new operator of the Bald Mountain Mine would be required to follow the approved Plan of Operations (PoO) and the conditions for approval (e.g. mitigation measures) or they would need to modify the PoO. Kinross would be required to provide an acceptable replacement financial guarantee on all obligations and conditions created by Barrick under regulation 43 CFR 3809.116. This information has been added to Chapter 1.	BOGDON	JAKE	
450	65	Before this EA or FONSI is signed or agreed upon, there must first be a complete evaluation (validated by independent scientifically proven information) of the following specific points: Impacts on local communities (including socio-economic impacts) The effects of a degraded environment and/or altered regional identity on public property values and quality of life for the visiting public. Compute the true cost (including financing costs) to the public for the project. Taxpayer investments in infrastructures that ultimately benefit private corporations	Impacts to communities and quality of life are disclosed in Section 3.17. financing and taxpayer investment decision are beyond the scope of this EIS.	OSTER	SHERRY	
372	58	The out of state mine workers have polluted and poached Ruby Valley so bad it is truly disgusting to the residents, we have never seen a group of people come to our Valley with such disregard for the humans and wildlife that live here. The mines hire vey few locals and most of workers pay very little local property tax, they know their time is limited in a Boom and Bust industry like Gold Mining.	Comment noted. Local and nonlocal hire estimates are included in Section 3.17.	GILBERT	SHAUN	
150	49	Chapter 3, Section 3.17.1.2, Page 3.17-26: Add "Employment" to the title "Operations and Total "	Revised as indicated.	ERICKSEN	BETH	BARRICK GOLD U.S.
151	49	Chapter 3, Section 3.17.2.3, Page 3.17-28: Include the reduction in the duration of mining on the west side of the NOA in the first paragraph of this section.	Revised as indicated.	ERICKSEN	BETH	BARRICK GOLD U.S.
152	49	Chapter 3, Section 3.17.2.3, Page 3.17-29: The first full paragraph on this page should be revised to reflect a "significant" reduction in hunting economic impacts with the reduced WRM Alternative footprint and duration of mining the west side of the NOA as this alternative significantly reduced the mine footprint in this area as well as significantly reducing the duration of mining activities in this area. Characterizing this alternative impacts on hunting economics as "similar to, but potential reduced from the Reconfiguration Alternative" seriously under values the reduce impact the WRM Alternative represents to this issue.	Section revised to indicate that it is expected that more positive outcomes for the MA 10 deer herd would have a positive effect on the socioeconomics of hunting.	ERICKSEN	BETH	BARRICK GOLD U.S.
183	50	We need to highlight the fact that the WRM alternative would have a more positive outcome for the MA 10 deer herd that the other identified alternatives and thus would have a positive effect on the socioeconomics of hunting.	Section revised to indicate that it is expected that more positive outcomes for the MA 10 deer herd would have a positive effect on the socioeconomics of hunting.	LESMEISTER	LINDSEY	NDOW
244	50	One of the considerations that is missing from the impact analysis is the issue of the importance of this deer herd to the current operational health of NDOW. A signficant amount of income that funds this agency is generated from the MA 10 mule deer resource. Any impact to this resource will reduce the abuility of this agency and the State of Nevada to exercise its legislative mandate to preserve, protect, manage and restore wildlife and their habitats within the State.	Section 3.17, page 5 identifies the contribution of MA 10 (22.9 percent to 33.81 percent of the statewide total, averaging 26.5 percent) using NDOW data. Section revised to indicate that NDOW is largely funded by hunting. . Analysis of the Proposed Action also revised to note that reduction in hunting opportunities would reduce the funding available to NDOW for wildlife management. See also response to comment 183.	LESMEISTER	LINDSEY	NDOW
131	49	Chapter 2, Section 2.8, Page 2-243: In Table 2.8-1 on page 243, change one week to two weeks because: The migratory bird active nest survey period is typically 14 days in BLM guidance. The ACM on p. 2-124, first bullet under "Wildlife Resources" states the survey period is 2 weeks.	Comment noted. Updated BLM guidance recommends migratory bird nest surveys be conducted within 7 days prior to any surface disturbance. This was implemented for the PAN mine project recently.	ERICKSEN	BETH	BARRICK GOLD U.S.

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299	54	On page 3.4-7, the Draft EIS indicates that approximately 5.4 to 10.4 million cubic yards of growth media would be available from the North and South Operations Areas collectively. The Draft EIS then states that salvageable growth media may be insufficient due to steep terrain, limited thickness, and rock fragment content. It is not clear how much suitable growth media will be available for reclamation. With the potential for insufficient salvageable growth media, reclamation activities may depend on the use of soil amendments. The Draft EIS does not disclose the estimated amount of soil amendments needed nor the source of such amendments. It is also unclear whether the relative amounts of salvageable growth media and availability of soil amendments would impact decisions on soil depths to be used for reclamation activities. Recommendation: Discuss in the Final EIS the contingencies in place relative to how much soil will be available for reclamation and how much additional soil amendment may be needed. If additional soil amendments would be needed to improve the growth media, include a brief discussion as to the quantities available, how this material would be acquired, and from what offsite location(s) it would be obtained and transported.	The text has been revised to provide further detail on how any shortfall in growth media would be handled. Additional detail has been added on the types of amendments that may be used. The specifics associated with the amended materials including quantities available, location, and how the material would be acquired may change over the course of the mine life. Depending on the material used and the amendments selected, the volumes of each would vary; therefore an estimate of volumes for these various combinations is unavailable but would be determined by the Bald Mountain Mine project management team during the near-term reclamation planning. Decisions associated with growth media depths will be sufficient to meet the revegetation standards provided in the Nevada Guidelines for Successful Revegetation (guidelines). Reclamation activities for bond release require that desirable species have been established successfully and provide sufficient aerial cover to adequately protect the site from soil erosion. Furthermore, reclamation of disturbed areas are completed in accordance with the BLM and NDEP regulations.	MARTYN GOFORTH	KATHLEEN	USEPA
392	60	We recommend that in the Record of Decision for the EIS (ROD), BLM commits to the following mitigation measures: Sediment and erosion control features as well as re-vegetated areas shall be inspected periodically and a least once between September 1 and October 15 annually to ensure long-term erosion control.	Revised as indicated.	SEDLACEK	NICOLE	U.S. FISH AND WILDLIFE SERVICE
181	50	NDOW was not a part of the MOU between Barrick, Newmont, USDOI, USDA, and Nevada DCNR for sage grouse.	Comment noted. The MOU has been replaced by requirements of the recently approved greater sage-grouse Land Use Plan Amendment. Appendix A of the FEIS contains BMPs and mitigation measures for GRSG.	LESMEISTER	LINDSEY	NDOW
227	50	Need to highlight the fact that the Conservation Actions Outlined within the MOU are common to all alternatives.	The MOU has been replaced by requirements of the recently approved Greater Sage-grouse Amendment. The BLM agrees that conservation measures under the Greater Sage-grouse Amendment are applicable to all action alternatives. Appendix A of the FEIS contains BMPs and mitigation measures for GRSG.	LESMEISTER	LINDSEY	NDOW
232	50	At the present time we are working off existing MOUs and the details of these MOUs are identified in this section, however, once the ROD for the sage grouse LUP amendment is signed the rules of the game will change. It would have been nice to identify this potential change in the current document to inform the public.	The MOU has been replaced by requirements of the recently approved Greater Sage-grouse Amendment. The changes in applicable conservation measures has been identified in Section 3.8 of the FEIS. Appendix A of the FEIS contains BMPs and mitigation measures for GRSG.	LESMEISTER	LINDSEY	NDOW
278	52	Barrick Mining has recently requested that BLM include the Little Bald Mountain heap leach pad in the selected alternative of the Bald Mountain EIS. Reportedly the mine has concluded it has inadequate leach facilities for the ore produced by the Top Pit quarry without the addition of the Little Bald Mountain leach facility. The Little Bald Mountain heap leach development will have greatest impacts on sage grouse with lesser impacts of loss of habitat to mule deer. All consideration of this addition must be in accordance with the requirements of the BLM Sage Grouse Plan for the State of Nevada.	Comment noted. The LBM HLF has been included in all action alternatives for the project. BLM incorporated all applicable conservation measures approved under the September 2015 Greater Sage-grouse Amendment into the FEIS and Record of Decision for the BMM. Appendix A of the FEIS contains BMPs and mitigation measures for GRSG.	JOHNSON	LARRY J	THE COALITION FOR NEVADA'S WILDLIFE

Comment ID	Submittal ID	Comment Text	Response Text	Last Name	First Name	Org Name
409	62	GBRW remains concerned about the long-term impacts to wildlife. There are critical mule deer migration routes that the Bald Mountain mine cuts across, and pigmy rabbit and sage grouse habitat that is being affected as well. The mere construction of the roads is a major disturbance to any ecosystem, and chops up potentially important road-less areas. In the case of sage grouse, this disturbance alone can prevent the birds from breeding that explored area (and access roads) for a very long time, since they are so sensitive to place. Resource extraction in both exploration and development, whether fluid, locatable and salable minerals constitute discrete impacts to SG according to the National Technical Team (NTT) report.(2) Sagegrouse are extremely sensitive to these discrete disturbance,(3) and thus resource extraction is completely incompatible with SG habitat, “There is strong evidence from the literature to support that surface-disturbing energy or mineral development within sage-grouse habitats is not consistent with a goal to maintain or increase populations or distributions.”(4) The nature and kind of development completely obliterates the habitat, and it is unclear how effective reclamation will be in restoring populations displaced by resource extraction. (2) NTT(National Technical Team). 2011. A Report on National Greater Sage-Grouse Conservation Measures. Produced by the Sage-Grouse National technical Team. Washington D.C. December 21, 2011. (3) Johnson, D.H., M.J. Holloran, J.W. Connelly, S.E. Hanser, C.L. Amundson, and S. t. Knick. 2011. Influence of environmental and anthropogenic features on greater sage-grouse populations. pp 407-450 in S.T. Knick and J.W. Connelly, editors. Greater Sage-grouse: ecology and conservation of a landscape species and its habitats. Studies in Avian Biology vol. 38. University of California Press, Berkeley, California, USA. Naugle, D.E., K.E. Doherty, B.L. Walker, H.E. Copeland, M.J. Holloran, and J.D. Tack. 2011a. Sagegrouse and cumulative impacts of energy development. Pp 55-70 in D.E. Naugle, editor. Energy development and wildlife conservation in western North America. Island Press, Washington, D.C., USA. Naugle, D.E., K.E. Doherty, B.L. Walker, M.J. Holloran, and H.E. Copeland. 2011b. Energy development and greater sage-grouse. Pp 489-503 in S.T. Knick and J.W. Connelly, editors. Greater sage-grouse: ecology and conservation of a landscape species and its habitats. Studies in Avian Biology vol. 38. University of California Press, Berkeley, California, USA. (4) NTT, 2011, pg. 19.	Comment noted. Access to locatable mineral claims remains open under the September 2015 Greater Sage-grouse Amendment. Potential impacts to wildlife and greater sage-grouse are disclosed in Section 3.7 Wildlife and Section 3.8 Special Status Species respectively. The BLM acknowledges the sensitivity of GRSG to disturbance and continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity. BLM incorporated all applicable conservation measures approved under the September 2015 Greater Sage-grouse Amendment into the FEIS and Record of Decision for the BMM. Appendix A of the FEIS contains BMPs and mitigation measures for GRSG.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
410	62	It is well known that sage grouse have very strong site fidelity,(5) so once the sage-grouse are displaced by resource extraction it is potentially a permanent loss to sage-grouse populations even with reclamation. The first two sage grouse conservation options stated in the COT report are:(6) 1. Avoid new mining activities and/or any associated facilities within occupied habitats, including seasonal habitats; 2. Avoid leasing in sage-grouse habitats until other suitable habitats can be restored to habitats used by sagegrouse. (5) Connelly, J.W., S.T. Knick, M.A. Schroeder, and S.J. Stiver. 2004. Conservation assessment of greater sage-grouse and sagebrush habitats. Unpublished Report, Western Association of fish and Wildlife Agencies. Cheyene, WY. 610 pp. Connelly, J.W., C.A. Hagen, and M.A. Schroeder. 2011. Characteristics and dynamics of greater sage-grouse populations. pp. 53-68 in S.T. Knick and J.W. Connelly, editors. Greater sagegrouse: ecology and conservation of a landscape species and its habitats. Studies in Avian Biology vol. 38. University of California Press, Berkeley, California, USA. (6) U.S. Fish and Wildlife Service. 2013. Greater Sage-grouse (Centrocercus urophasianus) Conservation Objectives: Final Report. U.S. Fish and Wildlife Service, Denver, CO. February 2013. pg. 49.	Comment noted. The BLM acknowledges findings in the sources cited in the comment regarding site fidelity of GRSG. Access to valid locatable mineral claims remains open under the September 2015 Greater Sage-grouse Amendment.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
411	62	Numerous studies show that sage grouse populations are effected as far as 4 miles or greater from the actual disturbance. The noise, dust, and constant activity of resource extraction (most operations are 24/7) deters sage grouse habitation far from the actual operations. As noted in the NTT report, “Impacts as measured by the number of males attending leks are most severe near the lek, remain discernable out to >4 miles, and often result in lek expirations.”(7) The NTT report goes on to conclude that, “ Even if this approach were to be continued [establishing a No Surface Occupancy, NSO, buffer around leks], it should be noted that protecting even 75 to >80% of nesting hens would require a 4-mile radius buffer (Table 1). Even a 4-miles NSO buffer would not be large enough to offset all the impacts reviewed above.”(8) The DEIS acknowledges close proximity of the project to sage grouse habitat and breeding grounds: (DEIS, p. 3.8-14) Figure 8.3-4 shows a complete overlap of the South Operations Yankee area with Preliminary Priority Habitat. There are several leks surrounding both North and South operations facilities with two overlapping (0.5 mile radius of the lek) at the Yankee operations boundary. Given the research as outlined above these mine facilities are within a more conservative 3-4 mile exclusion zone. Further expansion of this mine will only eliminate more habitat with a very uncertain time of recovery. (7) NTT(National Technical Team). 2011. A Report on National Greater Sage-Grouse Conservation Measures. Produced by the Sage-Grouse National technical Team. Washington D.C. December 21, 2011. (pg. 20)	Comment noted. Access to locatable mineral claims remains open under the September 2015 Greater Sage-grouse Amendment. Potential impacts to greater sage-grouse are disclosed in Section 3.8 Special Status Species. The BLM acknowledges the sensitivity of GRSG to disturbance and continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity. BLM incorporated all applicable conservation measures approved under the September 2015 Greater Sage-grouse Amendment into the FEIS and Record of Decision for the BMM. Appendix A of the FEIS contains BMPs and mitigation measures for GRSG.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH

Comment ID	Submittal ID	Comment Text	Response Text	Last Name	First Name	Org Name
145	49	Chapter 3, Page 3.8-12, Figure 3.8-3: The alignment of a portion of the main access road from Elko/Spring Creek is missing on this figure. Either remove the roads from the figures or update the legend to include roads.	The EIS has been revised to address comment. Access roads have been added to the figure.	ERICKSEN	BETH	BARRICK GOLD U.S.
146	49	Chapter 3, Section 3.8.2.1, Page 3.8-20&21, Table 3.8-4: The column heading "Ambient Noise Level (dBA)" should have a descriptor that clarifies that it is L90. This is particularly important because L90 is apparently being compared to Leq in this table which is of significance because they are two different metrics.	The FEIS has been revised to address comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
147	49	Chapter 3, Section 3.8.2.1, Page 3.8-20&21, Table 3.8-4: Include a column for Leq so as to be able to directly compare similar metrics as opposed to comparing L90 to Leq.	Comment noted. This table was reviewed and approved by BLM prior to the DEIS.Although the comparison is not direct, the modeled Leq provides an noise estimate that conservatively encompasses the full range of potential disturbance.	ERICKSEN	BETH	BARRICK GOLD U.S.
148	49	Chapter 3, Section 3.8.2.1, Page 3.8-20&21, Table 3.8-4: This table compares baseline data collected using an L90 metric to modeled data collected using an Leq metric. This is not a good comparison because these metrics are not the same and represent two different things: L90 shows the noise level that is exceeded 90% of the time whereas Leq averages the data over time and takes into account even the smallest loud events.	Comment noted. This table was reviewed and approved by BLM prior to the DEIS. Although the comparison is not direct, the modeled Leq provides an noise estimate that conservatively encompasses the full range of potential disturbance.	ERICKSEN	BETH	BARRICK GOLD U.S.
233	50	What is the reason for not modeling noise propagation for both alternatives? How can the impacts to sage grouse be fully analyzed if adequate information isn't provide? 9 out of 10 leks will be impacted by noise for the proposed action, should we just assume for all alternatives that if the lek is within the 3 mile buffer to the mine or mine infrastructure that noise impacts will occur and should be properly mitigated for such impacts?	Noise modeling was completed prior to the development of alternatives. Modeling of the Proposed Action represents the worst case scenario as distances to the leks would be the shortest under the Proposed Action in comparison to the other action alternatives. This modeling provides a conservative measure that can be used for comparison of the other alternatives based on their greatest distance from sage grouse leks. Additionally, mitigation measure SSS-1 requires the development of a Noise Mitigation Plan within 90 days of the date of ROD approval that includes monitoring of actual noise levels experienced at leks for whichever alternative is selected in the ROD. The Noise Mitigation Plan also would implement noise reduction measures in response to any noise levels that are greater than 10 dBA above ambient levels at leks. The BLM, Barrick, and NDOW are actively coordinating on the noise mitigation plan. Potential BMPs to be considered for inclusion in the Noise Mitigation Plan for noise reduction have been incorporated into the text of mitigation measure SSS-1 as requested.	LESMEISTER	LINDSEY	NDOW
234	50	Do the acreage figures incorporate the zone of influence from the proposed powerline?	Acreages reported to be within the zone of influence (ZOI) of proposed transmission lines is separate from the acreages reported as direct impacts. This has been clarified in text of Section 3.8.	LESMEISTER	LINDSEY	NDOW
235	50	It is unknown if noise from the proposed operations of the NOA and SOA will impact sage grouse, this statement is disingenuous because the noise analysis indicated that 9 out of 10 leks would have 10dBA exceedances. Now if this statement is all encompassing of the alternatives then this could be true but only because noise modeling propagation wasn't done for either alternative. Should the assumption be that if any leks are located within the three mile buffer that noise will impact them? Also the issue of the unknown of noise impacts on sage grouse is highly documented with recent literature and this should be documented and incorporated within this EIS	Text of the sentence has been revised to clarify that the extent of impacts resulting from noise is unknown, not that the potential for impacts is unknown. Further discussion of impacts from noise to greater sage-grouse has been included in Section 3.8 of the FEIS.	LESMEISTER	LINDSEY	NDOW
243	50	We understand that the BLM cannot include specific details from the LUPA because that would predecisional.It is NDOWs understanding that once the LUPA ROD is signed that the Bald Mountain EIS will conform with all sage grouse measures within the LUPA. Once the sage grouse section is updated NDOW will be able to provide a more in-depth/specific comments on sage grouse and mitigation.	BLM has updated the FEIS to include analysis and discussion of the BMM project consistency with the Greater Sage-grouse Amendment in a greater sage-grouse consistency review provided as Appendix A.	LESMEISTER	LINDSEY	NDOW
338	56	The impacts of water drawdown associated with all action alternatives on greater sage-grouse are disclosed in the DEIS (section 3.8), but the cumulative impacts of a possible reduction in sage-grouse habitat from the proposed mine expansion and how this will affect future wild horse management are not discussed. There is no information in the DEIS as to where leks co-occur with areas utilized by wild horses. This information should be disclosed.	Comment noted. Figures in Section 3.8 display areas of greater sage-grouse habitat and general locations of lek within the vicinity of the Proposed Action. It is BLM policy to not disclose the exact locations of leks in public documents. Section 3.10 of both the Draft and Final EIS disclose project and cumulative impacts on Wild Horses. Also, please note that additional information on wild horse use of the Triple B HMA, please refer to the 2007 EIS regarding wild horse management in Nevada.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
170	41	The USF&WS declared on September 22, 2015 that the sage grouse will not be listed as a threatened species because of "the collective efforts by the BLM and US Forest Service, state agencies, private landowners and other partners to conserve its habitat". The maps on 3.8.12 and 3.8.13 of the draft EIS indicate mine operation overlap with both PPH and PGH habitat. Development, such as the proposed leach pad and related roads, should comply with Nevada's Greater Sage-Grouse Conservation plan to avoid, minimize and mitigate as well as any requirements within the revised LUPs and USF&WS Record of Decision. We encourage selection of an alternative site.	BLM has updated the FEIS to include analysis and discussion of the BMM project consistency with the Greater Sage-grouse Amendment in a greater sage-grouse consistency analysis provided in Appendix A to this FEIS. Implementation of the Greater Sage-grouse Amendment is required under all alternatives, is also subject to valid existing mineral rights, including existing mining claims associated with the project.	VON SEGGERN	DAVID	SIERRA CLUB, TOIYABLE CHAPTER
172	41	The Draft EIS references Appendix I "Memorandum of Understanding" between BLM, the Forest Service, the Department of Conservation and Natural Resources, Barrick, Newmont, and "various mining companies". This memorandum signed in 2013 primarily to address sage grouse, does not include wildlife representatives. The Department of Conservation and Natural Resource expressly states that it represents the Division of Minerals, an agency within the Department. We believe this memorandum needs to be set aside and new memorandum developed which includes the Nevada Department of Wildlife and the USF&WS. This EIS may be one of the first to be completed following the "No Listing" decision and needs to incorporate best management practices for sage grouse.	Comment noted. The MOU has been superseded by the September 2015 Greater Sage-grouse Amendment. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity.	VON SEGGERN	DAVID	SIERRA CLUB, TOIYABLE CHAPTER
226	50	The DEIS notes the Water Canyon eagle nest is likely to be disturbed by mining. Disturbance is listed under the definition of 'take' by the BGEPA as is disturbance of a nest that results in nest abandonment. Given the potential impacts to this nest and the stated impacts to the Yankee Pit nest, a ECP should be prepared in coordination with the USFWS and NDOW. Mitigation should be required for impacts to golden eagles and this should be more clearly stated in the DEIS.	Text reflecting Barrick's coordination with the USFWS regarding the development of a BBCS and ECP has been included in Section 3.8 of the FEIS.	LESMEISTER	LINDSEY	NDOW

