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Tracie K. Lindeman
Clerk of Supreme Court

**IN THE SUPREME COURT
OF THE STATE OF NEVADA**

EUREKA COUNTY, a political subdivision of
the State of Nevada; KENNETH F. BENSON,
individually; DIAMOND CATTLE
COMPANY, LLC, a Nevada limited liability
company; and, MICHEL AND MARGARET
ANN ETCHEVERRY FAMILY, LP, a
Nevada registered foreign limited partnership,
Appellants,

v.

THE STATE OF NEVADA STATE
ENGINEER; THE STATE OF NEVADA
DIVISION OF WATER RESOURCES; and
KOBEL VALLEY RANCH, LLC, a Nevada
limited liability company,

Respondents.

Case No. 61324

MICHEL AND MARGARET ANN
ETCHEVERRY FAMILY, LP, a Nevada
registered foreign limited partnership;
DIAMOND CATTLE COMPANY, LLC, a
Nevada limited liability company; and,
KENNETH F. BENSON, individually,
Appellants,

v.

STATE ENGINEER, OF NEVADA, OFFICE
OF THE STATE ENGINEER,
DEPARTMENT OF CONSERVATION
AND NATURAL RESOURCE; and KOBEL
VALLEY RANCH, LLC, a Nevada limited
liability company,

Respondents.

Case No. 63258
*(Consolidated with
Case No. 61324)*

**JOINT APPENDIX
VOLUME 1**

APPENDIX SUMMARY

Chronological Order by Filing Date

Document	Filing Date	Vol.	3MJA Page Nos.
Letter from State Engineer Approving 3M Plan	June 6, 2012	I	1
Petition for Judicial Review	July 5, 2012	I	2-35
Lisa Morlan's Affidavit of Service of Notice of Petition for Judicial Review and Petition for Judicial Review	July 18, 2012	I	36-38
State Engineer's Record on Appeal Vol. 1	August 3, 2012	I	39
Vol. 1 - SE ROA Summary SE ROA 39-42		I	39-42
Vol. 1 – SE ROA Conti. SE ROA 43-52		I	42-95
Vol. 1 – SE ROA Conti. SE ROA 53-132		II	96-175
Vol. 1 – SE ROA Conti. SE ROA 133-218		III	176-261
Vol. 1 – SE ROA Conti. SE ROA 219-249		IV	262-292
Vol. 1 – SE ROA Conti. SE ROA 250-251		V	293-294
State Engineer's Record on Appeal Vol. 2	August 3, 2012	V	295
Vol. 2 – SE ROA Summary SE ROA 295		V	295

Document	Filing Date	Vol.	3MJA Page Nos.
Vol. 2 – SE ROA Conti. SE ROA 252-376	August 3, 2012	V	296-420
Vol. 2 – SE ROA Conti. SE ROA 377-448		VI	421-492
State Engineer’s Supplemental Record on Appeal	August 15, 2012	VI	493
Supplemental Record Summary SUP SE ROA		VI	493-495
Supplemental Record SUP SE ROA 1-29		VI	495-525
Kobeh Valley Ranch, LLC’s Answer to Petition for Judicial Review	August 17, 2012	VI	526-531
Petitioners’ Opening Brief	November 5, 2012	VI	532-576
Kobeh Valley Ranch’s Answering Brief	Dec. 20, 2012	VI	577-610
State Engineer’s Answering Brief	Dec. 20, 2012	VII	611-629
Petitioner’s Reply Brief	February 1, 2013	VII	630-646
Transcript of Oral Argument	April 15, 2013	VII	647-719
Findings of Fact, Conclusions of Law, and Judgment	May 17, 2013	VIII	720-736
Petitioners’ Notice of Appeal	May 21, 2013	VIII	737-739
Notice of Entry of Findings of Fact, Conclusions of Law, and Judgment	May 23, 2013	VIII	740-761

Document	Filing Date	Vol.	3MJA Page Nos.
Proof of Service of Notice of Entry of Findings of Fact, Conclusions of Law, and Judgment	May 23, 2013	VIII	742

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Alphabetical Order

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Supplemental Record SUP SE ROA 1-29		VI	495-525
Transcript of Oral Argument	April 15, 2013	VII	647-719

BRIAN SANDOVAL
Governor

STATE OF NEVADA



LEO DROZDOFF
Director

JASON KING, P.E.
State Engineer

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF WATER RESOURCES

901 South Stewart Street, Suite 2002
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June 6, 2012

Mr. Patrick Rogers
Director, Environmental and Permitting
Eureka Moly, LLC
2215 North 5th Street
Elko, NV 89801

RE: 3M Plan for Mount Hope Project

Dear Mr. Rogers,

We received your Monitoring, Management, and Mitigation Plan (Plan) for your Mount Hope molybdenum mine dated May 30, 2012. The Plan as submitted is approved with the understanding that components of the Plan are subject to modification based on need, prior monitoring results, or changes in the approved water rights. This Plan is authorized by NRS 534.110, and the State Engineer has final authority over the Plan. Eureka Moly LLC and any successors or assigns will be responsible for implementing and complying with the Plan.

Water level and flow data are to be reported semiannually within 30 days of the end of each reporting period. An annual report is required by March 31st of each year. The annual report shall summarize water production, the results of the monitoring, all management and mitigation actions taken, any proposed or needed changes to the Plan, and any changes to project pumping.

Water level and flow data are to be reported electronically in a prescribed format. Instructions for documentation and reporting, and spreadsheets for tabulating and submitting data can be downloaded from our website: <http://water.nv.gov/forms/>.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard Felling".

Richard Felling
Chief, Hydrology Section

3MJA 000001

NO. _____
FILED
JUL 05 2012
Eureka County Clerk
By B. Conley

1 CASE NO.: CV 1207-178
2 DEPT. NO.: 2
3 SCHROEDER LAW OFFICES, P.C.
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5 Therese A. Ure, Nevada State Bar #10255
6 440 Marsh Ave.
7 Reno, Nevada 89509-1515
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9 counsel@water-law.com
10 *Attorneys for the Petitioners*

11 IN THE SEVENTH JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA
12
13 IN AND FOR THE COUNTY OF EUREKA

14 MICHEL AND MARGARET ANN
15 ETCHEVERRY FAMILY, LP, a Nevada
16 Registered Foreign Limited Partnership,
17 DIAMOND CATTLE COMPANY, LLC, a
18 Nevada Limited Liability Company, and
19 KENNETH F. BENSON, an individual,

20 Petitioners,

21 v.

22 STATE ENGINEER, OF NEVADA,
23 OFFICE OF THE STATE ENGINEER,
24 DIVISION OF WATER RESOURCES,
25 DEPARTMENT OF CONSERVATION
26 AND NATURAL RESOURCES,

Respondent.

PETITION FOR JUDICIAL REVIEW

21 COME NOW Petitioners MICHEL AND MARGARET ANN ETCHEVERRY
22 FAMILY, LP, DIAMOND CATTLE COMPANY, LLC, and KENNETH F. BENSON
23 (collectively referred to herein as "Petitioners"), by and through their attorneys of record,
24 Schroeder Law Offices, P.C., and file this petition for judicial review of the STATE
25 ENGINEER's decision dated June 6, 2012 approving a monitoring, measurement, and mitigation
26 plan relating to STATE ENGINEER Ruling No. 6127.



1 **BACKGROUND**

2 9. Between May of 2005 and June of 2010, numerous applications to appropriate
3 underground water and to change the point of diversion, place of use, and/or manner of use were
4 filed by Idaho General Mines, Inc. and Kobeh Valley Ranch LLC (collectively herein the
5 "Applications"). The Applications filed by Idaho General Mines, Inc. were thereafter assigned to
6 Kobeh Valley Ranch LLC (the "Applicant"). The Applications were filed for a proposed
7 molybdenum mine, known as the Mount Hope Mine Project, requiring underground water for
8 mining and milling and dewatering purposes.

9 10. The Applications, a combination of applications for new appropriations of water
10 and applications to change the point of diversion, place of use, and/or manner of use of existing
11 water uses (applications, permits and/or certificates), requested a total combined duty under all
12 of the Applications of 11,300 acre feet annually (afa).

13 11. On July 15, 2011, the STATE ENGINEER issued Ruling No. 6127 granting the
14 majority of the Applications subject to certain terms and conditions. Ruling No. 6127 found that
15 water rights on springs and streams within the Kobeh Valley could potentially be impacted by
16 drawdown of the water table. Approval of the Kobeh Valley Ranch Applications was
17 conditioned upon submission and approval of a monitoring, management, and mitigation plan
18 ("3M Plan") prior to diverting any water under the Kobeh Valley Ranch Applications. State
19 Engineer Ruling No. 6127 at 21-22.

20 12. On August 11, 2011, Petitioners filed their Petition for Judicial Review before this
21 Court, challenging STATE ENGINEER Ruling No. 6127 (Case No. CV-1108-157). As the
22 STATE ENGINEER continued to issue permits subsequent to STATE ENGINEER Ruling No.
23 6127, Petitioners filed additional Petitions for Judicial Review designated as Case Nos. CV-
24 1112-165 and CV-1202-170. Petitioners' requests for judicial review were subsequently
25 consolidated with Case Nos. CV-1108-155, CV-1108-156, CV-1112-164 and CV-1112-165.

26 ///



13. On June 13, 2012, this Court rendered its Findings of Fact, Conclusions of Law and Order Denying Petitions for Judicial Review (Case Nos. CV-1108-155, CV-1108-156, CV-1108-157, CV-1112-164, CV-1112-165 and CV-1202-170).