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228	50	The 2013 MOU does not identify lek counts as an avenue for mitigation. Furthermore lek counts do not avoid, minimize, nor mitigate the project related impacts.	Lek counts and monitoring are discussed on DEIS page 3.8-24 as a measure to ensure that all leks within the area potentially impacted by project construction and operation are identified and have appropriate conservation measures outlined in the MOU or Greater Sage-grouse Amendment applied before impacts occur. The monitoring itself is not considered a mitigation measure by the BLM. Final details of mitigation for impacts to greater sage-grouse are included in Appendix A, which discloses consistency with the requirements of the Greater Sage-grouse Amendment.	LESMEISTER	LINDSEY	NDOW
229	50	2nd bullet, first paragraph. The reference to the MOU indicates that specific noise-mitigation measures would be employed if noise levels from project related activities exceed 10 dBA above ambient. What are the measures that would be considered? A 2011 report is referenced. We should pull those recommendations from the report and identify them here. The noise BMP's addressed within the NTT report represents fluid minerals and provides such guidance to keep noise levels below 10 dBA, using noise shields while drilling during lekking, nesting, brood rearing, and winter along with locating compressor stations outside of priority habitat and designing the compressors with noise reducers. The NTT report does not address applicable BMPS to mitigate noise exceedances for hard rock mining.	Potential BMPs for noise reduction have been incorporated into the text of the measure as requested (See SSS-1). Potential BMPs include noise shielding for drilling activities and other operational restrictions that would be considered in the Noise Mitigation Plan to be developed within 90 days of ROD approval. The BLM, Barrick, and NDOW are actively coordinating on the noise mitigation plan. Coordination with NDOW biologists has also been added to the text of the measure to provide protection to breeding GRSG.	LESMEISTER	LINDSEY	NDOW
230	50	In reference to the mitigation fund created to conduct habitat enhancement activities to off set loss of sage grouse habitat there is reference made to a team to identify potential habitat enhancement projects. NDOW is not mentioned and yet NDOW has regulatory responsibility for the species at the present time and the expertise to effectively identify habitat enhancement projects. The Ecosystem Council has neither the regulatory responsibility nor the expertise. Please identify NDOW as a participant in this identification/prioritization process.	Comment noted. The MOU has been superseded by the September 2015 Greater Sage-grouse Amendment. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity. Appendix A of the FEIS contains BMPs and mitigation measures for GRSG. Mitigation measures were revised based upon agency and public comment on the Draft EIS.	LESMEISTER	LINDSEY	NDOW
231	50	Contributions to the mitigation fund are based on the number of acres not mitigated, multiplied by a cost per acres. The area of influence buffer (600m) acreage relating the transmission lines should be used in these calculations?	Comment noted. Appendix A of the FEIS contains BMPs and mitigation measures for GRSG. Mitigation measures were revised based upon agency and public comment on the Draft EIS.	LESMEISTER	LINDSEY	NDOW
236	50	Mitigation Measure SSS-1. We continue to reference measures that may be employed should noise monitoring show exceedance triggers at leks. What are these measures? We need to identify here. Without knowledge of what measures would potential be employed how can we make a determination that they would be effective?	Potential BMPs for noise reduction have been incorporated into the text of the measure as requested. BMPs include noise shielding for drilling activities and other operational restrictions. Coordination with NDOW biologists has also been added to the text of the measure to ensure full protection of breeding GRSG.	LESMEISTER	LINDSEY	NDOW
237	50	Mitigation Measure SSS-1 only addresses noise disturbance from road traffic but there are several leks that are within the 3 mile buffer from mine activities, how will the noise impacts from the mine be mitigated for?	Potential BMPs for noise reduction have been incorporated into the text of the measure as requested. BMPs include noise shielding for drilling activities and other operational restrictions. Coordination with NDOW biologists has also been added to the text of the measure to ensure full protection of breeding GRSG from potential noise impacts.	LESMEISTER	LINDSEY	NDOW
238	50	Mitigation Measure SSS-2. We need to make sure that we can locate fences in a manner that doesn't compromise sage grouse habitat and resources as well as modify existing fences. We may need to relocate fences to better protect this resource.	Comment noted. The BLM intends to continue working with NDOW to design and install fences according to current guidance, in addition to considering the purpose and need for additional fencing prior to installation.	LESMEISTER	LINDSEY	NDOW
239	50	Mitigation Measure SSS-3 is already covered under Barrick's proposal under page 2.48 with figure 2.4.7. Since the identification of using perch deterrents is within their proposal this cannot qualify as mitigation.	The BLM acknowledges that perch diverters are mentioned in the ACEPM in Table 2.4-54 of the DEIS. This ACEPM is included to minimize electrocution risk to raptors and may not be implemented on towers where the spread of charged components is wide enough to alleviate the need for diverters. In order to ensure the minimization of perching and predation by ravens the BLM is requiring installation of diverters on all transmission structures. This mitigation measure has also been updated to include consideration of tower types and perch diverters in coordination with NDOW to ensure full protection of the species.	LESMEISTER	LINDSEY	NDOW
240	50	Mitigation Measure SSS-3. Would like to think that we would consider tower design as a method to minimize the ability for corvids and raptors to perch on transmission lines as well as the opportunity to employ perch deterrents.	DEIS page 2-47 states "A single pole structure would be utilized for each proposed transmission line. Proposed new transmission lines would follow Avian Power Line Interaction Committee (APLIC) design standards and would be constructed according to the schematic illustrated in Figure 2.4-7 or similar APLIC recommended monopole structure."	LESMEISTER	LINDSEY	NDOW
241	50	Mitigation Measure SSS-5. Again reference is made to mitigation measures or best management practices to reduce or mitigate impacts on sage grouse. Please identify these measures here.	Comment noted. Appendix A of the FEIS contains BMPs and mitigation measures for GRSG. Mitigation measures were revised based upon agency and public comment on the Draft EIS.	LESMEISTER	LINDSEY	NDOW
412	62	Sage grouse protection hinges on the memo of understanding (MOU) signed in 2013 between United States Department of Interior Bureau of Land Management-Nevada State Office, United States Department of Agriculture, United States Forest Service, Humboldt-Toiyabe National Forest, Nevada Department of Conservation and Natural Resources, and Barrick Gold of North America, Newmont Mining Corporation, and Other Companies. However, according to the MOU (DEIS, p. I-8, xi) any party may terminate its involvement with 30 day written notice. Thus, assured long-term protection of sage grouse does not exist. Furthermore, the agreement is binding upon Barrick and its Companies, but not future owners of the mine operations, which may occur in the near future. GBRW finds this unacceptable.	Comment noted. The MOU has been superseded by the September 2015 Land Use Plan Amendment. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity. The BLM will require terms of any approval to be applicable to the buyer of the Bald Mountain Mine property, Kinross Gold.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH

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413	62	The MOU also states that if mitigation appears to be infeasible, which is likely in many cases, the MOU offers habitat transfer options. GBRW understands that this method of population preservation is unproven. Before the BLM agrees to allow habitat destruction from mining operations there needs to be a test for this approach to assure that sage-grouse populations will be protected.	Comment noted. The MOU has been superseded by the September 2015 Greater Sage-grouse Amendment. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity. As noted in Appendix A, Barrick has voluntarily agreed to use the Nevada Conservation Credit System to offset proposed project surface disturbance impacts to Greater sage-grouse as compensatory mitigation.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
414	62	GBRW also notes regarding the MOU: DEIS, I-3, 4; “(a) Avoidance and minimization of sage-grouse habitat disturbance where practicable…” What about not mining there?	Comment noted. The MOU has been superseded by the September 2015 Greater Sage-grouse Amendment. BLM is still required to allow reasonable access to valid existing mineral rights, including locatable mineral claims, under the September 2015 Greater Sage-grouse Amendment.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
415	62	GBRW also notes regarding the MOU: DEIS, I-4; “(b) Site reclamation plans may include specific measures designed to provide for restoration/rehabitation or improvements of sag-grouse habitat during the reclamation process.” It is unclear where are the birds supposed to go during mining and improvement of their habitat post-mining?	Comment noted. The MOU has been superseded by the September 2015 Land Use Plan Amendment. Section 3.8.2.1 states "Habitat loss or alteration would result in direct losses of smaller, less mobile species of wildlife, such as small mammals, and the displacement of more mobile species into adjacent habitats. In areas where habitats are at, or near, carrying capacity, animal displacement could result in some unquantifiable reductions in local wildlife populations."	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
416	62	GBRW also notes regarding the MOU: DEIS, I-4; “c (i) … acceptable to the land management agency and in place prior to the disturbance, for the protection, management, and of comparable habitat on private land.” If there are already birds on that comparable habitat like the Barrick ranches, i.e., what if there are already birds there? This would seem to mean that there are no assurances that sage-grouse can be moved successfully.	Comment noted. The MOU has been superseded by the September 2015 Greater Sage-grouse Amendment. The BLM does not propose trapping and relocating of GRSG to adjacent habitats as mitigation under any of the action alternatives.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
16	8	The South operations area in particular overlaps Priority Sage Grouse Habitat and falls close to breeding leks. Many other sensitive species are also at risk in the area as a result of expansion of this mine.	Potential impacts to special status species and their habitat is disclosed in Section 3.8.2. Consistency with applicable restrictions and conservation measures is discussed in Appendix A - Project Consistency with the Greater Sage-grouse Approved Resource Management Plan Amendment (GRSG Amendment)	EMMERICH	KEVIN	BASIN AND RANGE WATCH
417	62	None of the alternatives offer an acceptable level of noise disturbance for sage-grouse and probably other species as ambient noise is above the threshold, not even the West Redbird Modification Alternative. Overall, GBRW does not see that the protections and mitigations discussed in the DEIS and MOU guarantee preservation of sage-grouse populations.	Potential BMPs for noise reduction have been incorporated into the text of the measure as requested. BMPs include noise shielding for drilling activities and other operational restrictions. Coordination with NDOW biologists has also been added to the text of the measure to ensure full protection of breeding GRSG from potential noise impacts.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
448	65	Consider this data source regarding impacts to Mt. Tenabo (a sacred place) and the Yerington Paiute Tribe from mining: http://www.planevada.org/nevada-mining-fact-sheet/	Mt Tenabo is not within the project analysis area, but rather is near another mine in Nevada. No change to document.	OSTER	SHERRY	
455	65	Before this EA or FONSI is signed or agreed upon, there must first be a complete evaluation (validated by independent scientifically proven information) of the following specific points: Native American Cultural and Physical Concerns.	An analysis of impacts to Native American Cultural and Physical Concerns was conducted as part of the EIS and is contained as Section 3.13. No additional clarification of this comment was received.	OSTER	SHERRY	
459	66	3.13 Native American Traditional Values 3.13.1 Affected Environment 3.13.2 Environmental Consequences How can the Duckwater Tribe make any comments on these two if there is nothing written on any of the subject matter. This section has to be included. The BLM and the Bald Mountain Mine has to rectify this in order for the project to move forward.	An analysis of impacts to Native American Cultural and Physical Concerns was conducted as part of the EIS and is contained as Section 3.13. No additional clarification of this comment was received.			DUCKWATER SHOSHONE TRIBE
3	3	On behalf of the Confederated Tribes of the Goshute Reservation (CTGR) Business Council, I strongly recommend that the Bureau of Land Management (BLM) require that Tribal Monitors be utilized in the Bald Mountain Mine North and South Operations Area Projects Draft Environmental Impact Statement (DEIS).	Monitoring opportunities are readily available for Tribal Members who meet the Secretary of the Interior's standards.	GREYMOUNTAIN	MADELINE	CONFEDERATED TRIBES OF THE GOSHUTE RESERVATION
4	3	Proposed Action directly impacts the loss of approximately 6,903 acres of lands used by Native Americans for hunting, gathering, and other traditional uses. This project will also affect CTGR's interest as it pertains to federally reserved water rights, cultural resources including, but not limited to, human remains and associated funerary objects. All of these impacts need to be protected by CTGR representatives, also titled "Tribal Monitors", as the Tribal Monitors are the most knowledgable and sensitive to CTGR and other Native American interests.	Monitoring opportunities are readily available for Tribal Members who meet the Secretary of the Interior's standards.	GREYMOUNTAIN	MADELINE	CONFEDERATED TRIBES OF THE GOSHUTE RESERVATION
5	3	The use of Tribal Monitors will further BLM's requirement to consult with Indian Tribes. On page 17 of the DEIS the BLM indicates that "[t]ribal consultation remains ongoing and could continue through completion." The BLM has a trust responsibility to protect and preserve the natural resources of CTGR, which includes the protection and preservation of all natural resources. Pursuant to interpretation of the trust responsibility by the United States Supreme Court, the United States has charged itself with moral obligations of the highest responsibility and trust and therefore its conduct should be judged by the most exacting fiduciary standards.	Monitoring opportunities are readily available for Tribal Members who meet the Secretary of the Interior's standards.	GREYMOUNTAIN	MADELINE	CONFEDERATED TRIBES OF THE GOSHUTE RESERVATION

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6	3	In compliance with its trust responsibility, the Department of Interior issued its Departmental Consultation Policy in compliance with President Barack Obama's Presidential Memorandum and President Clinton's Executive Order 13175 requiring meaningful consultation by all Executive Agencies and Departments. Department of Interior's Consultation Policy requires that the Bureau of Indian Affairs and Bureau of Land Management conduct meaningful consultation by honoring the government to government relationship, involving the appropriate level of decision maker in a consultation process, promoting innovations in communication by including a Department·wide tribal governance officer, detailing early tribal involvement in the design of a process implicating tribal interests, and capturing a wide range of policy and decision making processes under the consultation umbrella.	Tribal consultation has been ongoing during this project. Section 4.3 describes consultation to date and provides a summary of the issues expressed during tribal consultation. Monitoring opportunities are readily available for Tribal Members who meet the Secretary of the Interior's standards.	GREYMOUNTAIN	MADELINE	CONFEDERATED TRIBES OF THE GOSHUTE RESERVATION
7	3	On behalf of the CTGR Business Council, I strongly request that the BLM fulfill its trust responsibility to protect tribal resources. The use of Tribal Monitors would ensure that BLM's duty to consult is fully complied with, as there would be Tribal members, who best understand tribal culture, history, and custom, on the ground monitoring of this project and of the actions ofnon·Indians disturbing CTGR's aboriginal territory.	Monitoring opportunities are readily available for Tribal Members who meet the Secretary of the Interior's standards.	GREYMOUNTAIN	MADELINE	CONFEDERATED TRIBES OF THE GOSHUTE RESERVATION
460	66	Since there is mention of the two above sections that are very important to the Tribes, the Duckwater Tribes strong recommends tribal monitors to be present during the expansion. The costs for the Tribal Monitors will be negotiated between the Tribes and Barrick Gold Mine with a binding contract Barrick. Good will pay the Tribe through a negotiated contract.	Monitoring opportunities are readily available for Tribal Members who meet the Secretary of the Interior's standards.			DUCKWATER SHOSHONE TRIBE
352	56	Consider these resources: Craig RK (2010) “Stationarity is Dead” – Long Live Transformation: Five Principles for Climate Change Adaptation Law. Harvard Environmental Law Review, 34 (1): 1-57. Garfin G, Jardine A, Merideth R, Black M, LeRoy S, eds. (2013) Assessment of climate change in the Southwest United States: A report prepared for the National Climate Assessment. A report by the Southwest Climate Alliance. Washington, D.C.: Island Press.	The climate change discussion in 3.5 Vegetation has been modified to include additional detail on climate change impacts to vegetation.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
204	50	Under Water Management Activities, please describe the length of time that groundwater drawdown could impact riparian and wetland vegetation and water availability for wildlife. The text states "impacts…would decrease once pumping ceases and groundwater levels rebound." If surface expression of water is reduced or lost as a result of pumping, it will be important for the reader to understand how many years of groundwater recharge may be required until springs and seeps return to pre-project condition.	Section 3.5 Vegetation has been revised to include a description of the length of groundwater drawdown (i.e. 14 years under the Proposed Action	LESMEISTER	LINDSEY	NDOW
287	53	An Elko Band Council member who participated in the October 2nd site visit stated her aversion to any clear cutting of trees, mostly pine and juniper that may be related to the project. This is addressed in Section 3.5.2.5. Cumulative Impacts.	Commented noted. Vegetation treatments to Forest and Woodland Vegetation is addressed in 3.5.2.5 Cumulative Impacts. In addition, temporary and permanent impacts to these pinyon-juniper woodlands are disclosed as acreages for each alternative.	BANUELOS	CLIFFORD	ELKO BAND COUNCIL
342	56	The BLM seems to be viewing the landscape as relatively unchanging. “Stationarity,” the concept that ecosystems remain relatively stable over long periods of time and that current protocols are adequate to measure them, is untenable in a changing climate (see Craig 2010). Recent warming in the Southwest is the most rapid in the Nation and significantly more than global averages in some areas. Average daily temperatures for the 2001-2010 decade were the highest in the Southwest from 1901 – 2010 and the period since 1950 has been warmer than any period of comparable length in at least 600 years (Garfin et al., 2013). Additionally, Garfin et al. (2013) found that recent drought in the Southwest has been unusually severe relative to droughts of the last century. Projected future climatic changes identified by Garfin et al. (2013) that need to be considered when analyzing the impacts of reduced wildlife waters caused by drawdown from mining activities include: - Decrease in spring precipitation (median 9-29%) with a confidence level of medium-high; and - Increase in drought severity (which will be coupled with warmer summer temperatures) leading to depletion of soil moisture and a lower total stream flow – confidence level of medium-high. Ecological implications of climate change in the Southwest include long-term shifts in vegetation patterns. Garfin et al. (2013) indicated that significant land cover changes are likely. Cold-tolerant species may move upward or die, and the same is true for precipitation-dependent species at lower elevations in desert and grassland areas. It is likely that all life forms (including shrubs, herbaceous perennials, and annuals) will be affected.	Impacts to vegetation on the project area due to climate change is addressed at the end of the cumulative effects section. Additional impacts to vegetation communities has been added.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
393	60	We recommend that in the Record of Decision for the EIS (ROD), BLM commits to the following mitigation measures: To reduce the spread of noxious weeds and invasive species, the BLM shall approve the seed mixes proposed by the applicant, or the BLM shall require the seed mixes to be in accordance with a previously BLM-approved Noxious Weed Control Plan or Integrated Pest Management Plan.	This mitigation measure is already included in Chapter 2 pages 123-124.	SEDLACEK	NICOLE	U.S. FISH AND WILDLIFE SERVICE
433	64	Noted seed mixture to survive upper or lower elevation and competitive with invasive plants.	Comment noted.	SCHULZ	SUSAN	ELY SHOSHONE TRIBE
69	33	The project will cause further destruction of the sensitive desert landscape and the inevitable pollution of aquifers and surface and subsurface areas. The Draft EIS acknowledges this fact and clearly states that this pollution will harm wildlife, including federally protected wild horses.	Comment noted - acres of permanent vegetation loss are reported in residual impacts and a description of fragmentation and long-term change in vegetation composition is included.	MULTIPLE		