DECISION

14. On or about May 30, 2012, Eureka Moly, LLC submitted a Monitoring, Management and Mitigation Plan (“3M Plan”) to the STATE ENGINEER. The 3M Plan “applies to proposed groundwater extraction from Kobeh Valley and Diamond Valley for mining process water rights granted in Ruling 6127 of the of the office of the Nevada State Engineer (NSE) dated July 15, 2011.”

15. On June 6, 2012, Richard Felling, Chief of the Hydrology Section of the Division of Water Resources, communicated to Eureka Moly, LLC that “[t]he Plan as submitted is approved with the understanding that components of the Plan are subject to modification based need, prior monitoring results, or changes in the approved water rights.” *See* Exhibit 1.

AGENCY ERROR(S)

16. The STATE ENGINEER manifestly abused his discretion by approving a 3M Plan which contravenes the conditions expressed in STATE ENGINEER Ruling No. 6127.

17. By approving the 3M Plan, the STATE ENGINEER exceeded his statutory authority under NRS 533.370 by allowing the use of water absent *express* conditions that will protect the rights of existing appropriations and mitigate conflicts with existing rights.

18. The STATE ENGINEER's approval of the 3M Plan fails to include findings of fact or conclusions of law demonstrating that under NRS 534.110, existing appropriations can be satisfied pursuant to express conditions included within the 3M Plan.

19. The STATE ENGINEER's approval of the 3M Plan is in error because the 3M Plan fails to bind the current water right holder and Applicants under Case Nos. CV-1108-155, CV-1108-156, CV-1108-157, CV-1112-164, CV-1112-165 and CV-1202-170.

///



1 20. The STATE ENGINEER's approval of the 3M Plan results in impermissible
2 delegation of administrative authority to an outside committee.

3 21. The STATE ENGINEER's approval of the 3M Plan constitutes impermissible ad
4 hoc rulemaking, in violation of NRS 534.110 and/or NRS 532.110, that establishes an additional
5 administrative remedy that must be exhausted by Petitioners in order to receive relief in the form
6 of mitigation.

7 22. The 3M Plan is deficient in one or more of the following ways, thereby rendering
8 it incapable of serving as "conditions" to monitor and mitigate conflicts with existing rights:

9 a) The 3M Plan is premised upon funding and implementation by unknown third
10 party non-applicants that must act unanimously prior to taking action under the
11 3M Plan;

12 b) The 3M Plan is not reasonably calculated to timely address urgent mitigation
13 needs, conflicts or grievances;

14 c) The 3M Plan is vague and aspirational and fails to expressly articulate what
15 mitigation measures will be taken to avoid conflicts with existing rights on Kobeh
16 Basin valley floor; and

17 d) The 3M Plan offers only non-binding "potential" mitigation measures, many of
18 which are better characterized as speculative or remedial in nature.

19 **REQUEST FOR RELIEF**

20 WHEREFORE, Petitioner requests judgment as follows:

- 21 1. The Court vacate the STATE ENGINEER's approval of the 3M Plan.
- 22 2. The Court enter an order instructing the STATE ENGINEER to disallow water
23 use under Permit Nos. 72695, 72696, 72697, 72698, 73545, 73546, 73547, 73548,
24 73549, 73550, 73551, 73552, 74587, 75988, 75989, 75990, 75991, 75992, 75993,
25 75994, 75995, 75996, 75997, 75998, 75999, 76000, 76001, 76002, 76003, 76004,
26 76005, 76006, 76007, 76008, 76009, 76745, 76746, 76989, 76990, 76802, 76803,



1 76804, 76805, 79911, 79912, 79913, 79914, 79915, 79916, 79917, 79918, 79919,
2 79920, 79921, 79922, 79923, 79924, 79925, 79926, 79927, 79928, 79929, 79930,
3 79931, 79932, 79933, 79934, 79935, 79936, 79937, 79938, 79939, 79940, 79941,
4 79942, and 78424 until a 3M Plan is submitted that satisfactorily provides express
5 conditions for monitoring and mitigating conflicts with existing rights.

6 3. Award such other and further relief as the Court deems just and proper.
7

8 DATED this 3rd day of July, 2012.

SCHROEDER LAW OFFICE, P.C.

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10 

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AFFIRMATION

Pursuant to NRS 239B.030, the undersigned does hereby affirm that the preceding
PETITION FOR JUDICIAL REVIEW does not contain the social security number of any
person.

DATED this 3rd day of July, 2012.

SCHROEDER LAW OFFICE, P.C.



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Therese A. Ure, NSB #10255

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BRIAN SANDOVAL
Governor

STATE OF NEVADA



LEO DROZDOFF
Director

JASON KING, P.E.
State Engineer

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF WATER RESOURCES

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June 6, 2012

Mr. Patrick Rogers
Director, Environmental and Permitting
Eureka Moly, LLC
2215 North 5th Street
Elko, NV 89801

RE: 3M Plan for Mount Hope Project

Dear Mr. Rogers,

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Water level and flow data are to be reported electronically in a prescribed format. Instructions for documentation and reporting, and spreadsheets for tabulating and submitting data can be downloaded from our website: <http://water.nv.gov/forms/>.

Sincerely,

A handwritten signature in cursive script, appearing to read "Richard Felling".
Richard Felling
Chief, Hydrology Section

**NEVADA DIVISION OF WATER RESOURCES MONITORING, MANAGEMENT,
AND MITIGATION PLAN FOR THE MT. HOPE PROJECT**

RECEIVED

2012 JUN -4 PM 12:04

1. BACKGROUND

STATE ENGINEERS OFFICE

- A. This Monitoring, Management, and Mitigation Plan (3M) applies to proposed groundwater extraction from Kobeh Valley and Diamond Valley for mining process water rights granted in Ruling 6127 of the office of the Nevada State Engineer (NSE) dated July 15, 2011. The groundwater extracted will be consumed in activities related to the Mt. Hope Project (Project), including mineral processing and mine dust control. The groundwater will be developed by Eureka Moly, LLC, (EMLLC) through Kobeh Valley Ranch, LLC (KVR), both of which are subsidiaries of General Moly, Inc. (GMI), with KVR being the water rights holder. The Lessee of the water rights and operator of the Project is EMLLC. The groundwater will be supplied primarily from a wellfield in Kobeh Valley and conveyed via pipelines to the mine and mill sites. In addition, groundwater will include water derived from open pit dewatering at rates that are predicted to reach a maximum of 742 af/yr. The distribution of this water from the pit is estimated at 20% from Kobeh Valley Hydrographic Basin and 80% from the Diamond Valley Hydrographic Basin.

2. PURPOSE OF THE 3M

- A. The purpose of this 3M is to assist the NSE in managing development of groundwater resources within and near the Project area to avoid adverse impacts to existing water rights. The 3M is designed to include or develop, as needed or appropriate, express conditions that will protect the rights of domestic well owners, if any, and existing appropriations.
- B. While it is the goal to avoid any adverse impacts due to the groundwater pumping, the 3M outlines a process by which adverse impacts will be identified and ultimately mitigated. It is intended to provide the necessary data to assess the response of the aquifer(s) to the stress of water resource exploitation, provide an early warning capability, and provide safeguards for responsible management of water.

3. AUTHORITIES AND PARTICIPANTS

- A. The NSE has final authority over the 3M, and EMLLC, including all successors and assigns, will be responsible for implementing and complying with the 3M.
- B. In addition to the purpose outlined above, this 3M is intended to provide participation and transparency to the locally affected stakeholders. Eureka County (EC) holds water rights for municipal use in Diamond Valley. Additionally, Eureka County has local natural resource, land-use, and water resource policies, plans, and goals

developed under Nevada State Law that obligate County officials, both elected and appointed, to actively participate in the planning and management of resources within Eureka County. Eureka County, and representatives from locally potentially affected farming, ranching, and domestic interests will be invited to participate in this 3M. In the event there are other water rights holders who may be adversely affected by Mt. Hope Project groundwater extraction, these entities could be invited to participate as described under MANAGEMENT and in accordance with this 3M. The entities that participate in this 3M as outlined in the MANAGEMENT section 5.B are hereinafter referred to as "Parties".

- C. The USGS will be invited to participate expressly to provide impartial technical and scientific input, as described herein.
- D. This 3M is separate from the requirements placed upon EMLLC by other agencies including the United States Bureau of Land Management (BLM) and Nevada Department of Wildlife (NDOW). The BLM has claimed Federal Public Water Reserves (PWR 107) within the area of concern. The BLM and EMLLC have entered into a stipulated settlement agreement as a condition of the BLM withdrawal of protests of EMLLC's water right applications and NDOW is included as a party to the settlement agreement.

4. PRINCIPAL COMPONENTS

The 3M consists of three principal components:

- A. Management
- B. Monitoring
- C. Mitigation

The framework of these components is described in the following sections.

5. MANAGEMENT

- A. Two committees are established. The Water Advisory Committee (WAC) is to establish and carryout policy under this 3M. The Technical Advisory Committee (TAC) is to provide the technical scientific expertise necessary for collection, evaluation and analysis of data. Separation of the roles and responsibilities of these two bodies is considered crucial to maintaining scientific impartiality of the data collection and analysis program.