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395	60	Second, the DEIS did not adequately address the impacts to visual resources. There are at least three nationally recognized landmarks that would be significantly affected by proposed mining activities: 1) the Pony Express National Historic Trail and Ruby Valley Pony Express Station, 2) the Fort Ruby National Historic Landmark (NHL), and 3) the South Marsh National Natural Landmark (NNL). The viewshed and very character of these areas would be significantly negatively affected by proposed mining activities. Impacts from proposed mining activities would likely be in effect for 100 or more years due to the proposed mining timeline and subsequent reclamation actions. Reclamation on extremely poor soil conditions in this environment would be slow at best and vegetation may not recover at all in many places, thus leaving the land scarred for decades if not centuries. Visitor experience to the three landmarks mentioned above would be significantly affected by proposed mining activities. It is in the best interest of all Americans to protect and preserve the viewshed of this area as an outstanding and visually unique example of our Nation's natural and cultural heritage. Effects to these three landmarks were omitted or inadequately addressed in the DEIS. Although the Refuge itself is outside the area for the mine expansion, NEPA and CEQ state that the direct, indirect, and cumulative effects of the project shall be analyzed on the surrounding area, with includes the adjacent refuge and its biological and cultural resources.	Section 3.19, Visual Resources contains an analysis of visual impacts to the Pony Express National Historic Trail and Ruby Valley Pony Express Station, the Fort Ruby National Historic Landmark (NHL), and the South Marsh National Natural Landmark (NNL). The analysis was supported by an appendix containing visual simulations. No additional changes to the document.	SEDLACEK	NICOLE	U.S. FISH AND WILDLIFE SERVICE
396	60	We recommend BLM commit to that the following mitigation measures in the ROD: As was noted in our previous comments, "In addition to the "anti-glare lights", add more light pollution reduction measures to Table 2.4-54 design features and applicantcommitted measures to further reduce noticeable changes to the characteristic night sky, which are significant adverse effects to the Fort Ruby National Historic [Landmark, the Ruby Marsh National Natural Landmark,] and Ruby Lake NWR; and/or change the preferred alternative in the Draft EIS to the Reconfiguration Alternative. We recommend that BLM's commitment to these and other mitigation measures in the DEIS be documented in the Record of Decision.	The BLM has determined that the anti-glare measures included in the Table 2.4-54 are appropriate measures to reduce light pollution while still allowing sufficient flexibility to allow appropriate lighting to meet mine safety requirements. Barrick uses photocells with motion sensors on some facilities to reduce energy costs and reduce light pollution. No change to document.	SEDLACEK	NICOLE	U.S. FISH AND WILDLIFE SERVICE
427	63	One of the special characteristics of Ruby Lake National Wildlife Refuge and the entire Ruby Valley is that it's presently almost entirely without human lighting at night. While the area is not presently an active candidate for the International Dark Skies Association's Dark Skies Places Program, there is no reason that it could not be - except that, given the anticipated length of the proposed Bald Mountain project (decades, not years), it will be another generation before the area could be so designated. The DEIS suggests that the work project area will be lighted 24 hours a day. Under the circumstances, the mitigation proposed Cappropriate lighting") does not appear adequate to preserve the area's potential dark sky status. At the very least, the outdoor lighting fixtures should conform to the Dark Sky Friendly criteria stipulated by the International Dark Skies Association. This means that the mine's outdoor lighting should minimize glare while reducing light trespass and skyglow. (See http://darksky.org/fsa/fsa-products/)	The BLM has determined that the anti-glare measures included in the Table 2.4-54 are appropriate measures to reduce light pollution while still allowing sufficient flexibility to allow appropriate lighting to meet mine safety requirements. Barrick uses photocells with motion sensors on some facilities to reduce energy costs and reduce light pollution. No change to document.	DE FREITAS	PATRICK	
18	8	The mine will impact the visual resources. It will be very visible from the Ruby Lake National Wildlife Refuge and the southern end of Ruby Valley.	Comment noted. Impacts to the Ruby Lake NWR are disclosed by alternative in Section 3.19. The section acknowledges that there would be visual impacts, but that the impacts are progressively reduced from the Proposed Action under the RA and WRM. No additional change to the document.	EMMERICH	KEVIN	BASIN AND RANGE WATCH
80	37	The project may be subject to BWPC permitting. Permits are required for discharges to surface waters and groundwater's of the State (Nevada Administrative Code NAC 445A.228). BWPC permits include, but are not limited to, the following: - Stormwater Industrial General Permit - De Minimis Discharge General Permit - Pesticde General Permit - Drainage Well General Permit - Temporary Permit for Discharges to Groundwater's of the State - Working in Water Permit - Wastewater discharge Permits - Underground Injection Control Permits - On-site Sewage Disposal System Permits - Holding Tank Permits Please note that discharge permits must be issued from this Division before construction of any treatment works (Nevada Revised Statute 445A.585). For more information on BWPC Permitting, please visit our website at: http://ndep.nv.gov/bwpc/index.htm.	Comment noted.			NDEP, Bureau of Water Pollution Control
82	38	Plans and specifications for the replacement of public drinking water wells PW-2A and PW-3A by proposed new wells PW-2B and PW-3B will need to be submitted to the Nevada Division of Environmental Protection (NDEP), Bureau of Safe Drinking Water (BSDW) for review and approval prior to construction. Questions or comments should be directed to Jim Balderson at 775-687-9517, or jbalderson@ndep.nv.gov .	Comment noted.	BALDERSON, P.E.	JIM	

Comment ID	Submittal ID	Comment Text	Response Text	Last Name	First Name	Org Name
84	40	All waters of the State belong to the public and may be appropriated for beneficial use pursuant to the provisions of Chapters 533 and 534 of the Nevada Revised Statutes (NRS), and not otherwise. Any water used on the described lands should be provided by an established utility or under permit issued by the State Engineer's Office. Any water, or monitor wells or boreholes located on the project lands are the responsibility of the owner of the property and must be plugged and abandoned as required in Chapter 534 of the Nevada Administrative Code. Any water used on the described project for construction, dust control, or maintenance should be provided by an established utility or under permit or waiver issued by the State Engineer's Office.	Comment noted. Barrick has the necessary water rights and permits to appropriate water for the project. Water wells, monitor wells, and boreholes will be plugged and abandoned according to Chapter 534 of the NAC.	KONO	IAN	NEVADA STATE CLEARINGHOUSE
85	40	Any person proposing to construct a dam, reconstruction or alteration of old structures in this state shall, before beginning construction, obtain from the State Engineer a permit to appropriate, store and use the water to be impounded by or diverted by the dam. If the proposed dam is or will be 20 feet or more in height, measured from the downstream toe to the crest of the dam, or is less than 20 feet in height and will impound more than 20 acre-feet of water, must submit to the State Engineer in triplicate plans and specifications thereof for his approval in accordance with Nevada Revised Statue Chapter 535 and Nevada Administrative Code Chapter 535 prior to construction is to begin.	Comment noted.	KONO	IAN	NEVADA STATE CLEARINGHOUSE
86	40	A review of the area, Hydrographic Basins No. 47, Huntington Valley, No. 154, Newark Valley, No. 175, Long Valley, No. 176 Ruby Valley, indicates there are multiple active water rights in the vicinity of the described lands in this proposed project and currently owned by Barrick Gold U.S. Inc. For the Huntington Valley Basin, State Engineer Order No. 1251 requires the installation of a totalizing meter, monthly records kept for the water pumped from each well, and records submitted to the State Engineer within 15 days after the end of each calendar quarter. Interbasin transfers of more than 250 acre-feet of groundwater from a basin not previously inventoried will require an inventory of the basin from which the water is to be exported. Proposed Project must not conflict with existing rights in the area per the provisions of Chapters 533 of the Nevada Revised Statutes (NRS), and not otherwise. Any changes in Manner of Use, Place of Use or Point of Diversion will require applications to change and approval of the applications.	Comment noted. Barrick complies with these requirements for the currently permitted operations and would continue to do so under the proposed expansion project.	KONO	IAN	NEVADA STATE CLEARINGHOUSE
97	44	It would be inexcusable and indeed criminal for the BLM to expand this intensive water-consuming mine for the benefit of private interests which would destroy the land for the American Public and for all other multiple uses, in clear violation of FLPMA, for generations to come. It is even worse that the proposed expansion is in a designated wild horse Herd Management Area, and especially at this time, considering that much of the West is experiencing severe drought conditions and operating under serious water restrictions.	Comment noted. As explained in Section 3.3.Water Quality and Quantity, Barrick has appropriated water rights on file with NDWR for mining and milling and stockwater uses. Section 3.3.2 of the EIS discusses potential impacts from the Proposed Action, Reconfiguration Alternative, Western Redbird Modification Alternative, and the No Action Alternative on surface and groundwater resources, including water rights. Groundwater modeling results for the Proposed Action and Reconfiguration Alternative shows that three springs are within the 10-foot groundwater drawdown contour, but only two springs, the South Water Canyon Seep and JBR No. 14 could be impacted with reduced flows from groundwater pumping. Mitigation will be required for this impact. Mining is a valid use of public lands under the Federal Land Policy and Management Act [FLPMA] of 1976.	LYNCH	JANET	
444	65	Consider this data source regarding water pollution from hardrock mining and the cost of treatment: "Polluting the Future: How Mining Companies are Contaminating Our Nation's Waters in Perpetuity." http://www.earthisland.org/journal/index.php/elist/eListRead/us_mines_are_causing_water_pollution_that_will_last_for_centuries_says/	The referenced article in the magazine Earth Island Journal was reviewed. The article does not provide any site specific data or analysis for the proposed project. Potential impacts to water resources are addressed in Section 3.3 of the EIS.	OSTER	SHERRY	
445	65	Consider this data source regarding impacts to water resources from mining: http://www.planevada.org/nevada-mining-fact-sheet/	The referenced Nevada Mining Fact Sheet provided at the web site stated was reviewed. The article does not provide any new site specific data or analysis for the proposed project that was not already considered or would change the conclusions provided in the water resources impact analysis provided in Section 3.3 of the EIS.	OSTER	SHERRY	
449	65	Before this EA or FONSI is signed or agreed upon, there must first be a complete evaluation (validated by independent scientifically proven information) of the following specific points: Analysis of all water uses Account for all existing water uses including those for existing users, springs, rivers, creeks. Risks to agricultural irrigation water and recreational water and wildlife water. Cumulative impacts analysis of water uses	Comments noted. Potential impacts to water resources including impacts to existing water rights, and cumulative impacts to water resources were provided in Section 3.3 Water Quantity and Quality in the DEIS.	OSTER	SHERRY	
453	65	Before this EA or FONSI is signed or agreed upon, there must first be a complete evaluation (validated by independent scientifically proven information) of the following specific points: What are the short and long term and cumulative impacts on the ground and sub-surface water quantity and quality? What amount of water that will be used? Where will the water come from? Where and how will water disposal be handled after use? How will contaminated water be recycled after use? What are the negative impacts to groundwater supplies? What are the short and long term impacts on aquifers? From which aquifers will water be taken?	Comments noted. Potential impacts to water resources including impacts to existing water rights, and cumulative impacts to water resource; including a description of the water requirements, proposed sources of water for the project, potential impacts to groundwater supplies, were provided in Section 3.3 Water Quality and Quality in the DEIS.	OSTER	SHERRY	

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360	57	Gold Mines -- Massive Water Consumers Consider this data source regarding impacts to water resources from mining: http://www.safewater.org/PDFS/resourcesknowthefacts/Mining+and+Water+Pollution.pdf Heap-Leach Pad -- Typical HLF Uses 1.2 Billion Gallons of Water per Year The USGS report Estimated Water Requirements for Gold Heap-Leach Operations indicates that a typical leach pad uses 36 billion liters of water per year plus "several billion liters" per year for dust suppression. http://pubs.usgs.gov/of/2012/1085/pdf/ofr2012-1085_v1-1.pdf Converting liters to gallons, we see that a typical leach-pad uses approximately 9.5 billion gallons a year plus billions more gallons for dust-suppression. So, four new leach pads would consume 38 billion gallons of water a year, plus billions more gallons for dust-suppression. Such extravagance constitutes an excessive "take" of a shared public resource. It is unacceptable for one company to take so much of precious, slow-to-recharge water from the aquifer. The expansion should be denied.	Comments noted. Potential impacts to water resources resulting from the proposed project and alternatives to the project were evaluated and provided in Section 3.3 Water Quality and Quality in the DEIS. This included an evaluation of the impacts to water resources associated with the use of groundwater to supply the project.	DEVLIN	MARYBETH	
371	58	Nevada has no more water to spare Ruby Lake is almost completely dry and the Bald Mountain mine right down the road uses it for dust control by the millions of gallons just what they use in one week could save Ruby Lake but know one cares.	Comments noted. Potential impacts to water resources resulting from the proposed project and alternatives to the project including potential impacts to Ruby Lake were evaluated and provided in Section 3.3 Water Quality and Quality in the DEIS.	GILBERT	SHAUN	
377	59	If approved, the BLM would green-light the disturbance of a legal habitat for the 2015 “guesstimated” population of 1,460 wild horses, who would suffer the negative effects of this Project, including all of the disruptive and destructive impacts to the mustangs and to the environment that go along with mining exploration activities -- such as road construction expansion, increased vehicle traffic and the use of heavy equipment including excavators, trucks and drilling rigs as well as drilling activities -- which would threaten the welfare of these protected animals and, according to the BLM’s own admission, lead to loss of critical valuable wildlife habitat. Mining expansion would also cause further destruction the sensitive desert landscape. The Draft EIS also confirms resultant negative impacts that would be harmful to wildlife -- including federally-protected wild horses -- such as pollution of aquifers and surface and subsurface areas. As you know, mines negatively impact surface water availability by draining water from aquifers and our government’s own scientists estimate it could take more than 200 years to replenish the groundwater removed by mining operations.	If approved, the Proposed Action Alternative would result in a temporary loss of less than one percent of the total acreage of the Triple B HMA. The permanent loss would be negligible and acreage lost to the Reconfiguration Alternative and the Western Redbird Alternative would be less than for the Proposed Action Alternative. Impacts to water are discussed in section 3.3 Water Quality and Quantity.	HENNESSY	EILEEN	
402	62	GBRW is concerned about the South Water Canyon Seep and JBR-14 spring, since their location is critical to mule deer migration and are believed to be the source of a public water reserve, HV-164, which is federally protected. Only under the No Action or West Redbird Modification are these seeps and springs well away from the expected 10 foot drawdown and are preferred from a water depletion perspective.	Comments noted. Potential impacts to water resources resulting from the proposed project and alternatives to the project including potential impacts to South Water Canyon Seep and the JBR-14 spring under each alternative were evaluated and provided in Section 3.3 Water Quality and Quality in the DEIS. This section also provides recommendations for monitoring mitigation to address potential impacts to these springs that may occur under the Proposed Action and Reconfiguration alternatives.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
425	63	It appears that BLM anticipates only a minor impact to the water supply available to the Ruby Valley and Ruby Lake National Wildlife Refuge. While this may be an appropriate assessment using historical rainfall data and water flows, it is important to analyze and consider the effect of the current long-term, multi-year drought on the water supply for the Refuge.	Potential impacts to water resources in the Ruby Lake NWR were addressed in Section 3.3.3 of the DEIS. The results of groundwater modeling indicate that localized drawdown associated with the project is not likely to extend to, or capture flow in springs that sustain the lake and associated wetland areas in the NWR. These conclusions suggest that regardless of the current drought situation, and impacts of drought on the Ruby Lake NWR, the localized drawdown associated with groundwater pumping at the mine is not anticipated to impact the source of water that sustains perennial flow to the lake and associated wetlands.	DE FREITAS	PATRICK	
437	64	Noted re-circulation of water.	Comment noted.	SCHULZ	SUSAN	ELY SHOSHONE TRIBE
361	57	The National Aeronautics and Space Administration (NASA) uses satellites to measure terrestrial water-storage. These devices are known as the Gravity Recovery And Climate Experiment -- GRACE -- satellites. The image found at the link below shows Nevada to be in the red zone. The state's aquifers do not need to be further stressed in this era of drought by expanding water-wasting gold mines. Therefore, no expansion is the correct option. http://drought.unl.edu/MonitoringTools/NASAGRACEDataAssimilation.aspx	Comment noted.	DEVLIN	MARYBETH	
138	49	Chapter 3, Section 3, Page 3.3-25, Table 3.3-11: Update title block so callout is “3.3-11” and not “3.3-1"	The title block on page 3.3-25 in the DEIS was Figure 3.3-11 and is correct. (No change)	ERICKSEN	BETH	BARRICK GOLD U.S.
282	53	Another concern is the impact on the water aquifer(s) in and near the project area. In section 3.3, the EIS describes the current ground and surface water conditions, particularly the conditions of the water springs, which have significant cultural value to the Western Shoshone people in the form of areas where the Western Shoshone people gathered and still gather, to participate in traditional ceremonies and important meetings. The cultural significance of these [Western Shoshone gathering] areas are not adequately addressed in the draft EIS. Sections under 3.13.1.2 Native American Consultation, go over the communication with nearby Tribes and the correspondence resulting from the public scoping meetings and individual meetings with the Yomba and Duckwater Tribes.	The section says, "During the meeting, the Tribe expressed concerns with potential adverse effects to groundwater during mining operations and closure". No change.	BANUELOS	CLIFFORD	ELKO BAND COUNCIL

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294	54	The discussion of surface water quality of springs and seeps on pages 3.3-20 and 3.3-21 directs the reader to Appendix B for the water quality monitoring data and identifies exceedances of municipal or domestic supply standards for several parameters at several springs. It is unclear whether these exceedances may be the result of contaminant releases from past or current mining in the area. Additionally, arsenic concentrations above the water quality standard for livestock are reported at the Cracker Johnson Spring No. 1. The discussion of groundwater quality on page 3.3-21 notes that, in the general project vicinity, Nevada water quality standards are met. The exception is arsenic, which exceeds the MCL standard of 0.01 mg/Lin wells ARW (0.0214 mg/L), BMM-1 (0.07 mg/L) and BMM-2 (0.031 mg/L). The two paragraphs above note a common trend of metals, especially arsenic, being elevated in both surface water and groundwater. Furthermore, on page 3.3-32, the Draft EIS states that more recent investigations under legacy rock disposal areas showed that arsenic has some mobility in the upper few feet of soil. EPA is concerned that elevated metals concentrations in surface water and groundwater could be the result of past and existing mining activities in the area and could be exacerbated by the proposed project. Recommendation: Include in the Final EIS an examination of water quality data trends from all surface water and groundwater monitoring locations. Provide monitoring data to determine whether present background concentrations in both surface water and groundwater were caused by previous mining activities - especially for arsenic. Other potential contaminants (e.g. antimony, mercury, selenium, nitrates) should be evaluated by comparing trend data to demonstrate whether or not impacts from previous mining have occurred. Discuss, in the Final EIS, potential sources of these contaminants, and describe mitigation measures to prevent degradation of water quality from mining activities.	All available groundwater quality data for monitoring wells on site were compiled and reviewed to supplement the prior evaluation presented in the DEIS. Available groundwater quality data from monitoring wells is provided in the Appendix C of the FEIS. The results of the review indicated that one or more of the samples from monitoring wells, ARW, BMM 1, BMM 2, MMW 3, MMW 5, MMW 14 exceeded the drinking water standard of 0.01 mg/L. However, review of the water quality analysis data set for each monitoring did not reveal any trends in the data that would suggest a consistent increase in concentration over time at any of the monitoring sites. In addition, the data set does not indicate that elevated concentrations of other constituents of concern such as mercury, selenium, sulfate, or nitrate occurred at these locations. Water quality trends for springs and seeps was provided in Tetra Tech 2012 that is incorporated by reference in the EIS and is available for review on request. Appendix C include available water quality data for wells and supplemental water quality data for springs that was not included in Tetra Tech 2015.	MARTYN GOFORTH	KATHLEEN	USEPA
295	54	We also recommend that Table 3.3-5 and tables in Appendix B include aquatic life criteria, which are relevant to the quality of surface water (including springs) in the mine area and are, in some cases, more stringent than the drinking water criteria and, in many cases, more stringent than irrigation or stock water criteria.	Table 3.3-5 was revised in include aquatic life standards for reference purposes. These standards were not added to the Appendix B tables since these tables include inventory of springs and seeps, a water rights inventory, and groundwater quality summary.	MARTYN GOFORTH	KATHLEEN	USEPA
135	49	Page 3.3-57, Figure 3.3-23: Modify the legend "Monitoring Sites" to "Baseline monitoring Sites". The figure shows JBR 7, however it no longer exists and should be removed.	The figure uses the same compilation of spring and seep sites provided in Figure 3.3 and described in the affected environment section. These same seep and spring layer appears on Figures 3.3-17, 3.3-21, and 3.3-25. The JBR No. 7 site is derived from the JBR wetland delineation survey (JBR 2011a). Without documentation the site has been retained for consistency with the original baseline survey.	ERICKSEN	BETH	BARRICK GOLD U.S.
203	50	Under Water Management Activities, please describe the length of time that groundwater drawdown could impact riparian and wetland vegetation and water availability for wildlife. The text states "impacts…would decrease once pumping ceases and groundwater levels rebound." If surface expression of water is reduced or lost as a result of pumping, it will be important for the reader to understand how many years of groundwater recharge may be required until springs and seeps return to pre-project condition.	A paragraph was added to Section 3.3.2.1 discussing groundwater recovery related to the two springs that could potentially be impacted by mine induced drawdown.	LESMEISTER	LINDSEY	NDOW
292	54	It is unclear in the Draft EIS how the different volumes of waste rock that would be generated by each of the action alternatives would affect waste rock geochemistry and net neutralization. In the June 2012 A WRMP, figures 13 and 14 on pages 22 and 23, respectively, depict the volume of potentially acid generating (PAG) and non-PAG waste rock from each pit. For pits such as Redbird, Winrock, Rat and Gator, which have a proportionally greater volume of PAG material, it is unclear how the reduced volume of waste rock (and potentially less volume ofnon-PAG rock) in the Reconfiguration Alternative and Western Redbird Modification Alternative would affect the net neutralizing capacity and to what extent there would be a greater risk of generating acidic seepage. Recommendation: In the Final EIS, discuss and clearly compare the changes in the relative proportions of PAG and non-PAG waste rock within the context of overall volume of waste rock associated with each of the action alternatives.	A new table (Table 3.3-13) indicating the volume of waste rock and percentage of PAG material generated from each pit for the Proposed Action, Reconfiguration and WRM alternative and summary text was added to Section 3.3.2.	MARTYN GOFORTH	KATHLEEN	USEPA