B. Water Advisory Committee:

- a. Within 30 days after NSE approval of this 3M, EMLLC, NSE, and Eureka County representatives will convene as the three (3) founding members of the WAC. Upon the three founding members convening, the Diamond Natural Resources Protection and Conservation Association (DNRPCA) and the Eureka Producers Cooperative (EPC) (DNRPCA and EPC represent the bulk of water rights holders in the Diamond Valley Flow System) will each be invited to bring forward one representative nominated from their respective membership for inclusion as members of the WAC. Letters of interest will also be accepted from potentially affected ranching interests (i.e., Koebe Valley rancher) for inclusion as a member of the WAC. Eureka County, NSE, EMLLC, DNRPCA, and EPC will make the determination on the affected ranching interest to be included on the WAC based on letters of interest received. If any of the potentially affected ranching and farming interests ceases to exist, the remaining WAC members will develop a process so that replacement members will be selected to join the WAC. The WAC may also invite other potentially affected water rights holders to participate as members. The WAC will have no more than seven (7) members. The member of the WAC representing the NSE will be invited to participate as the chair of the WAC. If the NSE member representative declines this invitation, the WAC will elect the chairman. Each WAC member, at its sole discretion, may invite such additional staff or consultants to attend WAC meetings as it deems necessary.
- b. After the full WAC has been convened, the WAC will establish policy and define additional roles and responsibilities of the WAC and TAC, such as scheduling of meetings, agenda setting, publication of minutes, receiving input from the public, and any other necessary components.
- c. The WAC will meet no less than one time in each quarter starting at the execution of this 3M with the primary focus to ensure water monitoring is actively in place. Future meeting frequency may then be adjusted as decided by the WAC, but will be no less than once annually.
- d. The WAC will have an annual meeting, open to the public, to review project operations and to review monitoring, management and mitigation actions of the previous year.
- e. Purposes and Functions of the WAC will be to:
 - i. Provide a forum for the WAC to discuss relevant data and analyses.
 - ii. Share information regarding modeling efforts and model results.
 - iii. Make modifications to the Monitoring component of this 3M, including, but not limited to additional data collection and scientific investigations, based on recommendations from the TAC.
 - iv. Provide status reports and recommendations to the Parties.
 - v. Establish values for monitored variables (water levels, spring discharges, vegetation responses, etc.) known as "action criteria" which, if exceeded,

may be of concern to the Parties and could require mitigation or management actions.

- vi. Determine what constitutes an adverse impact on a case-by-case basis.
- vii. Form and ensure implementation of groundwater management or mitigation measures approved by the WAC based on recommendations of the TAC.
- viii. Review financial assurance periodically and make adjustments to amount as appropriate and recommend release of funds for mitigation and/or management measures.
- ix. Provide the NSE, Parties, and the local stakeholders with data and results of any analyses or technical evaluations, along with reports of specific implemented mitigation or management actions.
- x. Develop and implement a procedure to remove and replace WAC and TAC members as it deems necessary, excluding, however, removal of the founding members consisting of the NSE, EC, and EMLCC.

C. Technical Advisory Committee:

- a. The WAC will appoint a Technical Advisory Committee (TAC) as a subcommittee to the WAC. Each Party represented on the WAC is entitled to appoint a representative and is responsible for funding the participation of their respective TAC member. In addition, the USGS will be invited to participate as a member of the TAC. Funding for the USGS's participation in the 3M will be borne by EMLLC either through new or through existing joint funding agreements with USGS sponsored by Eureka County to study the Diamond Valley Flow System or by a "pass-through" agreement with the NSE. TAC members must exhibit a professional level of technical or scientific expertise and a background or experience in land management, natural resources, water resources, or other related field. Each Party, at its sole discretion may invite additional staff or consultants to attend TAC meetings.
- b. The TAC will meet within 30 days after WAC appointment to review the proposed monitoring provided as Attachment A to this 3M. Upon completing this review, the TAC will make recommendations to the WAC for any changes to the monitoring components of this 3M. Thereafter, the TAC will meet at intervals deemed appropriate by the TAC to review and analyze data, but not less than twice annually or as instructed by the WAC.
- c. At a minimum, purposes and functions of the TAC will be to:
 - i. Review the proposed monitoring and recommend to the WAC implementation, including any changes to the specific monitoring elements, as appropriate.
 - ii. Review historic groundwater level trends, spring and stream flows to determine historic hydrologic trends. Where possible, identify wet and dry

- regimes, climate effects on groundwater recharge rates and base flows in surface waters.
- iii. Review, develop, and refine standards and quality control procedures for data collection, management, and analysis.
 - iv. Inform the entity or entities that collect data of standard accepted protocols of data collection, recording and analysis (e.g., USGS) that will be used.
 - v. Evaluate monitoring data, reports, analyses, etc. to determine whether data gaps exist and make appropriate recommendations to the WAC.
 - vi. Develop and recommend action criteria to the WAC for management or mitigation measures based upon available data and analyses.
 - vii. Evaluate all monitoring data to determine if any action criterion has been or is predicted to be exceeded, indicating a possible adverse impact and report findings to the WAC.
 - viii. Recommend mitigation and management measures and related scope of work details to the WAC. This includes individual resources or a comprehensive list of all resources to support WAC evaluation of the adequacy of mitigation funding.
 - ix. Evaluate the effectiveness of mitigation, if implemented, and report findings to the WAC.
 - x. Make recommendations to the WAC regarding the numerical groundwater flow model, including appropriate times for any model updates and modes of model output.

D. Numerical Groundwater Flow Model:

- a. EMLLC has developed the Numerical Groundwater Flow Model (FM) to simulate the groundwater flow system and the FM will be updated to incorporate the data collected under this 3M. EMLLC will update the FM after recovering data from the first year of wellfield pumping for mineral processing as recommended under the provisions of this 3M. Thereafter, EMLLC will update the FM on a schedule as determined under the provisions of the 3M.
- b. The FM will be used as a management tool to evaluate predictions of drawdown and impacts and to help define action criteria.

E. Prevention of Interbasin Transfer from Diamond Valley Basin:

- a. If excess water is produced within the Diamond Valley Hydrographic Basin which is not consumed in that basin, this water will be returned to the Diamond Valley Hydrographic Basin. As described in Section 6.E., water derived from pit dewatering and consumed will be documented and reported by EMLLC to verify that the volume of water extracted from Diamond Valley is equal to or less than the volume of water consumed in Diamond Valley (i.e. no transfer of water out of Diamond Valley).

F. Action Criteria:

- a. Specific quantitative action criteria will be developed by the WAC with recommendations from the TAC. These criteria will be developed to provide early warning of potential adverse impacts to water rights, determined to be caused by Project groundwater pumping.
- b. When any action criterion that has been adopted as part of this 3M is reached, the following management actions will be triggered:
 - i. The TAC will meet as soon as possible to assess whether the action criterion exceedance is caused by Project groundwater pumping and present their findings to the WAC.
 - ii. If the WAC determines that any action criterion exceedance is caused by Project groundwater pumping, the TAC will expeditiously develop mitigation or management measures for the WAC to consider. The TAC will analyze the feasibility of the specific measures to assess alternatives, evaluate the potential effectiveness of the measures, and evaluate potential impacts created by implementation of the measures.
 - iii. The WAC will determine whether or not to recommend implementation of the mitigation or management measures and to also recommend if the funds described in MITIGATION will be used to implement such measure.
 - iv. The effectiveness of any implemented measure will be evaluated by the TAC to ensure the measure met or exceeded the intended result. Results and recommendations for any additional measures will be reported to the WAC.
 - v. Any member of the WAC may propose an additional action criterion or a change to existing action criteria. Any such change must be presented in writing to the WAC and accompanied by analyses to support the proposed change.

G. Decision-Making Process:

- a. For technical issues, including, but not limited to monitoring modifications, setting action criteria, and appropriate mitigation, decisions under this 3M will be made after considering the evaluation and recommendations of the TAC.
- b. All Parties shall be afforded the opportunity to attend meetings where decisions will be made. Any decisions made by the WAC under this 3M shall be by unanimous vote of Parties in attendance, provided however, both EMLLC and EC must be present for a vote to occur. If unanimity is not achieved, the Parties may jointly agree to conduct additional data collection and/or data review and analyses directed at resolving the different interpretations or opinions. If that is not successful, the Parties may refer the issue, accompanied by their respective opinions, to the NSE for final determination.

- c. Decisions made by the WAC regarding recommended modifications to the 3M, implementation of mitigation, or other management actions that would be required of EMLLC will be subject to the jurisdiction and authority of the NSE.
- d. Nothing herein limits or changes the NSE authority, and any Party can petition the NSE to consider any issue.

H. Modification of the 3M

- a. The Parties may individually or jointly petition the NSE to modify this 3M in the event that mutual agreement cannot be reached. Any such petition shall be concurrently provided to the other Parties. Prior to the NSE decision, all Parties will be provided the opportunity to submit a written response to the NSE no later than 60 calendar days following the date of receipt of the petition by NSE.
- b. Any modification to the 3M must be approved by the NSE.
- c. Nothing herein seeks to limit, alter, modify or change the exclusive authority of the NSE to approve or modify the 3M.