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297	54	The prediction of impacts to seeps and springs, and the resulting potential loss of 32.88 acres of wetland vegetation, is based on the 10-foot groundwater drawdown contour shown on Figure 3.3-17 on page 3.3-40. The Draft EIS provides only a minimal explanation of the models and calculations used to derive the 10-foot groundwater drawdown contour. Without further explanation, it is difficult for the reader to draw the connection between a 10-foot groundwater drawdown contour and the predicted resulting effects on springs, seeps, and wetland vegetation areas. Impacts to vegetation can occur as a result of substantially less groundwater drawdown; therefore the loss of wetland vegetation may be greater than predicted in the Draft EIS. While EPA understands that analysis of a groundwater table drawdown contour less than 10 feet may present a modeling challenge, such uncertainty alone should not preclude the consideration of potentially significant environmental impacts. Recommendation: In the Final EIS, explain why and how the 10-foot drawdown contour was used to evaluate risk to springs and seeps. Given the correlation between the contour calculation and the impact on wetland vegetation, provide further details on the confidence of this calculation, the factors of uncertainty within the calculation, and whether estimated calculations are conservative.	DEIS Section 3.3.2 under the heading, "Groundwater Modeling" provides a summary of the numerical groundwater model developed to evaluate groundwater drawdown resulting from groundwater withdrawal for the proposed project and alternatives evaluated in the DEIS. This section also refers the reader to the technical model report (Geomega 2015a) that was incorporated by reference for additional details including model parameters and calculations. The process used for the DEIS to evaluate impacts to water resources was summarized in DEIS Section 3.3.2, under the heading "Evaluation of Impacts to Water Resources". This section explains that: "For this impact analysis, the area that is predicted to experience a reduction (drawdown) in groundwater elevation of 10 feet or more as a result of mine groundwater pumping activities was selected as the area of potential concern regarding potential impacts to water resources. Changes in groundwater levels of less than 10 feet are typically difficult to distinguish from natural seasonal and annual fluctuations in groundwater levels. Springs located outside but within close proximity (<1 mile) to the perimeter of the 10-foot drawdown area also were evaluated to identify surface water resources that may be at risk of impacts from drawdown by examination of the model predicted drawdown at those specific points." In other words, the analysis considered all water resources such as seeps and springs located within a mile of the 10-foot drawdown contour. The impact evaluation included reviewing baseline data for the water source, the estimated depth to groundwater (prior to pumping), and predicted drawdown over time at the water source locations to evaluate if the water source was likely or unlikely to be connected to the groundwater system that would be affected by pumping. Regarding uncertainty, as explained in Section 3.3.2.1, under the heading Impact to Springs and Seeps, potential impacts to the South Water Canyon Seep and JBR No. 14 were identified as a result of recognized uncertainty regarding the model simulated baseline groundwater elevation and actual groundwater elevations beneath these springs sources.	MARTYN GOFORTH	KATHLEEN	USEPA
389	60	The Service is concerned that adverse effects to water quality and quantity were not adequately addressed in the DEIS. The western United States is experiencing a severe long-term drought and indications are that with a changing climate this condition is likely to continue. Proposed mining activities would increase groundwater extraction that could affect the springs and marshes at Ruby Lake National Wildlife Refuge (Refuge). The Refuge supports endemic fish and a host of wildlife species that depend on these springs and marshes. Any further loss of groundwater could severely affect spring flows and water levels in the marsh and thence affect the survival of fish and wildlife species using the Refuge and surrounding areas. In addition, water quality entering Refuge waterways is of great concern. The Refuge lies at the crossroads of the Central and Pacific Flyways and is both an important stop for migrating birds as well as an important breeding area for a host of species. As mining activities proceed to the north of Bald Mountain run-off from the mining activities contributes to and accumulates in the watershed supporting Refuge lands and waters. There is potential for contaminants to leach out of waste rock and cause harm to Refuge resources.	Potential impacts to water resources in the Ruby Lake NWR were addressed in Section 3.3.3 of the DEIS. The results of groundwater modeling indicate that localized drawdown associated with the project is not likely to extend to, or capture flow in springs that sustain the lake and associated wetland areas in the NWR. The analysis also indicates that the project is not expected to impact water quality in the Ruby lake NWR.	SEDLACEK	NICOLE	U.S. FISH AND WILDLIFE SERVICE
404	62	GBRW disagrees with the approach in the DEIS on the cumulative affects of ground water pumping. The analysis presented is based on the total study area of the four hydrographic basins, which represents a perennial yield 92,000 acre feet per year (AFY) with a total allocation of 60,053 AFY (DEIS, p.3.3-64). The total allocation for mining and milling represents about 4% of the total appropriation, and the DEIS concludes, "this level of groundwater pumping would have a small effect on the total groundwater resource available in the study area." (DEIS, p.3.3-64) However, if the individual hydrographic basins are examined, Table 3.3-4 (DEIS), Long Valley Basin is appropriated at 4,749 AFY and 4,000 AFY is mining a milling. Thus, for this basin it is more like 84% of the available water for the basin is used to mining, and is greatly affecting other water users in the basin including wildlife needs. BLM should motivate a finer detail analysis to assess how other water needs are affected. One level finer is the hydrographic basin, where it is assumed that the water is partially contained. Of course there exists basin-to-basin movement, but the primarily availability is the perennial yield of the basin. Even within a basin there is often great variation in hydraulic conductively, thus the affect of groundwater pumping maybe be non-uniformly experienced within a basin.	The Cumulative Effects Study Area (CESA) for Water Quantity and Quality was established by the BLM management team during the early stages of development of the DEIS to include the Huntington Valley, Newark Valley, Long Valley, and Ruby Valley hydrographic basins. These hydrographic basins were include in the CESA because portions of the project extend into each of these four basins as shown on Figure 3.3-1 of the DEIS and is a reasonable area for the cumulative analysis.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
405	62	The question of what is the cumulative affect of all uses on the water resource and impacts to other waters users on a more localized level within the cumulative effects study area including the Ruby Lake National Wildlife Refuge is not meaningfully addressed.	Comment noted. The cumulative impact analysis for water resources provided in Section 3.3.3 of the DEIS includes a specific discussion of the project pumping related to the perennial yield used by the State Engineer for administration of water rights in the Ruby Valley hydrographic basin.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
136	49	Page 3.3-65: Change WR-1 Springs and Seeps to: "Barrick will expand the Water Management and Monitoring Plan" instead of the Integrated Monitoring and Management Plan. Since the title of the Plan has changed to Water Management and Monitoring Plan.	Text modified as suggested in the comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
137	49	Page 3.3-67: Change AWRMP to WRMP	Text modified as suggested in the comment.	ERICKSEN	BETH	BARRICK GOLD U.S.

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174	41	While the EIS under the WRA amendment indicates no impacts or only slight temporary impacts on water sources, any use of water in combination with this long term drought may have impacts on water sources. While guzzlers provide water, they do not provide riparian habitat so critical to many species, particularly sage grouse broods. Water sources need to be monitored and alternative sources provided and so the EIS needs to incorporate a monitoring plan. Additionally, thee should be a plan for alternative sources of water if needed.	Comments noted. There is no mention of the use of guzzlers provided in this section. Proposed Monitoring and Mitigation Measure WR-1 in Section 3.3.4 includes requirements for monitoring and seeps and springs within or near predicted drawdown areas. It is important to understand that Impacts to springs and seeps are projected to occur under the Proposed Action and Reconfiguration alternatives, but not under the Western Redbird Modification Alternative. Therefore, specific mitigations measures for impacts to springs will not be necessary or required if the Western Redbird Modification Alternative is selected as the preferred alternative and authorized in the ROD.	VON SEGGERN	DAVID	SIERRA CLUB, TOIYABLE CHAPTER
260	51	Ground water monitoring around the open pit sites to be backfilled will provide assurance those activities do not impact ground water quality.	Comment noted. Specific groundwater monitoring requirements for the project will be determined by the NDEP as part of the WPCP(s) for the project.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
261	51	The Ruby Lake National Wildlife Refuge is close to the north end of proposed operations. There needs be a method proposed to assure dewatering activities do not affect sufficient recharge of the lake.	Potential impacts to water resources in the Ruby Lake NWR were addressed in Section 3.3.3 of the DEIS. The results of groundwater modeling indicate that localized drawdown associated with the project is not likely to extend to, or capture flow in springs that sustain the lake and associated wetland areas in the NWR.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
285	53	It is important that the draft EIS clearly states the number of monitoring facilities (Figure 3.3-23), monitoring protocol & policy, and people responsible for the monitoring of the water, and follows through with their promises. I am not a scientist, nor a lawyer or a person who has written a programmatic agreement or NEPA document; however, it is vital that the mining company that is responsible for the Bald Mountain mine, and the governmental agencies with legal responsibilities to protect water quantity and quality, do their due diligence to protect the water quality and quantity in and near the project area as laid out in section 3.3.1.5 and Tables 3.3-5 of the draft EIS. This includes ensuring that dust particles containing contaminants that settle on surface water are morutored by qualified personnel usmg operat10nal procedures that react quickly to water contamination issues and ensure that the health and safety of the people.	Comment noted. Specific groundwater monitoring requirements for the project will be determined by the NDEP as part of the WPCP(s) for the project. In addition, a comprehensive water management and monitoring plan will be developed for the approved action described in the BLM record of decision for this project.	BANUELOS	CLIFFORD	ELKO BAND COUNCIL
298	54	The Draft EIS discusses monitoring and mitigation measures that address the potential for groundwater pumping to impact baseflow in springs and seeps and reduce wetland vegetation. In particular, on page 3.3-65, WR-1 Springs and Seeps discusses how Barrick Gold U.S., Inc. would expand the Integrated Monitoring and Mitigation Plan to include more robl!st sampling and develop a mitigation plan to offset potential impacts. "The plan would define ojfsite mitigation to restore or reclaim natural spring and wetland areas on BLM land in the district. The plan would be subject to BLM approval prior to initiation of the project." The discussion ofWR-1 does not disclose how these impacts would be mitigated nor the effectiveness of mitigation, and it defers development of the Plan to an unspecified time in the future. Recommendation: In the Final EIS, discuss the availability and viability of offsite mitigation of wetlands vegetation in other areas of BLM land in the district. This information should be presented clearly within a comparative context and include reasonable timeframes for completion of mitigation efforts.	Impacts to springs and seeps are projected to occur under the Proposed Action and Reconfiguration alternatives, but not under the Western Redbird Modification Alternative. Therefore, site specific details regarding offsite mitigations to restore or reclaim natural spring and wetland areas on BLM land in the district to off set potential impacts from the project as outlined in mitigation measure WR-1 will not be necessary or required if the Western Redbird Modification Alternative is selected as the authorized alternative in the BLM record of decision for this project.	MARTYN GOFORTH	KATHLEEN	USEPA
300	54	The draft Adaptive Waste Rock Management Plan and page 3.3-50 of the Draft EIS indicate that all rock disposal areas wou!d have an overall positive net neutralizing potential and would be covered with six inches of soil material. The draft A WRMP indicates that the six-inch cover would support vegetation reestablishment and minimize infiltration. EPA remains concerned that a six-inch cover of soil material on the rock disposal areas may not be an adequate thickness for cover that would not only accommodate successful revegetation, but act as a store-and-release cover as well. Recommendation: Explain in the revised Adaptive Waste Rock Management Plan and the Final EIS the basis for BLM's determination that 6-inches of cover material would be adequate to limit infiltration into the rock disposal area. EPA also recommends that the revised Adaptive Waste Rock Management Plan include provisions to continue to study whether additional growth media and soil cover will be needed to effectively preclude meteoric water from infiltrating rock disposal areas.	As stated in Section 3.3.2.1, the Bald Mountain Mine has successfully used a 6-inch soil cover to reclaim waste rock facilities at the existing mine. Cover modeling and experience on site described in the Adaptive Waste Rock Management Plan indicates that the 6-inch cover will support vegetation reestablishment and minimize infiltration (Schafer 2012a,b). The 6-inches of cover for proposed RDAs is the minimum growth media cover thickness that would be allowed.	MARTYN GOFORTH	KATHLEEN	USEPA
390	60	We recommend that in the Record of Decision for the EIS (ROD), BLM commits to the following mitigation measures: Water quality and quantity monitoring shall be implemented prior to and during implementation to quickly detect changes in water quality (including heavy metals) and quantity.	Comment noted. Specific groundwater monitoring requirements for the project will be determined by the NDEP as part of the WPCP(s) for the project.	SEDLACEK	NICOLE	U.S. FISH AND WILDLIFE SERVICE
391	60	We recommend that in the Record of Decision for the EIS (ROD), BLM commits to the following mitigation measures: The exclusion distance for pesticides shall be quantified in the contract specifications (e.g., "a minimum of 100 feet from environmentally sensitive areas and points of entry to water bodies, down-slope from water bodies").	The proposed project and alternatives do not specify plans for the application of pesticides. Any applications of pesticides used in the project would need to be applied in accordance with applicable state and federal regulations.	SEDLACEK	NICOLE	U.S. FISH AND WILDLIFE SERVICE
406	62	(DEIS, p. 3.3-66) BLM needs to explain why mitigation would not practical for the South Water Canyon Seep or JBR No. 14. If monitoring indicates that baseline flow is decreasing, then why wouldn't stopping the dewatering arrest the problem? Furthermore, if there is no mitigation then it seems like these wetlands would collapse upon which wildlife depends. In particular, mule deer migratory routes. BLM cannot allow this to happen.	Comments noted. The model simulations indicate that drawdown that occurs in the vicinity of these springs would persists for the foreseeable future (i.e. the water table would not recover to pre-project water levels). Therefore, it is assumed that perennial water sources that are hydraulically connected to the groundwater system impacted by pumping and within the drawdown area likely would experience a reduction in baseflow and the reduction in baseflow would likely persists for the foreseeable future even if the groundwater pumping were reduced or stopped.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH

Comment ID	Submittal ID	Comment Text	Response Text	Last Name	First Name	Org Name
408	62	Geochemical analysis results show that while much of the resource is not considered potentially acid generating (PAG), and there are some high PAG pockets that must be managed carefully. Partial backfill of pits is planned for those pits that are expected to form a pit lake. This means that groundwater will flow through the backfill material and great care must be taken to avoid acid generation and groundwater contamination. As part of the mitigation plan groundwater monitoring wells should be installed up and down gradient of these backfilled pits to assure that groundwater contamination is arrested as soon as possible.	Mitigation measure WR-4 provided in Section 3.3.4 would require selective handling of waste rock for placement in the Top Pit Complex and Redbird Pit to effectively mitigate potential adverse impacts to downgradient groundwater quality associated with the pit backfill material. Site specific monitoring requirements for the project will be specified in the Nevada WPCP for the project, and in an updated Water Management and Monitoring Plan that would be developed specifically for the approved action specified in the BLM record of decision for the project.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
17	8	Groundwater pumping could also dry up important seeps and springs in the area that also support the migratory and other species. The Proposed Action is expected to pump 14 billion gallons of groundwater over the next 27 years. According to the draft EIS pumping out of the Ruby water basin to an estimated extent of about 1-2 percent of the perennial yield.	Comments noted. Potential impacts to water resources was provided in Section 3.3 of the DEIS.	EMMERICH	KEVIN	BASIN AND RANGE WATCH
27	13	By the BLM allowing this expansion, they would be completely derelict in its mandate to protect our public lands and to manage them for multiple uses by granting the expansion of the Bald Mountain Mine. Of course, this is due to the vast amounts of water each project will consume, and the water that will be lost for wild horses and other wildlife. There is no good excuse for the BLM to expand this intensive water-consuming mine in a designated Herd Management Area, especially while much of the West is experiencing severe drought conditions and operating under serious water-restrictions.	Comments noted.	HUNT	DEBRA	
28	13	As you know, mines negatively impact surface water availability by draining water from aquifers. In fact, the US government's own scientists estimate that it could take more than 200 years to replenish the groundwater removed by mining operations. By draining water from the aquifers, it takes water from the land, it's residents, but more then that, it also takes from other rivers and lands down the way which will also have a negative effect on animals, humans and ecosystems not in the immediate area. For every action there is a reaction, and some actions cause larger ripples. Mining and expanding a mine will have a large ripple effect.	Comments noted.	HUNT	DEBRA	
50	21	Please, reconsider allowing the expansion of this company. Yes, the almighty dollar seems to trump what is 'right' and decent in the world we live in, but have a heart and think outside the box. These horses deserve the right to be left alone and left free to roam.	Comments noted. The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under the mandate of multiple-use and sustained yield. The Proposed Action Alternative (which is the most impactful of the three alternatives) would impact less than one percent of the total acreage within the Triple B HMA and would not result in rounding up or moving wild horses.	MC MULLIN	ROBYN	
71	33	The BLM would be derelict in its mandate to protect public lands and manage them for multiple uses by granting the expansion of the Bald Mountain Mine, due to the vast amounts of water each project will consume and the water that will be lost for wild horses and other wildlife. There is no excuse for the BLM to expand this intensive water-consuming mine in a designated Herd Management Area, especially while much of the West is experiencing severe drought conditions and operating under serious water-restrictions. As you know, mines negatively impact surface water availability by draining water from aquifers. In fact, the US government's own scientists estimate that it could take more than 200 years to replenish the groundwater removed by mining operations.	Comments noted. The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under the mandate of multiple-use and sustained yield. The Proposed Action Alternative (which is the most impactful of the three alternatives) would impact less than one percent of the total acreage within the Triple B HMA and would not result in rounding up or moving wild horses.	MULTIPLE		
94	44	This proposed project would contribute to the decline of the sensitive desert ecosystem in this area and would both seriously pollute and unsustainably draw down surface and subsurface water resources- resources which are already dangerously imperiled to begin with. The Draft EIS acknowledges this fact and clearly states that pollution from the proposed mining expansion would undoubtedly harm wildlife, including federally protected wild horses. Indeed, it is well known that mining operations very negatively impact surface water availability by draining water from aquifers, and as you are aware, the US government's own scientists estimate that it could take more than 200 years to replenish the groundwater removed by the proposed mining operations.	Comments noted.	LYNCH	JANET	
364	57	Expanding mining operations that would draw an estimated 38 billion-plus gallons a year from the aquifer and, after contaminating it with cyanide and sulfuric acid, pump the water into ponds from which it will continue to evaporate -- that is a formula for disaster.	The quantity of groundwater that would be pumped on an annual basis stated in the comment is incorrect. The estimated future groundwater pumping requirements for the project alternatives was provided in Table 3.3-9, in Section 3.3.2 of the DEIS. For the proposed action, average annual pumping rate would reach a maximum of 1,658 gpm in year 14. A pumping rate of 1,658 gpm is equivalent to approximately 871 million gallons a year.	DEVLIN	MARYBETH	
11	6	I am writing in support of the wild burro and wild horse in this area.	Comments noted. The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under the mandate of multiple-use and sustained yield. The Proposed Action Alternative (which is the most impactful of the three alternatives) would impact less than one percent of the total acreage within the Triple B HMA and would not result in rounding up or moving wild horses.	CREASON	SHARON	
23	11	I am not astonished that the BLM has taken the exact same polices of our government hundreds of years ago against the American Indians and now uses those old polices to exterminate our wild horses.	Comments noted. The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under the mandate of multiple-use and sustained yield. The Proposed Action Alternative (which is the most impactful of the three alternatives) would impact less than one percent of the total acreage within the Triple B HMA and would not result in rounding up or moving wild horses.	HAUB	DAVID M	

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42	17	I have little hope that the BLM is really concerned about what the public feels, especially with regard to wild horses. Since the inception of The Wild Horse and Burro act of 1969, when the entire Congress voted unanimously to provide safety and habitat for these animals, the government as continually picked away at that popular sentiment to render it useless.	Comments noted. The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under the mandate of multiple-use and sustained yield. The Proposed Action Alternative (which is the most impactful of the three alternatives) would impact less than one percent of the total acreage within the Triple B HMA and would not result in rounding up or moving wild horses.	KITCHENS	COLIN M	
44	17	you look at your obligation as one of 'herd management' not preservation. I fault this to the attitude that the BLM looks at their duty as a business model concerning tourists and livestock. This land does not belong to the Government - it is, as is indicated, 'public land' and yours is the sacred duty of keeping it pristine - not selling it to mining companies. You have to stand up and fight for that as much as we do. You cannot capitulate to business and government entities who do not own the land. Please, get tough, and protect these animals.	The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under our mandate of multiple-use and sustained yield. The Proposed Action Alternative (which is the most impactful of the three alternatives) would impact less than one percent of the total acreage of the Triple B HMA.	KITCHENS	COLIN M	
60	31	The penning and killing and rounding up of AMERICA'S WILD AND BEAUTIFUL HORSES. you job is to protect wild life. Please please talk to god. YOU ARE KILLING OUR COUNTRY BY KILLING AND ROUNDING UP HORSES OF THERE LADY. This is awful I will do everything I can to stop you. Who cares about cattle…we need those horses there not moved. Please leave them Alone.	The Bald Mountain mine expansion project does not propose to kill, round up, or move wild horses.	YOUNG	RHONDA K	
65	33	This mining project will jeopardize the well-being of wild horses who call the Triple B Herd Management Area (HMA) home	If approved, the Proposed Action Alternative would result in a temporary loss of less than one percent of the total acreage of the Triple B HMA. The permanent loss would be negligible and acreage lost to the Reconfiguration Alternative and the Western Redbird Alternative would be less than for the Proposed Action Alternative.	MULTIPLE		
104	47	You are not even abiding by your own laws to protect wild horses roaming free.	This comment does not apply to the proposed project.	MC CORD-CROOKS	STACEY	
310	55	The Wild Free-Roaming Horses and Burros Act of 1971 (P.L. 92-195) (Dec. 15, 1971) (the "Wild Horse Act") charges BLM with the "protection, management, and control of wild free-roaming horses and burros on public lands." Id. Pursuant to this mandate, "wild free-roaming horses and burros . . . are to be considered in the area where presently found, as an integral part of the natural system of the public lands." 16 U.S.C. § 1331. Furthermore, BLM "shall manage wild free-roaming horses and burros in a manner that is designed to achieve and maintain a thriving natural ecological balance on the public lands." 16 U.S.C. § 1333(a). The legislative intent of the Wild Horse Act is explicit and provides that: It is the policy of Congress that wild free-roaming horses and burros shall be protected from capture, branding, harassment, or death; and to accomplish this they are to be considered in the area where presently found, as an integral part of the natural system of the public lands. 16 U.S.C. § 1331. BLM cannot ignore or minimize its obligations under Wild Horse Act in the course of developing and approving the Proposed Project.	The BLM will not ignore or minimize its obligations under the Wild Free-Roaming Horse and Burro Act in the course of developing and approving the Proposed Project. If the proposed project is approved the impacts to the Triple B HMA will result in a loss of less than one percent of the total acreage and there would be no branding, harassment, capture, or death of wild horses as a result of the project.	WAGMAN	BRUCE A	SCHIFF HARDIN
353	56	Consider these resources: Craig RK (2010) "Stationarity is Dead" – Long Live Transformation: Five Principles for Climate Change Adaptation Law. Harvard Environmental Law Review, 34 (1): 1-57. Garfin G, Jardine A, Merideth R, Black M, LeRoy S, eds. (2013) Assessment of climate change in the Southwest United States: A report prepared for the National Climate Assessment. A report by the Southwest Climate Alliance. Washington, D.C.: Island Press.	Thank you for suggesting the climate change resources. A discussion regarding climate change has been added to the Wild Horses section of the EIS.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
376	59	If approved, the BLM would green-light the disturbance of a legal habitat for the 2015 "guesstimated" population of 1,460 wild horses, who would suffer the negative effects of this Project, including all of the disruptive and destructive impacts to the mustangs and to the environment that go along with mining exploration activities -- such as road construction expansion, increased vehicle traffic and the use of heavy equipment including excavators, trucks and drilling rigs as well as drilling activities -- which would threaten the welfare of these protected animals and, according to the BLM's own admission, lead to loss of critical valuable wildlife habitat. Mining expansion would also cause further destruction the sensitive desert landscape. The Draft EIS also confirms resultant negative impacts that would be harmful to wildlife -- including federally-protected wild horses -- such as pollution of aquifers and surface and subsurface areas. As you know, mines negatively impact surface water availability by draining water from aquifers and our government's own scientists estimate it could take more than 200 years to replenish the groundwater removed by mining operations.	If approved, the Proposed Action Alternative would result in a temporary loss of less than one percent of the total acreage of the Triple B HMA. The permanent loss would be negligible and acreage lost to the Reconfiguration Alternative and the Western Redbird Alternative would be less than for the Proposed Action Alternative. Impacts to water are discussed in section 3.3 Water Quality and Quantity.	HENNESSY	EILEEN	
384	59	The overwhelming majority of the American people, including myself, continue to demand that our nation's last remaining wild horses and burros, who are "fast disappearing from the American scene", be humanely managed on the range in wild, free-roaming sustainable herds on our public lands and preserved for future generations -- not rounded up and removed from their rightful place on our western landscape or having their legally-designated habitat violated by the authorization of destructive activities within their legal HMAs. I fully support greater protections for our rapidly vanishing wild herds and their continued presence on our public lands.	The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under the mandate of multiple-use and sustained yield. The Proposed Action Alternative (which is the most impactful of the three alternatives) would impact less than one percent of the total acreage within the Triple B HMA and would not result in rounding up or moving wild horses.	HENNESSY	EILEEN	