6. MONITORING

- A. Hydrological related studies for the Project contain data concerning water and related resources in Kobreh Valley, Diamond Valley, Pine Valley, and surrounding areas. These data include locations of existing and proposed supply and monitoring wells, groundwater extraction rates, groundwater level measurements, flow from springs and streams, water quality, precipitation data, and wetland/riparian conditions. Additional data relevant to the Project available from other local, state, and federal agencies or other reliable sources will be compiled into a database by EMLLC and expanded as new data are collected under the provisions of this 3M.
- B. The proposed monitoring is provided in Attachment A to this 3M. As described in MANAGEMENT of this 3M, the TAC will review this proposed monitoring and provide recommendations to the WAC regarding changes and/or implementation. In addition to this initial review, the TAC will review the proposed monitoring and make recommendations to the WAC for changes throughout the Project life based on monitoring data and analysis. Such recommended changes may include, but not be limited to, addition or deletion of monitoring sites, addition or deletion of monitoring parameters, changes to monitoring methods, and increases or decreases in monitoring frequencies. Upon acceptance by the NSE of this 3M, EMLLC will implement the monitoring requirements as set forth in Attachment A.

- C. The term "as is feasible" as used in this 3M relates to mechanical failures or other events/reasons outside the control of the Parties, as agreed upon by the Parties, that interfere with data collection.

D. Groundwater

- a. Groundwater pumping will be measured by flow meters installed on each production well, dewatering well and pit dewatering sump.
- b. Water levels in all wells included as part of the Project monitoring network will be measured by recording pressure transducers (data loggers). The measurement frequency will depend on distance to the wellfield and be based on TAC recommendations.
- c. The Project monitoring network will include "sentinel" wells (i.e., wells strategically located to provide early indication of drawdown propagation towards sensitive or important resources). At a minimum these will be located near the boundary between Kobeh, Diamond, Pine and Antelope Valleys; between the pumping wells and the headwaters of Henderson and Roberts Creeks and Tyrone Gap; between the wellfield and Gravel Pit Spring, Bartine artesian wells, the Antelope Valley Hot Springs (Klobe Hot Springs), and the stock wells at Hay Ranch. Nested wells that monitor individual aquifers at a single location where more than one hydrostratigraphic unit is present or strong vertical gradients may exist will be completed, as is feasible.
- d. Test wells constructed at each Project production well site will be maintained as monitoring wells, as is feasible, and equipped with recording pressure transducers.
- e. Several USGS monitoring wells are located near the proposed well field and within the projected drawdown area. If the USGS is not funded to monitor these specific wells, EMLLC will request USGS permission to collect data from these wells. If the WAC determines that monitoring should continue at these locations, EMLLC may be required to drill replacement wells or develop a suitable alternative.

E. Pit Dewatering

Groundwater will be extracted from the Diamond Valley Hydrographic Basin either by wells or pit dewatering sumps. To determine the amount of water from pit dewatering within the Diamond Valley Hydrographic Basin, the total groundwater removed by pit dewatering sumps will be measured by totalizing flow meters and then multiplied by a factor reflecting the portion of the pit area that is located in Diamond Valley Hydrographic Basin. The discharge from dewatering wells will be measured with totalizing flow meters and allocated to the basin in which the well is located. Water truck loads utilized in the pit complex will be counted and recorded to document water used in

Diamond Valley for mine environmental dust suppression. The amount of water used in Diamond Valley for other uses will be metered or estimated and recorded in the database.

F. Surface Water

a. At a minimum, the monitoring of stream flow will be conducted as follows:

- i. Monitoring will include continuous measurements of stream stage at selected control sections for each stream, as is feasible.
- ii. The geometry of the control sections will be measured at the start of monitoring and re-measured at least annually.
- iii. Stage measurements will be collected with recording pressure transducers on a frequency of not less than one hour.
- iv. The flow in the streams at the control sections will be gaged monthly, as is feasible, for the first year of record to establish stage-discharge relationship for each gaging station and following any changes in the control section geometry.
- v. All control sections in streams will be assessed routinely for any changes in the control section geometry and the stage discharge relationship be re-established accordingly.
- vi. Following the first year of gaging, stream-flow measurements will be collected at least quarterly.
- vii. Flow data will be recorded at least quarterly and hydrographs updated at least annually.

G. Water Quality

Water quality samples will be collected from selected production and monitoring wells, surface waters and pit water and analyzed by a laboratory certified by the State of Nevada using standard accepted protocols and a standard water test. Macroinvertebrate monitoring will take place in select streams as an indicator of general stream and/or fishery health.

H. Biological Resources

To assess if there is any loss of vegetative communities in phreatophytic and riparian areas, monitoring of vegetation, including phreatophyte vegetation and riparian zones will be conducted. Specific locations are to be determined by the WAC and itemized in Attachment A, and will include sites in Kobeh Valley, Diamond Valley, Pine Valley and Antelope Valley that may be affected by groundwater extraction. Data will be collected using a variety of techniques and will include on-site measurement of vegetation cover, frequency, and type. Shallow wells will be co-located with vegetation monitoring transects. Remote sensing will be employed to help define and monitor the extent of vegetation communities at a larger spatial scale.