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385	59	The BLM must fulfill its mandate to protect Americas wild horses by not authorizing disruptive commercial activities by special interests that would lead to the destruction of their lawful habitat, interfering with their wild free-roaming behaviors, impeding genetic interaction, disrupting frequented travel routes, or worse, compelling the agency to call for wild horse roundups and removals to accommodate commercial usage in legal habitats which would sentence myriad wild horses to languish in government holding facilities that are already at full capacity with 60,000+ (and counting) captives -- a manmade crisis created by the BLM that has spurred the agency to call for slaughtering the "excess" captives, a barbaric practice that over 80% of the American people vehemently oppose.	The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under the mandate of multiple-use and sustained yield. The Proposed Action Alternative (which is the most impactful of the three alternatives) would impact less than one percent of the total acreage within the Triple B HMA. Such a small loss of acreage would not be the cause of roundups, capture, or disruption to the free-roaming nature of wild horses.	HENNESSY	EILEEN	
386	59	I vehemently oppose any actions by the BLM that would jeopardize the welfare and future survival of our nation's federally-protected wild horses and burros. The Wild Free-Roaming Horse and Burro Act of 1971 declares that wild free-roaming horses and burros shall be protected from capture, branding, harassment, or death and that they are to be considered in the area where presently found, as an integral part of the natural system of the public lands. Prioritizing special interests, such as mining, over the protection of the wild horses of the Triple B HMA violates the law, as does putting their welfare at risk with destructive activities and harassment in their own rightful habitat and threatening to reduce their legally-designated herd areas and the forage they need to survive -- all for the sake of profit. Such a proposal contradicts the legal mandate to protect and preserve our wild herds on our public lands. Commercial enterprises must not be elevated to the detriment of a protected species. Therefore, I call on the BLM to reject any further expansion of the Bald Mountain Mine's gold drilling activities in critical, legally-designated wild horse habitat in the Triple B HMA in Nevada.	The BLM will not ignore or minimize its obligations under the Wild Free Roaming Horse and Burro Act in the course of developing and approving the Proposed Project. If the proposed project is approved the impacts to the Triple B HMA will result in a loss of less than one percent of the total acreage of the Triple B HMA and there would be no branding, harassment, capture, or death, as a result of the project.	HENNESSY	EILEEN	
387	59	I, along with the majority of the American public, fully expect BLM to seriously consider and accept ALL comments from wild equine experts, range experts and that of the public whose opinion matters greatly on this issue and to accurately and truthfully reveal the actual figures on the members of the public who submitted comments on this EA and their positions on this extremely important issue, as your agency is legally required to do under the National Environmental Policy Act (NEPA). BLM cannot continually dismiss the American people, who fully support protection of our rapidly vanishing wild herds on our public lands and want these national treasures to be humanely manage ON THE RANGE in 59 wild, free-roaming genetically viable herds. Legions of concerned citizens are calling for the preservation of our wild herds only to have our protests fall on deaf ears. This cannot and must not continue. The agency must acknowledge that the will of the majority of Americans should outweigh that of a small minority of special interests, including welfare ranchers and extractive industries, with personal agendas that do not include the existence of wild horses and burros in the American West. BLM must fulfill its mandate to protect America's wild equines instead of constantly attempting to find new ways to manage them into extinction.	Under the National Environmental Policy Act (NEPA) the BLM is required to seriously consider all comments submitted by the public. The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under the mandate of multiple-use and sustained yield. The Proposed Action Alternative (which is the most impactful of the three alternatives) would impact less than one percent of the total acreage within the Triple B HMA.	HENNESSY	EILEEN	
313	55	The Triple B HMA spans approximately 1,225,000 acres. The study area, i.e., BLM's determination of the area of the HMA that could be affected by the Proposed Project, is approximately 40,716 acres, or 3% of the HMA's total acreage. DEIS, 3.10-1; https://eplanning.blm.gov/epl-front-office/projects/nepa/30202/61150/66392/Chapter_3_-_Sections_3.1_through_3.13.pdf.	This is correct. The Study Area is the combined boundary of the North Operations Area and the South Operations Area and does equal three percent of the Triple B HMA; however, surface disturbing activities under the Proposed Action Alternative total 6,879 acres which is less than one percent of the toil acres within the Triple B HMA.	WAGMAN	BRUCE A	SCHIFF HARDIN
329	56	By including such a vast area as part of the CESA the BLM has artificially minimized the impacts of this project on wild horses. To assess the true impacts of this project on the horses and their necessary forage in the project area, the BLM should have included the project area HMA acreage and assessed the impacts as they affect the wild horses and forage within the project area. The DEIS fails to address this important impact analysis.	The CESA for wild horses was identified as the Triple B HMA in its entirety since it is being managed as a complete unit.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
312	55	The DEIS states that the current estimated population for the HMA is 1,460 wild horses. Id. (citing BLM 2015). However, a recent BLM emergency gather notice cites a current population of 1,752 wild horses in the HMA. See BLM Ely District Office, Triple B HMA Emergency Gather (Oct. 1, 2015) ("Triple B Emergency Gather"), available at http://www.blm.gov/nv/st/en/fo/ely_field_office/blm_programs/wild_horses_and_burros/Cabin_Spring_Emergency_Gather.html.	The text was drafted prior to the October 15th emergency gather. It has been modified to reflect the current population.	WAGMAN	BRUCE A	SCHIFF HARDIN
314	55	BLM is aware that water is a very scarce resource in the Triple B HMA. The Triple B HMA "is within the Great Basin geographical region, which is one of the largest deserts in the world. The Great Basin is effectively cut off from the westerly flow of Pacific moisture. The Complex [i.e., the Triple B HMA and two other HMAs] is dry with few perennial waters. The majority of the limited water resources are small seeps and springs that are found mainly in the mountains." BLM Ely District Office, Triple B, Maverick-Medicine, and Antelope Valley Herd Management Areas Wild Horse Gather: About the Complex ("About the Complex"), available at http://www.blm.gov/nv/st/en/fo/ely_field_office/blm_programs/wild_horses_and_burros/triple_b__maverick/About_the_HMA.html. Unfortunately, the scarcity of water is an immediate, emergency concern to the wild horses in the HMA. BLM just announced an emergency gather of between 80 and 150 wild horses from the Triple B complex due to severe drought conditions. See Triple B HMA Emergency Gather (Oct. 1, 2015). There has been a "severe drought from near Cabin Spring" in the Triple B Complex. Id. "Seven horses have already died and four more were euthanized due to poor body condition and/or acute injuries with a poor or hopeless prognosis for recovery." Id. BLM states that it "has been supplementing Cabin Spring with water troughs. Despite the BLM's efforts, water remains limited at the spring, which is the only perennial water source for 16 miles. As a result of the drought, wild horse health conditions have continued to decline." Id.	Thank you for your comment. The EIS will be updated with the current wild horse population.	WAGMAN	BRUCE A	SCHIFF HARDIN

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321	55	The Triple B HMA is part of a 1,682,998-acre "Triple B Complex" that includes the Triple B HMA, Maverick-Medicine HMA, and Antelope Valley HMA. About the Complex, http://www.blm.gov/nv/st/en/fo/ely_field_office/blm_programs/wild_horses_and_burros/triple_b__maverick/About_the_HMA.html. Importantly, "[t]he boundaries between the Triple B, Maverick-Medicine and Antelope Valley HMAs; and Cherry Spring WHT [wild horse territory] are not fenced[,] nor do they have any natural boundaries. As a result, wild horses move regularly between the HMAs and WHT for water and forage." Id. (emphasis added).	The Affected Environment section has been updated to include this information.	WAGMAN	BRUCE A	SCHIFF HARDIN
317	55	The DEIS Should Detail the Potential Effects to Wild Horses from Lost or Reduced Vegetation. The DEIS discloses that the Proposed Project "would temporarily remove approximately 4,322 acres of available forage within the Triple B HMA within the proposed NOA; and approximately 2,557 acres of available forage within the Triple B HMA within the proposed SOA." DEIS, 3.10-2.1. Ultimately, after thirty years' time, some of that vegetation acreage would be reclaimed, but a permanent loss of 1,210 acres of vegetation is expected. Id. And what is "temporary" to BLM will be "permanent" for multiple generations of wild horses living on the range, and could easily cause their demise. This effectively amounts to a removal of wild horses without authorization or compliance with the requirements of the Wild Horse Act.1	The DEIS quantifies the loss of acreage that is assumed to produce vegetation. Temporary impacts are those surface disturbances that would be reclaimed within 20 years. The text has been modified to clarify this. The project disturbance of less than one percent of the total acreage within the Triple B HMA is considered minimal.	WAGMAN	BRUCE A	SCHIFF HARDIN
319	55	Lastly, the DEIS does not explain how the Proposed Project's effects on water resources and forage resources, considered cumulatively, could affect herd health and drive wild horse herd distribution within or even outside of the HMA. Any revised or final EIS must include detailed evaluation of how the particular lost forage, taken alone and considered cumulatively with the potential for lost water resources, could affect the Triple B HMA's wild horses.	The DEIS states that the project would impact less than one percent of the total acreage within the Triple B HMA and that its cumulative contribution within the CESA is one percent. This minimal overall disturbance is unlikely to affect herd health or distribution. No waters of critical concern are located within the project area.	WAGMAN	BRUCE A	SCHIFF HARDIN
320	55	Part of the Proposed Project's design to protect wild horses in the HMA includes "building fences according to BLM specifications, flagging the fences every 16 feet with white flagging, road signs for traffic to protect wild horses if necessary, and commencement of reclamation activities 'as soon as practicable.'" DEIS, 2-126. While FRER appreciates that such fencing may be intended to protect wild horses from harmful materials and substances or dangerous conditions associated with mining activities, the DEIS does not explain how such fencing could affect the wild horses' free-roaming behaviors and natural migration patterns.	Fencing would be constructed to exclude livestock wild horses and wildlife from dangerous elements within the North and South Operation Areas and not the entire study area. This would be associated with the less than one percent of the total acreage within the Triple B HMA and is considered minimal.	WAGMAN	BRUCE A	SCHIFF HARDIN
322	55	Given the currently unbounded range of wild horses in the Triple B Complex, and BLM's obligation under the Wild Horse Act to "protect, maintain, and control viable, healthy [wild horse and burro] herds while retaining their free-roaming nature," 43 C.F.R. § 4700.0-6(c) (emphasis added), the DEIS must explain the potential impacts of fencing on the wild horses and how any such impacts will be minimized by the mine operator.	Fencing would be constructed to exclude livestock wild horses and wildlife from dangerous elements within the North and South Operation Areas and not the entire study area. This would be associated with the less than one percent of the total acreage within the Triple B HMA and is considered minimal.	WAGMAN	BRUCE A	SCHIFF HARDIN
328	56	The Proposed Action would temporarily remove a total of 6,879 acres (or more than 10 ½ square miles) of currently available habitat and forage from the Triple B HMA. (DEIS 3.10.2.1, DEIS page 3.10-1) While this is a small percentage of the total land within the Triple B HMA (noted as less than 1 percent in Table 3.10-1 of the DEIS at page 3.10-3), it is nearly 17 percent of the portion of the HMA that overlaps with the project area. The portion of the HMA permanently removed (1,210 acres or nearly 2 square miles) raises the percent of currently available project area forage removed to nearly 20 percent, or one fifth. The DEIS fail to adequately analyze this impact to wild horse habitat. Additionally, the DEIS fails to quantify the temporary aspect of the forage removed by the proposed action. In addition, the DEIS fails to outlined the expected timeline for restoration or reclamation.	The proposed surface disturbance would occupy 17 percent of the project study area. It is incorrect to state that permanent disturbance is additive to temporary disturbance; it is that portion of temporary disturbance that will not be reclaimed. Successful reclamation depends on a number of factors that can't be predicted, such as weather. Barrick would not receive their bond release until the state and BLM have signed the release.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
330	56	The impacts to wild horses are not quantified and instead are vaguely described for distribution, forage, water, and direct mortality from vehicle collisions and exposure to toxic chemicals and open pits. (DEIS at page 3.10- 3 and 3.10-4) The DEIS fails to disclose impacts to wild horses expected from exposure to toxic chemicals. The DEIS fails to adequately disclose, quantify and analyze these impacts. Failure to do so renders the analysis inadequate.	The DEIS contains a quantitative discussion regarding loss of acreage assumed to produce forage vegetation and qualitative discussions regarding potential injury and displacement. The DEIS states that "Process ponds, storm water/event ponds, and other areas of cyanide use would be fenced with 8 foot high wildlife exclusion fence in accordance with NDOW guidelines."	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
331	56	Under the Reconfiguration Alternative the impacts to wild horses is reduced (total surface disturbance to 3,703 fewer acres, DEIS at page 3.10-4), and further slightly reduced (by an additional 636 acres) in the Modification Alternative (DEIS at page 3.10-4). However, the impacts are again not quantified in terms of anticipated numbers of horses impacted, rendering the analysis inadequate.	Impacts resulting from the Reconfiguration and Western Redbird alternatives affect less than one percent of the total acreage within the Triple B HMA; therefore the impact to the wild horse population is considered to be minimal.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
336	56	Fugitive dust impacts are analyzed relative to livestock grazing (dust settling on forage could reduce palatability) (DEIS at page 3.9-6), but not relative to wild horse forage palatability. This oversight must be corrected and the impacts of fugitive dust to wild horse forage must be analyzed. Similarly, the impacts of fugitive dust on the health of livestock are analyzed (DEIS at page 3.9-6), but not disclosed as to how wild horse health would be impacted. The DEIS fails to address this important impact analysis. This oversight must be corrected.	A qualitative discussion regarding the effects of fugitive dust emissions to wild horses has been added to the Environmental Consequences section.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
337	56	The DEIS acknowledges that the Proposed Action would "impact" 26 miles of ephemeral stream and that this would have an impact on wild horses. (DEIS at page 3.10-3) However, the impacts specific to wild horses are not disclosed and instead the reader is directed to "Section 3.7, Widllife." (DEIS at page 3.10-3) Unfortunately, the impacts to "wildlife" generally are not going to be the same as the impacts to wild horses specifically and therefore have not been analyzed at all. The DEIS lacks information on which springs and ephemeral streams wild horses utilize and how lack of water at these locations would impact the wild horse population. This information must be provided and failure to do so renders the DEIS inadequate.	Impacts to surface water is addressed in Section 3.3 Water Quality and Quantity. The DEIS does analyze the potential impact to surface water in regards to wild horses and states that "The loss of ephemeral drainages would represent a potential reduction in available water for wild horses. However, this reduction is anticipated to be minimal as ephemeral streams provide access to water only during runoff events and do not serve as consistent water sources." No waters of critical concern are located within the project area.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION

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348	56	Reclamation of disturbed areas is used to minimize the impacts to wild horses, their forage and other wildlife. However, the reclamation plan is long-term (20 years or more) and the impacts to wild horses and their forage are not analyzed for the interim period of time. This failure to analyze the immediate impacts and to discount them based on a proposed reclamation that is perhaps decades away results in an analysis that ignores how the proposed mine expansion will actually affect wild horses for the next 20 years. See DEIS at page 3.21-1. The immediate and short term impacts to wild horses are not quantified or qualified in the DEIS other than to identify the number of acres of habitat that are impacted by each action alternative. See DEIS Table 3.22-1. The DEIS fails to address this important impact analysis.	The majority of the Environmental Consequences section analyzes impacts that could occur prior to reclamation (temporary impacts) including acreage of surface disturbance, effects of fugitive dust emissions, potential impacts to water sources, and potential physical harm to wild horses. Other impacts to wild horses would be speculative and lack proper support.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
379	59	The BLM speculates that such extreme disturbances to wild horses and their habitat "could" or "may" negatively impact the wild horses and that any detrimental impacts that occur would likely be "temporary". On the contrary. I believe such invasive and potentially catastrophic disturbances to the Triple B HMA WOULD MOST DEFINITELY impact the wild horses, their foals, their habitat, their travel corridors, their water sources, their travel patterns, their wild free-roaming behaviors and their genetic interchange, without question, and would, most likely, result in permanent displacement from their legally-designated habitat, as well as orphaned and abandoned foals. Wild horses do not simply "adapt" to constant human presence and threatening and disturbing activities, nor threats to their families (including foals), restrictions of movement from intrusive fencing preventing the Triple B HMA being uniformly used, reduced and degraded habitat, cacophonous noise or any other antagonistic activities by humans trespassing into their domain.	The DEIS categorizes disturbance to wild horses and their habitat as temporary (20 years) and permanent (not reclaimed). Analyzing lingering effects to wild horse behavior and movement patterns after final reclamation would be speculative.	HENNESSY	EILEEN	
332	56	The assumption that "portions of past disturbances have been reclaimed, and ongoing reclamation at existing operations would continue to reduce cumulative impacts within the wild horse CESA" lacks supporting documentation. (DEIS at page 3.10-5) The DEIS should have included information and evidence of past and ongoing reclamation. The DEIS should also include specific timelines for completion of ongoing or anticipated reclamation projects. The unsupported assumption that reclamation is or will be completed and successful artificially reduces the impacts to wild horses within the Triple B HMA.	The text will be modified to clarify that reclamation success can vary and may not always return disturbed areas to pre-disturbance condition.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
366	57	Triple B HMA -- Already Fragmented by the Southwest Intertie Project (SWIP) The central portion of the SWIP transmission lines cut through the Triple B HMA, impacting land for a mile on either side of the center line. Now this HMA -- which is supposed to be managed principally for the wild horses -- is also being threatened with further encroachment by the most environmentally-devastating and polluting industry -- mining. The application for expansion of the Bald Mountain Mine must be denied. The wild horses must have their HMA free from further disturbance.	Thank you for your comment.	DEVLIN	MARYBETH	
458	4	Required mitigation: Buffer zones between wild horses and mining activities. New water-sources. Timing/seasonal and access route restrictions during peak foaling period. Strictly enforced speed limits. Mandatory education for mine employees on wild horses.	See comment 283.	MACY	MICHELLE	
283	33	However, if the BLM authorizes this project in spite of strong opposition from many private citizens and nonprofit groups, much stronger mitigation measures than those currently proposed must be required, including the following: • REQUIRED buffer zones (at least 1 mile in size) between mining expansion activities and core wild horse habitat area, including the corridors used by wild horses to access water sources, and between the mining activities and water sources themselves. • REQUIRED development of NEW water sources for wild horses if mining activities impact present water sources. • REQUIRED timing/seasonal restrictions and access route restrictions during the peak foaling period. • STRICTLY ENFORCED speed limits on all access roads within the HMA to prevent wild horse-vehicle collisions. • REQUIRED and mandatory education for mine employees regarding wild horses, their federal protections and their natural behaviors so that personnel in the area will have an understanding of and respect for the existing wild horse herd.	Refer to section 3.10 of the DEIS. It is anticipated that the implementation of Barrick's Traffic Management Plan would minimize the risks associated with potential wild horse-vehicle collisions (Barrick 2012a,b). During their current mining operations, Barrick has effectively controlled the speed limits of project-related traffic, resulting in zero livestock-vehicle collisions since January 2009 (BLM 2012m). Refer to Section 3.3 regarding water Quality and Quantity. No water of critical concern are located within the proposed area. The proposed project area is less than one percent of the total acreage of the Triple B HMA; so the overall impact to wild horses habitat would be minimal. It is also anticipated that wild horses will likely avoid any of the major human activity which will further reduce any potential impacts.	MULTIPLE		
88	44	If the BLM authorizes this project in violation of the FLPMA's clear statutory language, and against strong opposition from a large number of private citizens and nonprofit groups, much stronger mitigation measures than those currently proposed must be required, including the following: REQUIRED buffer zones (at least 1 mile in size) between mining expansion activities and core wild horse habitat area, including the corrdiros used by wild horses to access water sources, and between the mining activities and water sources themselves. REQUIRED development of NEW water sources for wild horses if mining activities impact present water sources. REQUIRED time/seasonal restrictions and access route restrictions during the peak foaling period. STRICTLY ENFORCED speed limits on all access roads within the HMA to prevent wild horse-vehicle collisions. REQUIRED and mandatory eduction for mine employees regarding wild horses, their federal protections and their natural behaviors so that personnel in the area will have an understanding of and respect for the existing wild horse herd.	See comment 283	LYNCH	JANET	

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89	55	Elimination of any water sources available to the wild horses in the HMA, especially without detailed consideration of the impacts that such elimination might have on the herds, is antithetical to BLM's duties of "protection" and "management" of wild horses on public lands under the Wild Horse Act. P.L. 92-195. The DEIS fails to explain how potential elimination of wild horses' water resources in the HMA, when none of those wild horses has been deemed "excess" and potentially eligible for removal, is consistent with BLM's duty to "achieve and maintain a thriving natural ecological balance on the public lands." 16 U.S.C. § 1333(a) (emphasis added). Moreover, BLM has an express duty to protect wild horses from harassment and death. 16 U.S.C. § 1331. By approving mining activities that could eliminate water resources from the HMA during this time of dangerous drought conditions, the agency is not only not preventing wild horse harassment and death, but may be unjustifiably contributing to harassment and death of the wild horses that it is legally obligated to protect. BLM cannot so violate its statutory mandate. Because the DEIS identifies concrete impacts to multiple water sources for the Triple B HMA, and in light of the current water crisis in that HMA, the DEIS must be revised to include mitigation measures to ensure that wild horses in the HMA are not harmed by the Proposed Project's impacts to the already limited water resources. At a minimum, the DEIS should provide that the current water trough supplementation by BLM will be continued and augmented to offset any effects from the Proposed Project.	Impacts to water resources are addressed in section 3.3 Water Quality and Quantity of the DEIS. The proposed project area is less than one percent of the total acreage of the Triple B HMA; so overall impact to wild horse habitat would be minimal. No water of critical concern are located within the proposed area. It is also anticipated wild horses will likely avoid any of the major human activity which will further reduce any impacts.	WAGMAN	BRUCE A	SCHIFF HARDIN
315	56	Despite permitting such mines for decades, the BLM has failed to collect data or conduct research on the impact of such mines on wild horses. The DEIS provides no information on future plans for monitoring wild horse herds for negative impacts associate with mining operations and infrastructure. We note that the BLM has provided a mule deer monitoring plan (see Appendix E of the DEIS) and therefore can and should provide a similar plan for wild horse monitoring.	Comment noted.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
306	59	As any further intrusive activities within this particular HMA could threaten the future survival of these mustangs, therefore, as it stands, the proposed mitigation measures for protecting this herd are inadequate and must be strengthened to ensure no harm comes to these federally-protected wild horses. Consequently, necessary measures must be taken to ensure the safety of these national treasures and strengthen their protection from the massive expanded disturbances to their home that are currently being proposed which would result in further losses of quality habitat usage for the federally-protected wild horses in the Triple B HMA. The following stronger mitigation measures than those being proposed must be required: - Any mitigation measures to ensure protection of the wild horses must include a requirement of buffer zones separating any drilling activities from essential wild horse habitat including travel corridors utilized by wild horses to gain access to water sources as well as between the water sources themselves and any drilling that may occur. Such buffer zones must be, at the very least, one mile away from human disturbance to discourage interference with normal wild horse behaviors. - Since wild horse distribution in the Triple B HMA is greatly influenced by water sources, it is imperative to require the creation of additional water resources so as to promote usage of the entire HMA. - In recognition of the importance of not disturbing the wild horses during the foaling process, in relation to timing and seasonal considerations and access to routes in wild horse habitat, there must be required restrictions in areas concentrated with mustangs during the peak foaling season (March 1 - June 30). - Moreover, there must be a required speed limit on all roads accessed within the legally designated HMA which must be rigorously enforced to ensure the safety of the wild horses in the areas identified as heavily used by them. - Bald Mountain Mine employees must be required to become educated about wild horses and learn to respect the legal rights of these treasured animals. This knowledge must include familiarity with natural wild horse behaviors and learning of the importance and legality of their federal protections. Such knowledge will enable employees to grasp their duty to protect these animals from any harm their unchecked activities could cause this valued herd of irreplaceable mustangs.	See response to comment 283.	HENNESSY	EILEEN	
8	4	Negative Impacts: Permanent removal of 1,210 acres of vegetation". Temporary removal-of 6,879 acres of forage. Reduced amount of water. Increased traffic, human activity and noise. Risk to wild horse safety and health by physical injury and/or exposure to poisonous mercury and cynaide (by products of gold mining).	Thank you for your comment.	MACY	MICHELLE	
12	6	Recreating a natural open free environment for our wild burro and horse for mans purposes is morally reprehensible and spiritually wrong. Please have the gumption to stop what is basically the execution of our wild heritage. Do not allow the restriction of grazing and water provision of our wild burro and horse. Please!	Comment noted.	CREASON	SHARON	
24	12	is seriously considering allowing a gold mining operation on the same property where the Triple B Herd is located in White Pine County. Mining guarantees the destruction of habitat and the consumption of a great deal of water. Moreover, this land was set aside for the wild horses. This is federal land and it is you responsibility to protect the habitat and protect the creatures who rely on the habitat for survival.	The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under the mandate of multiple-use and sustained yield.	HAUSER	DEBBIE	

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25	12	If you round up the Triple B herd, you will: - spend an obscene amount of tax payer money on the round-ups and care of the animals Kill and maim many horses during the round-ups - Obliterate families and historic blood lines - Condemn the horses to a miserable existence standing in pens, exposed to the hot sun without shade - Give them a death sentence. It is now known that BLM offices have sent the wild horses to slaughter.	This comment does not apply to the proposed project.	HAUSER	DEBBIE	
45	19	PLEASE reject expansion of Bald Mountain Mine! It will jeopardize the well being of wild horses. Negative Impacts: permanent removal of 1,210 acres of vegetation. temporary removal of 6,879 acres of forage. reduced amt of water. increased traffic, human activity and noise. risk to wild horse safety & health by physical injury and/or exposure to poisonous mercury & cyanide (byproducts of gold mining). PLEASE do NOT expand Bald Mountain Mine!	Thank you for your comment.	MACY	MICHELLE	
47	21	The wild horses that live there will be horribly affected with the waste water in the ponds. We all know, no one at the BLM office really cares about these horses. The horses are not going to be paying BLM any type of huge fee that the mining operation is going to. We all know, the BLM considers them to be a huge nuisance and would prefer that every single one of them be rounded up and shipped off for slaughter. But these horses are more than just 'dog food' or 'glue'. These horses are our heritage. These majestic animals are a part of American History.	The DEIS states that "Process ponds, storm water/event ponds, and other areas of cyanide use would be fenced with 8 foot high wildlife exclusion fence in accordance with NDOW guidelines."	MC MULLIN	ROBYN	
48	21	This mine uses a lot of water. Are we not in a drought? How can u even consider allowing this to happen? This mining operation is going to take away precious water resources that is unnecessary.	Comment noted.	MC MULLIN	ROBYN	
70	33	The project will cause further destruction of the sensitive desert landscape and the inevitable pollution of aquifers and surface and subsurface areas. The Draft EIS acknowledges this fact and clearly states that this pollution will harm wildlife, including federally protected wild horses.	Thank you for your comment.	MULTIPLE		
72	33	The BLM must deny the Bald Mountain Mine expansion in order to fulfill its mandate to protect the wild horses who are currently living in the Triple B HMA. The BLM's "multiple use" mandate does not require the agency to expand mining operations or to approve each and every mining proposal that is submitted especially when it would severely compromise, undermine, or restrict the other “multiple uses” of the lands that would be affected by it.	Comment noted. The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under the mandate of multiple-use and sustained yield.	MULTIPLE		
98	44	The BLM must therefore deny the Bald Mountain Mine expansion in order to fulfill its mandate to responsibly and sustainably manage the nation’s public lands, as well as to protect the wild horses who are currently living in the Triple B HMA. The BLM's "multiple use" mandate does not require the agency to expand mining operations or to approve every mining proposal that is submitted. Indeed, the FLPMA’s “multiple use” mandate requires the agency to carefully review proposals to ensure that proposals would not preclude, undermine, restrict or otherwise compromise the many other uses for which our nation’s public lands are used by Americans.	Comment noted. The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under the mandate of multiple-use and sustained yield.	LYNCH	JANET	
349	56	The BLM must revise the DEIS to address the above mentioned concerns and impacts to the human environment and federally-protected wild horses or deny the expansion proposal in order to fulfill its mandate to protect wild horses in these designated Herd Management Areas. The BLM's "multiple use" mandate does not require the agency to approve each mining permit application submitted.	Thank you for your comment.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
62	32	I ask BLM to select an alternative within the Final Environmental Impact Statement that will result in the fewest impacts to the herd,	Comment noted. The BLM will review all potential resource considerations when selecting an alternative, including consideration of impacts under the No Action Alternative. As stated in the DEIS, the WRM Alternative is anticipated to result in a reduction of impacts to wildlife in comparison to other action alternatives.	MULTIPLE		
64	32	Not surprisingly, this alternative is likely to be the one that involves the least amount of acres to be mined and/or used as mine waste dumps. If NDOW agrees that such an alternative will have negligible impacts to the herd, I believe a balanced approach to this development may exist, but if not, BLM should select the no-action alternative in order to demonstrate that it values wildlife over the profits of the world’s largest gold mining company.	Comment noted. The BLM will review all potential resource considerations when selecting an alternative, including consideration of impacts under the No Action Alternative. As stated in the DEIS, the WRM Alternative is anticipated to result in a reduction of impacts to wildlife in comparison to other action alternatives	MULTIPLE		
68	33	This mining project will involve the loss of valuable wildlife habitat.	Comment noted. Impacts to Wildlife are disclosed in Section 3.7.2 Environmental Consequences. BLM believes it has disclosed and addressed all potential environmental impacts in the EIS. It is not necessary to fully mitigate all such impacts. BLM's decision on the Plan of Operations will fully consider the environmental impacts along with all existing resource values and current stakeholder rights in allowing multiple uses of the project area while preventing undue and unnecessary degradation of the public lands involved.	MULTIPLE		
169	41	We cannot sufficiently emphasize the need for wide corridors that are free of sound, light, and impediments such as walls, buildings, or steep rock piles.	Comment noted. The BLM has determined that the WRM Alternative will provide the greatest area of undisturbed corridors for wildlife migration and movement. Table 3.7-5 provides the anticipated widths of the designated corridors under the WRM Alternative. Although operations are proposed to continue 24 hours a day and artificial lighting would be installed in pit and processing areas, designated migration corridors would not have lighting installed under any of the alternatives. No buildings are proposed for construction within the corridors during the life of the mine.	VON SEGGERN	DAVID	SIERRA CLUB, TOIYABLE CHAPTER
253	51	In general, removal and revegetation of any industrial disturbance from within or adjacent to any of the corridors will be predictably beneficial to deer migration, but also to other species such as sage grouse (SG), antelope and pygmy rabbit. Downgrading routes and seasonal adjustment of traffic levels and type could have benefits as well.	Comment noted. The BLM agrees that minimization of potential impacts to wildlife and special status species is beneficial to the entire suite of species that utilize the Bald Mountain area. The BLM has conducted this analysis in order to identify and avoid or minimize to the extent possible all adverse impacts to natural resources located on BLM administered lands.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC

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262	51	the solitude and remote character of the [Ruby Lake National Wildlife] Refuge must be retained, not diminished by negative impacts of ambient light and/or noise from mining operations.	BLM agrees that the solitude and character of the RLNWR are important aspects to be conserved. Impacts from light and noise will result under the previously approved action (No Action Alternative). The BLM has worked with the applicant to implement conservation measures to reduce potential impacts from ambient light and noise resulting from operations. Under the Applicant Committed Environmental Protection Measures, to reduce light pollution, Barrick commits to install anti-glare light fixtures at approved facilities.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
286	53	In my opinion the EIS adequately addresses mule deer habitat and corridor issues, greater-sage grouse habitat and strutting grounds. It is important that BLM and other agencies with oversight responsibilities regarding the wildlife in and near the proposed project areas, continue	Comment noted. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity.	BANUELOS	CLIFFORD	ELKO BAND COUNCIL
440	64	Noted Barrick has gone beyond what has been asked by knocking down burms and protection of a type of bird and their nests; for example.	Comment noted. BLM recognizes and appreciates Barrick's willingness to work on avoiding, minimizing, and mitigation potential impacts to natural resources.	SCHULZ	SUSAN	ELY SHOSHONE TRIBE
446	65	Consider this data source regarding impacts to mule deer: http://www.planevada.org/nevada-mining-fact-sheet/	The referenced Nevada Mining Fact Sheet provided at the web site stated was reviewed. The article does not provide any new site specific data or analysis for the proposed project that was not already considered or would change the conclusions provided in the water resources impact analysis provided in Section 3.3 of the EIS.	OSTER	SHERRY	
452	65	Before this EA or FONSI is signed or agreed upon, there must first be a complete evaluation (validated by independent scientifically proven information) of the following specific points: Impacts on ALL Wildlife, including aquatic species.	Comment noted. Section 3.7.1 (DEIS page3.7-23) notes that due to a lack of perennial aquatic habitat, no aquatic wildlife species are commonly found within the project area. Wetland vegetation communities are discussed under Section 3.5.	OSTER	SHERRY	
368	58	I am opposed to the Bald Mountain expansion due to the overwhelming evidence that the mine has already poisoned the Fish and Birds at Ruby Lake National Wildlife Refuge. The Mercury levels in the Fish at Ruby Lake and Overland Lake were not tested for years at the request of the Mining industry and now that they have been it is very obvious where the Mercury comes from directly up wind is Bald Mountain Mine. It is very well documented in the reports filed at the Ruby Lake National Wildlife Refuge. The Refuge just burns off the Mercury and sends it with the wind down to Idaho.	Emissions of mercury resulting from the BMM is addressed in Section 3.14 Air Quality. The USFWS RLNWR was contacted regarding reports of mercury levels, no response was received.	GILBERT	SHAUN	
418	62	The mule deer herd, which inhabits the Ruby Mountains, has historically been the largest in Nevada and may number 12,000 or more animals.(9) The herd migrates from 45 to 125 miles between seasonal ranges and crosses private lands as well as those administered by the federal government. The Nevada Department of Wildlife (NDOW) considers this herd to be the most important deer resource in the state in terms of population and recreational opportunity. The Bald Mountain Mine bisects this migration route. GBRW agrees that this herd is of great importance and more effort needs to made to protect this migration route. (9) U.S. Fish and Wildlife Service, Ruby Lake National Wildlife Refuge, Nevada, http://www.fws.gov/refuge/Ruby_Lake/Mule_deer.html.	Comment noted. The DEIS discusses the Area 10 mule deer population in 3.7.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
419	62	Mule deer migration impacts continue to be a concern with Bald Mountain mine operations. A recently published report prepared for the Nevada Department of Wildlife clearly shows the high degree of migration by mule deer through the Bald Mountain mine.(10) The report also delineates stopover locations, which serve a very important purpose, “From a biological perspective stopovers are important because they allow mule deer to migrate in concert with changes in vegetation phenology, which in turn improve their ability to maximize energy intake and improve body condition (Sawyer and Kauffman 2011). Because mule deer tend to use the same stopovers across years and seasons (Sawyer and Kauffman 2011), the conservation of these areas should have long-term benefits for mule deer."(11) The wetland areas along migration routs are vital stop-over sites, and must be preserved. Although this report is stated as a baseline study, it is really not baseline, since it does not represent mule deer migrations prior to the existence of the Bald Mountain mine. Thus, it is not clear the full extent of impacts that have already occurred to the mule deer populations. GBRW views each expansion of the Bald Mountain operations as undermining this most important deer migration route. (10) Nevada Department of Wildlife, “Mule deer migration and the Bald Mountain Mine – a summary of baseline data,” May 13, 2014. Prepared by Hall Sawyer and Megen Brittell, Western EcoSystems Technology, Inc. 200 South 2nd St., Suite B, Laramie, Wyoming. (11) Nevada Department of Wildlife, “Mule deer migration and the Bald Mountain Mine – a summary of baseline data,” May 13, 2014, pg. 29.	Comment noted. Information from the Sawyer and Brittell report is cited multiple times throughout Section 3.7. The BLM, Barrick, and NDOW have worked closely to develop the Western Redbird Alternative in order to satisfy concerns regarding conservation of important mule deer migratory and stopover habitat within the project area.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH

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428	63	All the above point to another troubling issue that should be considered: the impact to migratory birds passing through and nesting in the Refuge and surrounding areas. In a worst case scenario, water supply may not be adequate to support the needs of migratory birds while at the Refuge, night time lighting may be disorienting to them, and there is then a knock-on possibility of triggering applications for endangered species listing through the Endangered Species Act. These are all items to be analyzed and avoided if possible.	Comment noted. Water supply information is presented in Section 3.3 Water Quality and Quantity. Groundwater modeling under all action alternatives does not indicate that water supply at the RLNWR would be impacted. DEIS page 3.7-31 states "Passerine species migrating through the vicinity of the project area at night could be adversely impacted by artificial lighting used during nighttime mining operations. Studies involving lighting on communication towers and other tall structures have shown that steady-burning white or red lights can disorient migrating birds at night (Manville 2007, 2009; Gehring et al. 2009, 2011). These potential impacts have also been shown to be increased during periods of inclement weather. In order to reduce the impact of light pollution resulting from nighttime mining operations Barrick has committed to installing anti-glare fixtures authorized by the BLM Egan Field Office, as discussed in Table 2.4-54."	DE FREITAS	PATRICK	
429	63	Similarly, although there are no current standards for noise pollution in rural areas, it is important to assure that the Ruby Lake refuge and the surrounding areas are not negatively affected by the proposed mine expansion and operation.	Comment noted. The BLM agrees that potential impacts to the RLNWR should be avoided and minimized to the extent practicable.	DE FREITAS	PATRICK	
193	50	We should probably update the first and second paragraphs with most recent survey and tag information. McAdoo can provide this.	Tag numbers have been updated to indicate a yearly average of approximately 5,000 tags. Personal communication from C. McAdoo (NDOW 2015b).	LESMEISTER	LINDSEY	NDOW
194	50	Last sentence should read…."The Bald Mountain area is considered an important migratory route for mule deer moving from summer range in NDOW Hunt Units 101, 102 and 103 to winter range in Hunt Units 104, 108, and 131.	DEIS has been revised to address comment.	LESMEISTER	LINDSEY	NDOW
195	50	Please add unit 109 to the unit group list in the second paragraph.	DEIS has been revised to address comment.	LESMEISTER	LINDSEY	NDOW
196	50	Should read…."Telemetry data have also shown that some migrating mule deer are able to navigate through the NOA at the present time, however the resulting increased energetic cost likely has consequences on individual body condition and overall herd performance (McAdoo 2012)	DEIS has been revised to address comment.	LESMEISTER	LINDSEY	NDOW
197	50	There should be discussion about the use of the Yankee and Alligator Ridge units as being consistently utilized by pronghorn in the area	DEIS has been revised to address comment.	LESMEISTER	LINDSEY	NDOW
198	50	Please update the dated citations on pronghorn numbers for the area. The discussions of pronghorn populations should be discussed at the population unit scale. Thus, it would be appropriate to say, population estimates for antelope in Unit 108 and 104, are estimated at 800 individuals.	DEIS has been revised to address comment.	LESMEISTER	LINDSEY	NDOW
199	50	Please update the sentence to read: the majority of of pronghorn in this area of Nevada typically use the lower elevation habitats of Huntington, Ruby, Butte, and Long Valleys and can be consistently found within the study area. Recently, antelope have been observed expanding their seasonal range into more wooded areas.	DEIS has been revised to address comment.	LESMEISTER	LINDSEY	NDOW
200	50	Because of the scale at which the pronghorn seasonal habitat maps were drawn, they failed to encompass the Yankee and Alligator guzzler which are consistently used by pronghorn. This figure should depict the Yankee and Alligator Ridge Guzzler as they are known to be utilized by Antelope	Comment noted. The scale of Figure 3.7-4 Pronghorn Habitat within the CESA does make it difficult to include the guzzler locations in the SOA. Therefore these guzzlers are displayed in Figure 3.7-5 Pronghorn Habitat within the Study Area.	LESMEISTER	LINDSEY	NDOW
249	51	p. 154: lacks acknowledgement that thre are 4 existing migration corridors, 2 on each side of the project area. NDOW prefers retaining all 4, with 3 corridors as a minimum.	Comment noted. The delineation of exact corridors is problematic due to the nature of collaring data provided during field studies. In addition, collaring data indicates that the corridors on the western side of the NOA split north of the Numbers Pit and come together north of the Redbird Pit. Barrick, BLM, and NDOW have worked closely to develop the Western Redbird Alternative, under which migratory corridors and stopover habitat would be conserved during the life of the mine. Plans to ensure these and other conservation actions are effective have been outlined in the mule deer monitoring plan provided in Appendix E of the DEIS.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
255	51	p. 3: the migratory routes through the Bald Mountain area are not just considered "important", they are part of what is considered, at 200+ miles, the longest mule deer migration route in the lower 48 states. In addition, the Ruby Mountain deer herd is the largest in the Great Basin, even perhaps in all our Western states. These are 2 hugely valuable resources to the state of Nevada as well as our nation. To diminish the herd and/or their migration capabilities is a severe loss to contemplate, impossible to completely mitigate, will equate to an irreplaceable opportunity loss for hunters and have a resulting economic loss to local communities. These highly significant facts seem glossed over throughout this section. This exceedingly valuable resource deserves that any development within the migration corridors be minimized, but preferably eliminated.	Comment noted. Page 3.7-3 of the DEIS states that the Area 10 mule deer herd is the largest herd in the state. No information was found documenting that this herd is the largest in the western United States. The potential impacts to the Area 10 mule deer herd and the economic importance as a hunting resource are disclosed within the EIS Sections 3.7 Wildlife and 3.17 Socioeconomics.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
256	51	p. 6: Yes, while deer may be "successfully navigating through the NOA", there will be physical consequences of extra stress and exertion which will take it's toll on the herd vitality and mortality.	Comment noted. Page 3.7-26 of the DEIS states "The resulting behavioral shift by mule deer to negotiate disturbed terrain and avoid mining activities increases the animal's physiological energy expenditures due to elevated stress levels." and "Human related disturbances have been shown to divert time and energy away from foraging, resting, and other activities that improve fitness, which would be important to wintering ungulates whose nutritional condition is closely linked to survival (Frid and Dill 2002; Gill et al. 1996). These human-related disturbances on wildlife energetics, demography, and habitat selection are particularly important among temperate ungulates whose survival depends on minimizing energy expenditures during winter (Hobbs 1989; Parker et al. 1984)."	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC

Comment ID	Submittal ID	Comment Text	Response Text	Last Name	First Name	Org Name
61	32	I am concerned about Nevada's largest deer herd being placed at risk by Barrick Gold's proposed expansion at Bald Mountain. I understand that Barrick is actively working to counter the Nevada Department of Wildlife's (NDOW) findings regarding the nature of the herd's migration corridor and the threats that the expansion would pose to it. This is not acceptable, as NDOW's data is factual and based on radio collar data, not speculation. The agency's assessment of threats to the herd by the continued fragmentation of its migratory route are rooted in decades of experience with the herd and should be taken seriously. Please do not allow Barrick and their consultants to persuade BLM to devalue this critical information in any way.	Comment noted. The BLM also recognizes the potential impacts to the Area 10 mule deer herd resulting from the Proposed Action and has worked closely with Barrick and NDOW to develop feasible alternatives that meet the purpose and need of the applicant, the BLM, and cooperating agencies. Barrick has reviewed the data collected by NDOW collaring studies and the conclusions resulting from analyses of these data. Barrick has asked for clarification of conclusions and supporting data. The BLM recognizes NDOW's experience and authority as the State of Nevada's wildlife agency and a cooperating agency for this project, and has not devalued NDOW's conclusions regarding the Area 10 mule deer herd.	MULTIPLE		
139	49	Chapter 3, Section 3.7.2.1, Page 3.7-29: At end of paragraph 3 the following wording should be added to match wording on page 3.8-19: "No bald eagle nests occur within the study area. Occurrence by this species would be limited to migrating and dispersing individuals." This is applicable because the section heading is called out as bald and golden eagle specific, but no bald eagle information is currently included.	DEIS has been revised to address comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
140	49	Chapter 3, Section 7, Page 3.7-37, Figure 3.7-8: Update figure to reflect that data points represent two deer: E165 and E276.	Figure has been updated accordingly.	ERICKSEN	BETH	BARRICK GOLD U.S.
141	49	Chapter 3, Section 7, Page 3.7-36: The first paragraph referencing figure 3.7-8, please restate the sentence, new words in red: "Figure 3.7-8 displays locations of the two collared mule deer recorded in the NOA between June 2014 - March 2015". Replace next sentence with the following: For the time period between June 2014 through March 2015, the figure shows a wintering mule deer (E165) and a migrating mule deer (E276) representing the use of winter range in the NOA and migration through the NOA.	DEIS has been revised to address comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
142	49	Chapter 3, Section 7, Page 3.7-36: The second paragraph discusses the negative impacts to the mule deer Area 10 herd and the reduction of impacts, but is missing the commitments to ongoing and completed reclamation in or near designated mule deer migration corridors which ensures no further mining activity will occur and mule deer have access to these reclaimed features. Add text to include this discussion perhaps after the sentence about the reduction in mine life (line 7). The sentence could be written as: Furthermore, ongoing and completed reclamation of mining features within or near designated mule deer migration corridors allows for mule deer migration with fewer active mine operations and a larger wintering area for non-migrant deer. See Table 2.5-17.	DEIS has been revised to address comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
206	50	In the discussion there is reference made to deer becoming acclimated to current levels of mining. The reference is McAdoo 2012. We have no recollection of this statement, nor can we find a written reference for this verbiage. We would dispute the statement that migrating mule deer become acclimated, as acclimation suggests that there is no negative cost involved. Please change to: Recent data collected from mule deer telemetry collars and incidental observations, indicate that migrating ungulate species within the study area have been displaced from their natural migration routes as a result of constantly changing mining disturbance over the last 50 years. Mining operations have been occurring within the study area since 1976 and although migrating mule deer have been displaced, some deer have shown successful passage through the mining disturbance and within areas of suitable habitat in an attempt to ensure their continued survival. While successful passage through the mining disturbance can occur, the consequences of the displaced movements are manifested in increased energy expenditures and could result in indirect loss of mule deer due to compromised body condition and reproductively.	DEIS has been revised to address comment.	LESMEISTER	LINDSEY	NDOW
207	50	Last sentence should read…."Successful implementation of these design features under the Proposed Action may facilitate…..	DEIS has been revised to address comment.	LESMEISTER	LINDSEY	NDOW
208	50	Under Bald Eagle, Golden Eagle, and Other Raptors, the text "...potentially occuring…" is confusing to the reader and conflicts with Table 3.7-3, which cleary shows many raptor species (including active nests) occur within the study area and within the area of active disturbance. Please clarify the text by stating that these species and in some cases, active nests, occur within the study area.	DEIS has been revised to address comment.	LESMEISTER	LINDSEY	NDOW
209	50	Under Bald Eagle, Golden Eagle, and Other Raptors, the text "This loss is expected to have little effect of local raptor populations based on the amount of suitable breeding and foraging habitat in the surrounding area." Where is the data that supoorts this statement? This is inconsistent with the intent of the BGEPA and information provided in the Draft ECP Guidance (USFWS 2011) showing a cascading effect on golden eagles by the take of a single individual or nest. Permanent loss of breeding habitat and 'take' of active or inactive nests is a significant impact that can have local and regional population effects. Please reference USFWS (2011) Golden Eagle Plan Guidance for information on loss of breeding habitat and territories. Has the USFWS been consulted regarding potential permanent loss of breeding habitat and/or nest(s)?	DEIS has been revised to address comment.	LESMEISTER	LINDSEY	NDOW
210	50	Confirmation of any golden eagle nest results in the nest falling under protection of the BGEPA. Removal or take of golden eagles, including nests, is regulated under the BGEPA, and take may only be permitted under 50 CFR 22.25, 50 CFR 22.26, or 50 CFR 22.27. The statement that singles out the Yankee Pit nest is misleading as all GOEA nests discussed in the DEIS are protected from "take," which includes disturbance of individuals and nest abandonment.	DEIS has been revised to address comment.	LESMEISTER	LINDSEY	NDOW
211	50	For the statement, "…Barrick would avoid the area using a buffer zone developed in coordination with the BLM biologists," please add the USFWS and NDOW to the list of agencies that should be included in the coordination. An inadequate buffer may result in nest disturbace leading to nest abandonment. For GOEA, disturbance caused nest abandonment is a form of 'take' and would require proper authorization from the USFWS.	DEIS has been revised to address comment.	LESMEISTER	LINDSEY	NDOW

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212	50	The discussion regarding protection of golden eagles and preventing take (which include nest disturbace) seems lacking. There is no mention of an Eagle Conservation Plan, which BLM has traditionally requried mining proponents to complete especially when active nests occur within active disturbance. The text requiring "coordination with the USFWS" could be improved by stating BMM will develop an approved Eagle Conservation Plan and will obtain take permits as necessary to fully comply with the BGEPA and assocated CFRs. Further the list of "measures to prevent illegal take or disturbance" is generally lacking and could be improved based upon more specific guidance provided in the APLIC State of the Art and USFWS's Draft ECP Guidance Document.	Comment noted. Text reflecting Barrick's coordination with the USFWS regarding the development of a BBCS has been included in the FEIS.	LESMEISTER	LINDSEY	NDOW
213	50	Please include a citation or data supporting the statement "This loss is anticipated to have little impact given the extent of native habitats in the surrounding region." The DEIS provides no indication of the population size or quantifiably available habitat for golden eagles and other raptors. Herron et al. (1985) and Page and Seibert (1973) provide Nevada specific population information on golden eagles. Kochert & Steenhof (2002) and Nielson et al. (2012) provide population information on golden eagles in the western US. Temporary or permanent loss nest site or territories is regulated by the BGEPA and may impact the local and/or regional population. Due to territory structures in golden eagles, the loss of a territory due to physical removal of nesting substrate or disturbance is not as easily replaced as indicated in the DEIS. The entire section on golden eagles misrepresents or overlooks scientific reference and may understate potential impacts given that active nests occur within areas of active disturbance and may be removed as part of the mine expansion. This section seems to be lacking given the heightened regulatory environment for golden eagles and lack of detailed analysis (or complete deference to an ECP) is misleading to the public. Further, the USFWS has provided a model for calculating impacts resulting from GOEA take that could be referenced in the DEIS (USFWS, 2011, Draft Eagle Conservation Plan Guidance).	This information is provided in Section 3.8 Special Status Species.	LESMEISTER	LINDSEY	NDOW
215	50	The wording in sentence 2, paragraph 3 of Section 3.7.2.2 could be improved. Current wording implies fewer acres of habitat and not fewer acres of disturbance as intended.	DEIS has been revised to clarify that reductions in habitat removal are anticipated under the Reconfiguration Alternative to address comment.	LESMEISTER	LINDSEY	NDOW
216	50	First sentence should read…."implementation of the mule deer design features and any modifications to these design features resulting from the mule deer monitoring would provide for continued mule deer migration through the NOA at levels greater than the Proposed Action or No Action alternatives."	DEIS has been revised to address comment.	LESMEISTER	LINDSEY	NDOW
217	50	The wording in sentence 2, paragraph 3 of Section 3.7.2.3 could be improved. Current wording implies fewer acres of habitat and not fewer acres of disturbance as intended.	DEIS has been revised to address comment.	LESMEISTER	LINDSEY	NDOW
218	50	Second sentence should read…..Under the WRM Alternative impacts to migrating mule deer are anticipated to be reduced in scope and intensity in comparison to the Proposed Action, Reconfiguration, and No Action alternatives as……	DEIS has been revised to address comment.	LESMEISTER	LINDSEY	NDOW
219	50	Willow Spring (near LV-011) is within the drawdown area as depicted in figure 3.3-22. This spring has an established history of mule deer use as well as use by sage-grouse. As such, please revise the pertinent discussions regarding impacts to mule deer and sage-grouse on this spring.	DEIS page 3.3-56 states "The large depth to groundwater and low hydraulic conductivity of the formation suggest that this spring is controlled by shallow perched conditions that are not hydraulically interconnected with the groundwater system that would be affected by mine induced drawdown. Therefore, as with the Proposed Action and Reconfiguration Alternative impacts to the flow at Willow Spring are not anticipated."	LESMEISTER	LINDSEY	NDOW
221	50	Please revise to say: …facilitate mule deer movement through the NOA during severe winters and would be coordinated with NDOW.	DEIS has been revised to address comment.	LESMEISTER	LINDSEY	NDOW
258	51	p. 25: Acclimation of mule deer to mining activities may have occurred, and some deer made successful passage, but again, it must be noted that extra energy expenditures due to displace-ment has a negative effect on herd vitality and viability.	Comment noted. Page 3.7-26 of the DEIS states "The resulting behavioral shift by mule deer to negotiate disturbed terrain and avoid mining activities increases the animal's physiological energy expenditures due to elevated stress levels." and "Human related disturbances have been shown to divert time and energy away from foraging, resting, and other activities that improve fitness, which would be important to wintering ungulates whose nutritional condition is closely linked to survival (Frid and Dill 2002; Gill et al. 1996). These human-related disturbances on wildlife energetics, demography, and habitat selection are particularly important among temperate ungulates whose survival depends on minimizing energy expenditures during winter (Hobbs 1989; Parker et al. 1984)."	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
259	51	p. 36: Willow Springs, used by deer, antelope, elk, and SG, lies within the area of mine dewatering drawdown. The impacts to deer, antelope & SG must be reflected within this chapter. In general re: seeps and springs: these are known to be critical as stop-over locations along the migratory routes, as well as key in SG brood-rearing. Some of these may be lost completely. Mitigation measures should be outlined for any loss of this resource. Monitoring of spring flows is essential with adaptive management steps specified for potential impacts. Any loss of water sources must be replaced by guzzlers at place designated by NDOW and constructed well before water source is entirely lost.	DEIS page 3.3-56 states "The large depth to groundwater and low hydraulic conductivity of the formation suggest that this spring is controlled by shallow perched conditions that are not hydraulically interconnected with the groundwater system that would be affected by mine induced drawdown. Therefore, as with the Proposed Action and Reconfiguration Alternative impacts to the flow at Willow Spring are not anticipated."	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
296	54	The Proposed Action and the Reconfiguration Alternative involve groundwater pumping and drawdown that would impact springs and seeps in the North Operations Area. Table 2.8-1 on page 2-240 notes that the reduction and potential cessation of flows in springs and seeps could result in the long-term loss of "32.88 acres of wetland vegetation that occurs within the maximum extent of the 10-foot groundwater drawdown contour." The loss of 32.88 acres of wetland vegetation in an arid environment is a dramatic loss that warrants greater analytical discussion. Recommendation: Include in the Final EIS a thorough discussion of how decreases in wetland vegetation in the North Operations Area would affect wildlife resources.	Text regarding the potential impacts to wildlife from groundwater pumping under the Proposed Action has been updated in the FEIS.	MARTYN GOFORTH	KATHLEEN	USEPA
335	56	Additionally, the BLM must analyze the impacts the proposed mine expansion will have on current and future grazing leases. The impacts to cattle/grazing leases must be viewed in light of the mine expansion and the impacts from possible changes to grazing leases must be analyzed as they affect wild horses and available forage for wildlife. The DEIS fails to address this important impact analysis.	DEIS Section 3.9.2.1 (page 3.9-5) states "the BLM has no plans to reduce AUMs within either allotment as a result of any of the alternatives".	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION

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339	56	The impacts of reducing the available habitat for all wildlife species are not adequately analyzed. Specifically, how will potential crowding of multiple species into a reduced area impact highly managed species such as wild horses? It is critical that the BLM analyze how a reduced supply of water for wild horses will alter the interaction of wild horses in relation to the landscape, as well as in relation to other wildlife. Reduction of water quality and quantity in an arid to semi-arid environment will cause all wildlife to congregate and utilize fewer acres of land where water resources remain. The DEIS fails to address this important impact analysis.	Feral horses are not considered wildlife species. Impacts to water resources are addressed in Section 3.3 Water Quality and Quantity of the DEIS and impacts to wild horses are discussed under Section 3.10 Wild Horses of the DEIS.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION
63	32	I ask BLM to require that Barrick create a detailed mitigation plan that will be implemented should the herd be adversely affected.	Comment noted. The BLM and NDOW have developed a detailed mule deer monitoring plan (FEIS Appendix F) to track the efficiency of conservation measures and design features committed to by the applicant. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity.	MULTIPLE		
76	36	The proponent should be required to compensate the public for wildlife habitat destroyed by their operations. This has been accomplished elsewhere on other projects by mitigation offsite at a ratio of 1:1 for critical mule deer winter range in addition to sage grouse habitat. NDOW must be included as a key agency in identification of lost habitat as well as habitat enhancement mitigation projects.	Comment noted. Mitigation Measure WL-3 has been included in the FEIS. This draft mitigation language has been modeled after language adopted in the Arturo Decision and NDOW comments on the BMM DEIS.	MULTIPLE		
143	49	Page 3.7-40: Mitigation Measure WL-1. Please include the guzzler IDs of those that are gone.	The names of the guzzlers (Alligator and Yankee) have been included in the text of mitigation measure WL-1.	ERICKSEN	BETH	BARRICK GOLD U.S.
173	41	Appendix E states that BLM is responsible for monitoring the design features under WRA to protect the mule deer migration. I assume this means ensuring that the physical layout of the migration route remains within the guidelines of WRA. The monitoring plan for mule deer proposes to place collars on deer to track their migration. Which agency is purchasing the collars, placing the collars, and monitoring the collars? If mule deer populations drop, is the reduction due to curtailed migration or other causes? How is the cause determined? Since monitoring is necessary because of the mining operations, we are assuming that Barrick or BLM is underwriting the costs of equipment, and NDOW time and expenses. NDOW needs to be reimbursed for any costs incurred.	The BLM and NDOW have developed a detailed mule deer monitoring plan (FEIS Appendix F) to track the efficiency of conservation measures and design features committed to by the applicant. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity. Details regarding funding of labor, equipment, and other costs associated with monitoring continue to be discussed between the BLM, NDOW, and the applicant and will be provided in the Record of Decision for the BMM EIS.	VON SEGGERN	DAVID	SIERRA CLUB, TOIYABLE CHAPTER
201	50	Proposed action would remove two existing wildlife guzzlers. Appreciate the fact that in mitigation measures (WL-1) Barrick will construct two additional units prior to removal of the existing developments at locations specified by NDOW.	Comment noted.	LESMEISTER	LINDSEY	NDOW
214	50	Given the potential for impacts to migratory birds, including non-eagle raptors, and golden eagles, it would be prudent for the BLM to require BMM to develop and implement a BBCS and an ECP. Text to that effect would be appropriate to include in the FEIS/ROD. The BBCS/ECP should be open for review and approval by the BLM, USFWS, and NDOW due to shared management authorities.	Comment noted. Text reflecting Barrick's coordination with the USFWS regarding the development of a BBCS has been included in the FEIS.	LESMEISTER	LINDSEY	NDOW
220	50	Since Willow Spring (near LV-011) is within the drawdown area as depicted in figure 3.3-22 and has known use by elk, deer, and sage-grouse how will we mitigate the loss of this water source to those animals?	DEIS page 3.3-56 states "The large depth to groundwater and low hydraulic conductivity of the formation suggest that this spring is controlled by shallow perched conditions that are not hydraulically interconnected with the groundwater system that would be affected by mine induced drawdown. Therefore, as with the Proposed Action and Reconfiguration Alternative impacts to the flow at Willow Spring are not anticipated."	LESMEISTER	LINDSEY	NDOW
222	50	What mitigation measures will be conducted for Willow Springs draw-down and reduced water on JBR No. 14	Mitigation measures for potential impacts to groundwater and springs are discussed in Section 3.3 Water Quantity and Quality.	LESMEISTER	LINDSEY	NDOW
223	50	In Mitigation Measure WL-2 we roll out the adaptive management actions and associated triggers. There has been some discussion with Barrick that they are interested in modifying some of the metrics in WL-2 to ensure that greater numbers of deer are successful in moving through the NOA. This should be a topic of upcoming conversation.	Comment noted. Discussion regarding these points is ongoing between BLM, Barrick, and NDOW.	LESMEISTER	LINDSEY	NDOW
224	50	One of the issues that has been raised in the past is the potential for compensating the public for the loss of a public resource more specifically crucial mule deer winter range. In two recent BLM RODs, there has been an agreed to 1:1 offset for permanent loss of crucial deer winter range. With the Arturo ROD in the Elko District, Barrick agreed to this 1:1 offset for permanent impacts to crucial deer winter range associated with the MA 6 deer herd. More recently Newmont agreed to a 1:1 offset for permanent loss of crucial deer winter range associated with the MA 7 deer herd again in the Elko District. NDOW has in the past requested a similar offset for the loss of crucial deer winter range associated with the Bald Mountain Mine Expansion Project. While we understand that required offsets associated with permanent loss of sage grouse habitat will most likely be required, the request for compensation for loss of mule deer crucial deer winter range would not overlap the sage grouse habitat loss compensation. Monetary compensation for the loss of crucial mule deer winter range would be used to aid in funding current and future authorized habitat enhancement activities associated with the Overland Pass Habitat Enhancement Decision as well as the Huntington and Newark Watershed Decision.	Comment noted. Mitigation Measure WL-3 has been included in the FEIS. This draft mitigation language has been modeled after language adopted in the Arturo Decision and NDOW comments on the BMM DEIS.	LESMEISTER	LINDSEY	NDOW
225	50	It would be helpful if the DEIS listed the members (by Agency/Company) of the WWG in this section as well.	Language discussing the WWG has been included in the FEIS. The BLM has not finalized individual members of the WWG but anticipates having this information by the time of the Record of Decision.	LESMEISTER	LINDSEY	NDOW
257	51	p. 24: Site selection for relocation of the 2 guzzlers must be at the direction of NDOW and the disturbance of that activity be timed to be completed and relclaimed before use by wildlife.	As stated in Mitigation Measure WL-1: To offset the loss of two available water sources (guzzlers) within the study area, two wildlife guzzlers would be installed and maintained by BMM within the study area prior to the removal of the existing guzzlers. The two additional guzzlers would be installed at locations that are determined by NDOW to support wildlife populations that are currently utilizing existing guzzlers.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC

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264	51	In general re: mitigation measures: other projects have included off-site mitigation measures to compensate the public for loss of key wildlife habitat. For loss of mule deer winter range, crucial to herd survival, the compensation ratio has been 1:1. For SG, because negative impacts extend beyond the key habitat areas, the ratio has been 1:3. NDOW must be the key agency to consult as to the extent of areas lost/impacted, monetary value for those areas and design/location of habitat enhancement projects to be funded.	Comment noted. Mitigation Measure WL-3 has been included in the FEIS. This draft mitigation language has been modeled after language adopted in the Arturo Decision and NDOW comments on the BMM DEIS. Details regarding compensatory mitigation for impacts to greater sage-grouse is under development and will be consistent with the September 2015 Greater Sage-grouse Amendment and will be included in the Record of Decision for the BMM FEIS.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
265	51	Memorandum of Understanding (MOU), Appendix I, chapter 8, in general: Executive Summary, pg. 12, paragraph 3: Mistakenly states that NDOW was part of the MOU re: the greater sage grouse (GSG) and it's habitat. In our view, this is an oversight of grave concern. NDOW, as the regulatory agency with responsibility for the bird, as well as the repository of the scientific data and expertise of the biologists, is the THE primary key agency who must be involved, consulted, respected to identify and prioritize habitat restoration/enhancement/adaptive management projects.	Comment noted. The MOU has been superseded by the September 2015 Greater Sage-grouse Amendment. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
266	51	Memorandum of Understanding (MOU), Appendix I, chapter 8, in general: Lack of acknowledgement that once GSG habitat is lost, it may be re-created, but there is no evidence that GSG will utilize it. "Build it and they will come" = unproven.	Comment noted. The MOU has been superseded by the September 2015 Greater Sage-grouse Amendment. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
267	51	Memorandum of Understanding (MOU), Appendix I, chapter 8, in general: Conversely, if occupied GSG habitat is offered as mitigation replacement acres, lack of acknowl-edgement that GSG from lost habitat will still be displaced, potentially lost.	Comment noted. The MOU has been superseded by the September 2015 Greater Sage-grouse Amendment. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
268	51	Memorandum of Understanding (MOU), Appendix I, chapter 8, in general: Lack of acknowledgement that studies indicate that GSG will only relocate from a lost lek to a site within 1 mile of the one lost.	Comment noted. The MOU has been superseded by the September 2015 Greater Sage-grouse Amendment. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
269	51	Memorandum of Understanding (MOU), Appendix I, chapter 8, in general: Habitat transfer options are offered if mitigation proves infeasible. Has there been a test for this approach? Proven success needs be verified before any habitat destruction from mining operations is authorized by BLM.	Comment noted. The MOU has been superseded by the September 2015 Greater Sage-grouse Amendment. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
270	51	MOU pg. 24-37: p. 24: Lek counts should not qualify as a mitigation measure.	Comment noted. The MOU has been superseded by the September 2015 Greater Sage-grouse Amendment. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
271	51	MOU pg. 24-37: p. 24: Lacks specificity as to noise mitigation measures specific to activities of this mine.	Comment noted. The MOU has been superseded by the September 2015 Greater Sage-grouse Amendment. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
272	51	MOU pg. 24-37: p. 24 & 35: Transmission lines have a buffer zone of influence on GSG and must be factored in any mitigation fee scheme.	Comment noted. The MOU has been superseded by the September 2015 Greater Sage-grouse Amendment. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
273	51	MOU pg. 24-37: p. 28 & 36: There are 16 leks within 0-3 miles of the existing and expansion mine sites. Data is needed to analyze the degree of noise impacts for each of the alternatives and provide appropriate mitigation.	Comment noted. The MOU has been superseded by the September 2015 Greater Sage-grouse Amendment. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
274	51	MOU pg. 24-37: p. 37: fences must be eliminated or relocated so as not to impact GSG habitat. Existing fences non-compromising locations must be modified.	Comment noted. The MOU has been superseded by the September 2015 Greater Sage-grouse Amendment. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
275	51	MOU pg. 24-37: p. 37: perch deterrents and special tower design to discourage ravens should be standard in GSH habitat and not considered as mitigation.	Comment noted. The MOU has been superseded by the September 2015 Greater Sage-grouse Amendment. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC

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276	51	MOU pg. 24-37: p. 37: Mitigation measures and Best Management Practices (BMPs) should be listed.	Comment noted. The MOU has been superseded by the September 2015 Greater Sage-grouse Amendment. The BLM continues to coordinate closely with NDOW and the applicant to ensure the implementation of feasible conservation measures that protect and enhance the sustainability of wildlife resources within the project area and vicinity.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
397	60	We recommend BLM commit to that the following mitigation measures in the ROD: BLM shall add Applicant-committed Environmental Protection Measures" to address potential adverse impacts to fish and wildlife from mercury and other emissions."	Comment noted. Emissions of mercury and other materials are discussed in Sections 3.14 Air Quality and 3.20 Hazardous Materials.	SEDLACEK	NICOLE	U.S. FISH AND WILDLIFE SERVICE
430	64	Noted progress in monitoring of deer movement confirmed - Making space wider for deer to travel, expansion of area 10 deer, collard.	Comment noted. The BLM has disclosed potential impacts to wildlife in the EIS and has worked closely with the applicant and NDOW to develop the WRM Alternative in response to concerns about conservation of important mule deer migration routes through the NOA.	SCHULZ	SUSAN	ELY SHOSHONE TRIBE
15	8	This project will impact wildlife. The mine bisects arguably the most important mule deer migration route in Nevada. The Proposed Action would completely eliminate all "undisturbed" areas across these migration routes.	Comment noted. The BLM has disclosed potential impacts to wildlife in the EIS and has worked closely with the applicant and NDOW to develop the WRM Alternative in response to concerns about conservation of important mule deer migration routes through the NOA.	EMMERICH	KEVIN	BASIN AND RANGE WATCH
75	36	Additional clarification and detail needs to be added. Any development within the migration corridor needs to be minimized or eliminated such as: a. elimination of any truck shop expansion b. moving or eliminating fencing within the corridor c. elimination of downgrading haul routes in the corridor (i.e., RMB North RDA to truck shop d. locating equipment yards, trailers, light plants and other temporary features well outside migration corridors two (2) existing migration corridors on each side of the range are preferable, but not less than three (3) existing migration corridors for the entire width of the project should be delineated. f. seed mixes for re-vegetation should include bitterbrush where appropriate. g. If the WRM Alternative is selected, some previously authorized disturbance would not go forward, and some existing disturbances would undergo reclamation. This requires clarification.	The BLM responses are as follows: a) truck shop expansion is limited to what has been previously authorized; b) fencing would be minimized to the extent possible with specifics identified under Section 2.4.3.1 Mule Deer Design Features in the Draft EIS; c) Figure 2.5-7 in the EIS clearly shows the status of haul roads (active, downgraded to light duty road, restricted travel, or reclaimed for the Western Redbird Modification Alternative; the haul road from RBM North RDA to the truck shop area would maintain its active status until no longer needed; d) Barrick has committed to not locating temporary facilities within the 3 designated mule deer corridors during the active migration periods; f) Antelope bitterbrush has been added to the reclamation seed mix for sites with elevations below 7,000 feet; g) If the Reconfiguration Alternative or Western Redbird Modification Alternative is selected, then some previously authorized disturbance from the last Plan of Operations Amendment and NEPA action would not be implemented. The withdrawn authorized disturbance under the WRM Alternative is summarize in Table 2.5-16 in the EIS. Table 2.5-17 and Figure 2.5-6 in the EIS presents existing disturbance that would be reclaimed.	MULTIPLE		
77	36	Adaptive management is a mandatory feature of this plan and should be detailed to the extent possible.	Comment noted. Adaptive management actions for mule deer are detailed under Mitigation Measure WL-2 of the Draft EIS and Appendix D Mule Deer Monitoring Plan	MULTIPLE		
118	49	Chapter 2, Section 5.2, Page 2-185: Table 2.5-15 LJR Haul Road - Reclaimed in 2015	Text edit made per comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
119	49	Chapter 2, Section 5.2, Page 2-189: Table 2.5-17 Multiple changes - see attached table in "Acres Changes" tab (Table provided separately not included in database)	Text edits made per comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
120	49	Chapter 2, Section 5.2.1, Page 2-190, Figure 2.5-6: The whole LJR haul road is reclaimed no travel restriction; the snow route extends further south; the Rat interpit is reclaimed; Sage Flat RDA and eastern GMS are to be reclaimed; Horseshoe haul road is to be reclaimed; Horseshoe interpit and GMS are reclaimed; Galaxy area is to be reclaimed except for a portion for the haul road;	Figure 2.5-6 was updated to include entire LJR haul road as reclaimed with no travel restrictions and snow route was extended further south. The most recent reclamation status updates to the Reconfiguration Alternative and the Western Redbird Modification Alternative figures were made on 9/28/2015 based on SRK/Barrick supplied GIS shapefiles. Need new GIS shapefiles to update the following: Rat interpit is reclaimed; Sage Flat RDA and eastern GMS are to be reclaimed; Horseshoe haul road is to be reclaimed; Horseshoe interpit and GMS are reclaimed; Galaxy area is to be reclaimed except for a portion for the haul road.	ERICKSEN	BETH	BARRICK GOLD U.S.
121	49	Chapter 2, Section 5.2.1, Page 2-196, Figure 2.5-7: The entire LJR haul road is reclaimed; the snow route extends further south; the Rat interpit is reclaimed;	Figure 2.5-6 was updated to include entire LJR haul road as reclaimed with no travel restrictions and snow route was extended further south.	ERICKSEN	BETH	BARRICK GOLD U.S.
122	49	Chapter 2, Section 2.5.2.1, Page 2-207: Under the Mooney Basin and Galaxy Areas, add text to state that the Horseshoe area and Galaxy Area will be reclaimed.	Text edit made per comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
123	49	Chapter 2, Section 2.5.1.2, Page 2-207: Both GMSs need to be added to the list of facilities under the Royale Area.	Text edit made per comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
124	49	Chapter 2, Section 2.5.2.1, Page 2-207:Update narrative to include support facilities and components under Royale Area to be consistent in format with Little Bald Mountain Area.	Text edit made per comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
126	49	Chapter 2, Section 5.2.3, Page 2-214: Redbird Interpit would be reduced by 36 acres not 32	Text edit made per comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
127	49	Chapter 2, Section 5.2.3, Page 2-214: Numbers Interpit would be reduced by 21 acres not 54	Text modification made. The Numbers Complex Interpit area and GMS facility together would not be developed, representing a reduction of 49 acres in comparison to the Reconfiguration Alternative.	ERICKSEN	BETH	BARRICK GOLD U.S.
128	49	Chapter 2, Section 5.2.3, Page 2-214:The entire LJR haul road was reclaimed in 2015	Text edit made per comment.	ERICKSEN	BETH	BARRICK GOLD U.S.
190	50	Please identify the snow pathway in the legend area.	Figure edit made per comment.	LESMEISTER	LINDSEY	NDOW

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191	50	In the discussion concerning Interpit Areas, Haul Roads, and Access Roads we notice that there remains a haul road between RMB North RDA and the truck shop in Figure 2.5-7. In an effort to make a passage way for mule deer at a low elevation on the West Side of the project are it would be beneficial if this haul road could be eliminated or downgraded to light vehicle travel. Any changes in the infrastructure that would make this mule deer passageway more attractive to mule deer travel would be a benefit.	Comment noted. The haul road from RBM North RDA to the truck shop area will maintain its active status until no longer needed and then it would be reclaimed.	LESMEISTER	LINDSEY	NDOW
192	50	In the discussions concerning Ancillary and Support Facilities we thought there was a decision made to eliminate the truck shop expansion into the lower mule deer passageway and move the existing tire laydown yard. Again in Figure 2.5-7 these facilities are shown as a jutting projection into this mule deer passageway. In addition it would be productive to move the existing fence indicated in Figure 2.5-7 NE of the BMM2/3 HLF closer to the heap leach field and out of this passageway.	The truck shop expansion was eliminated and the tire laydown yard will be moved out of the passageway. The fence that is shown in the mule deer passageway extending north/south between then RBM North RDA and BMM 2/3 HLF will be relocated away from the middle of the passageway.	LESMEISTER	LINDSEY	NDOW
248	51	p. 154: lacks acknowledgement that thre are 4 existing migration corridors, 2 on each side of the project area. NDOW prefers retaining all 4, with 3 corridors as a minimum.	See response to comment #188.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
250	51	p. 185: add specificity to which previously authorized disturbance will be undeveloped and which disturbances reclaimed. A map would be useful. Has consultation with NDOW been directed? It should, if not.	The withdrawn authorized disturbance under the WRM Alternative is summarize in Table 2.5-16 in the Draft EIS. Table 2.5-17 provides a summary of concurrent reclamation for the WRM Alternative. Figure 2.5-6 in the Draft EIS presents the life of mine facilities for the WRM Alternative and reclaimed disturbance and concurrent reclamation. NDOW has been a cooperating agency throughout the EIS process.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
251	51	p. 198/199: Lower west side migration corridor will have a higher success rate by eliminating haul road between truck shop & RMB North RDA, eliminate truck shop expansion, relocating tire laydown yard and move existing fence out of the corridor.	See response to comment 192.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
252	51	In general, removal and revegetation of any industrial disturbance from within or adjacent to any of the corridors will be predictably beneficial to deer migration, but also to other species such as sage grouse (SG), antelope and pygmy rabbit. Downgrading routes and seasonal adjustment of traffic levels and type could have benefits as well.	Comment noted.	MERO	CHRISTOPHER	BACKCOUNTRY HUNTERS AND ANGLERS ASSOC
420	62	While GBRW still advocates for the No Action alternative, according to the Nevada Department of Wildlife, the West Redbird Modification Alternative as compared to earlier proposals is an improvement by offering - reduced acreage disturbance of 63% from other alternatives, - providing passageways through berms by reducing or eliminating them along key migration routes, - maximizing the width of corridors which ideally should be 2,000 ft wide with no impediments, - facilitating migration in a hard winter by compacting the snow, - the collective efforts by the BLM and US Forest Service, state - agencies, private landowners and other partners to conserve its habitat - reduced noise and human disturbance during the migration period, and - the shortest time occupying the property. GBRW cannot sufficiently emphasize the need for wide corridors that are free of sound, light, and impediments such as walls, buildings, or steep rock piles.	Comment noted.	HADDER	JOHN	GREAT BASIN RESOURCE WATCH
458	4	Required mitigation: Buffer zones between wild horses and mining activities. New water-sources. Timing/seasonal and access route restrictions during peak foaling period. Stri ctly enforced speed limits. Mandatory education for mine employees on wild horses.	See response to comment 283.	MACY	MICHELLE	
283	33	However, if the BLM authorizes this project in spite of strong opposition from many private citizens and nonprofit groups, much stronger mitigation measures than those currently proposed must be required, including the following: • REQUIRED buffer zones (at least 1 mile in size) between mining expansion activities and core wild horse habitat area, including the corridors used by wild horses to access water sources, and between the mining activities and water sources themselves. • REQUIRED development of NEW water sources for wild horses if mining activities impact present water sources. • REQUIRED timing/seasonal restrictions and access route restrictions during the peak foaling period. • STRICTLY ENFORCED speed limits on all access roads within the HMA to prevent wild horse-vehicle collisions. • REQUIRED and mandatory education for mine employees regarding wild horses, their federal protections and their natural behaviors so that personnel in the area will have an understanding of and respect for the existing wild horse herd.	Refer to section 3.10 of the DEIS. It is anticipated that the implementation of Barrick's Traffic Management Plan would minimize the risks associated with potential wild horse-vehicle collisions (Barrick 2012a,b). During their current mining operations, Barrick has effectively controlled the speed limits of project-related traffic, resulting in zero livestock-vehicle collisions since January 2009 (BLM 2012m). Refer to section 3.3 regarding water Quality and Quantity. No water of critical concern are located within the proposed area. The proposed project area is less than 1% of the total acreage of the Triple B HMA; so the overall impact to wild horses habitat would be minimal. It is also anticipated that wild horses will likely avoid any of the major human activity which will further reduce any potential impacts.	MULTIPLE		

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88	44	If the BLM authorizes this project in violation of the FLPMA's clear statutory language, and against strong opposition from a large number of private citizens and nonprofit groups, much stronger mitigation measures than those currently proposed must be required, including the following: REQUIRED buffer zones (at least 1 mile in size) between mining expansion activities and core wild horse habitat area, including the corrdiros used by wild horses to access water sources, and between the mining activities and water sources themselves. REQUIRED development of NEW water sources for wild horses if mining activities impact present water sources. REQUIRED time/seasonal restrictions and access route restrictions during the peak foaling period. STRICTLY ENFORCED speed limits on all access roads within the HMA to prevent wild horse-vehicle collisions. REQUIRED and mandatory eduction for mine employees regarding wild horses, their federal protections and their natural behaviors so that personnel in the area will have an understanding of and respect for the existing wild horse herd.	See comment 283	LYNCH	JANET	
89	55	Elimination of any water sources available to the wild horses in the HMA, especially without detailed consideration of the impacts that such elimination might have on the herds, is antithetical to BLM's duties of "protection" and "management" of wild horses on public lands under the Wild Horse Act. P.L. 92-195. The DEIS fails to explain how potential elimination of wild horses' water resources in the HMA, when none of those wild horses has been deemed "excess" and potentially eligible for removal, is consistent with BLM's duty to "achieve and maintain a thriving natural ecological balance on the public lands." 16 U.S.C. § 1333(a) (emphasis added). Moreover, BLM has an express duty to protect wild horses from harassment and death. 16 U.S.C. § 1331. By approving mining activities that could eliminate water resources from the HMA during this time of dangerous drought conditions, the agency is not only not preventing wild horse harassment and death, but may be unjustifiably contributing to harassment and death of the wild horses that it is legally obligated to protect. BLM cannot so violate its statutory mandate. Because the DEIS identifies concrete impacts to multiple water sources for the Triple B HMA, and in light of the current water crisis in that HMA, the DEIS must be revised to include mitigation measures to ensure that wild horses in the HMA are not harmed by the Proposed Project's impacts to the already limited water resources. At a minimum, the DEIS should provide that the current water trough supplementation by BLM will be continued and augmented to offset any effects from the Proposed Project.	Impacts to water resources are addressed in section 3.3 Water Quality and Quantity of the DEIS. The proposed project area is less than 1 % of the total acreage of the Triple B HMA; so overall impact to wild horse habitat would be minimal. No water of critical concern are located within the proposed area. It is also anticipated wild horses will likely avoid any of the major human activity which will further reduce any impacts.	WAGMAN	BRUCE A	SCHIFF HARDIN
315	56	Despite permitting such mines for decades, the BLM has failed to collect data or conduct research on the impact of such mines on wild horses. The DEIS provides no information on future plans for monitoring wild horse herds for negative impacts associate with mining operations and infrastructure. We note that the BLM has provided a mule deer monitoring plan (see Appendix E of the DEIS) and therefore can and should provide a similar plan for wild horse monitoring.	Comment noted.	BOLBOL	DENIZ	AMERICAN WILD HORSE PRESERVATION

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306	59	As any further intrusive activities within this particular HMA could threaten the future survival of these mustangs, therefore, as it stands, the proposed mitigation measures for protecting this herd are inadequate and must be strengthened to ensure no harm comes to these federally-protected wild horses. Consequently, necessary measures must be taken to ensure the safety of these national treasures and strengthen their protection from the massive expanded disturbances to their home that are currently being proposed which would result in further losses of quality habitat usage for the federally-protected wild horses in the Triple B HMA. The following stronger mitigation measures than those being proposed must be required: - Any mitigation measures to ensure protection of the wild horses must include a requirement of buffer zones separating any drilling activities from essential wild horse habitat including travel corridors utilized by wild horses to gain access to water sources as well as between the water sources themselves and any drilling that may occur. Such buffer zones must be, at the very least, one mile away from human disturbance to discourage interference with normal wild horse behaviors. - Since wild horse distribution in the Triple B HMA is greatly influenced by water sources, it is imperative to require the creation of additional water resources so as to promote usage of the entire HMA. - In recognition of the importance of not disturbing the wild horses during the foaling process, in relation to timing and seasonal considerations and access to routes in wild horse habitat, there must be required restrictions in areas concentrated with mustangs during the peak foaling season (March 1 - June 30). - Moreover, there must be a required speed limit on all roads accessed within the legally designated HMA which must be rigorously enforced to ensure the safety of the wild horses in the areas identified as heavily used by them. - Bald Mountain Mine employees must be required to become educated about wild horses and learn to respect the legal rights of these treasured animals. This knowledge must include familiarity with natural wild horse behaviors and learning of the importance and legality of their federal protections. Such knowledge will enable employees to grasp their duty to protect these animals from any harm their unchecked activities could cause this valued herd of irreplaceable mustangs.	See response to comment 283.	HENNESSY	EILEEN	

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