I. Meteorology

Weather/Climate stations will be installed and maintained to continuously monitor wind speed and direction, precipitation, temperature, barometric pressure, humidity, and solar radiation. Existing precipitation stations will be used where possible. The purpose of collecting weather/climate data is to provide the WAC with a basis for evaluating whether changes in groundwater levels or stream and spring flow are due to changes in weather or climate.

J. Elevation Control/Subsidence

Monitoring locations for subsidence, groundwater measuring point elevations and ground surface elevations will be established using survey-grade GPS instrumentation. A standard GPS data collection protocol (i.e., common geographic datum) will be used to allow a comparative base for all elevation associated data. Subsidence monitoring will be augmented using remote sensing technologies (e.g. InSAR). Frequency and methodology of remote sensing to monitor subsidence will be reviewed and determined by the WAC in consideration of TAC recommendations.

K. Data Management

- a. All monitoring data will be entered into the 3M database on a regular, timely, and continual basis as it is collected and verified using WAC-approved quality assurance and quality control (QA/QC). Data collected under or as described in this 3M will be fully and cooperatively shared among the Parties. Verified data within the 3M database will become available to the public, upon request.
- b. In addition to updating the 3M database on a regular and continual basis, EMLLC will provide an annual report that summarizes all information and analysis. This report, due in the NSE's office by March 31, will be prepared based on recommendations and in cooperation with the TAC. These reports will summarize water production, the results of monitoring, and all management and mitigation actions taken during the year. Copies of the annual report will be provided to each of the Parties.
- c. All water level, spring discharge, and stream flow data shall be submitted semi-annually to the NSE in an electronic format specified by the NSE. Data shall be submitted within 30 days of the end of the reporting period.

7. MITIGATION

- A. EMLLC will mitigate adverse impacts, if any, as agreed upon under the provisions of this 3M. The WAC will take necessary steps, including recommending whether funding described below may be used as outlined in this 3M, to ensure that mitigation actions are feasible, reasonable, timely, and effective.

- B. Effectiveness of implemented mitigation measures will be evaluated under the provisions of this 3M. Additional measures will be implemented if a previous mitigation measure does not meet its intended purpose(s).
- C. To ensure funding exists for any required future monitoring and mitigation after the cessation of active mining, EMLLC will provide financial assurances under the provisions of this 3M.
- D. EMLLC's financial assurances (FA) funding will be placed into an interest bearing trust account to be established as a part of this 3M. The initial funding will occur in a manner as follows:
 - a. Initial funding of \$250,000 will occur within 60 days of GMI's Board of Directors formal approval authorizing the start of construction of the Project.
 - b. Additional funding of \$750,000 will occur no later than the end of month six of wellfield pumping for mineral processing (plant startup).
 - c. Funding will be examined and adjusted, as recommended by the WAC, every three years to ensure that sufficient funding is in place to mitigate all potential adverse impacts, including funding for operating and maintenance and long-term replacement costs.
- E. After cessation of mining and groundwater pumping by EMLLC, if the NSE determines that there is no longer a reasonable potential for future impacts attributable to the Project, any excess funds, including interest, remaining in the account will be returned to EMLLC.
- F. This 3M outlines measures and procedures to identify and mitigate adverse impacts that may result from project pumping, all of which are uncertain. Due to the uncertainty, this 3M is intended to set forth procedures and methods for identifying adverse impacts and require mitigation of those identified impacts.
- G. To ensure wildlife have continued access to customary use, adversely impacted surface water sources will be mitigated through such measures including, but not limited to, installation and maintenance of replacement water sources of equal or greater volume (e.g. guzzlers) in the same area as the impacted water source.
- H. EMLLC will mitigate permitted water rights and determined and undetermined claims of vested or reserved rights should adverse impacts occur.
- I. Mitigation measures, if necessary, will be developed and implemented on a case-by-case basis under provisions of this 3M.
- J. Potential mitigation measures include the following:

- a. Supply (Project) water will be provided from wells located in Kobeh Valley that are completed in the carbonate and alluvial aquifers. Pumping of these different aquifers will have different impacts to the groundwater and surface water flow systems. Adjustment of carbonate/alluvium groundwater pumping ratio could be employed to either minimize or mitigate effects.
- b. Impacts can be greatly influenced by the specific location of groundwater pumping. Mitigation measures include reduction or cessation of groundwater extraction from one or more wells and/or geographic redistribution of groundwater extraction.
- c. Replacement wells can be constructed to mitigate impacted surface water or groundwater rights, or to supply water for wildlife.
- d. Revegetation of affected areas to achieve appropriate vegetative communities.
- e. Financial compensation or, if agreed upon, property (i.e., land and water rights) of equal value could be purchased for replacement.
- f. If adverse impacts to the Diamond Valley Flow System, or other adjacent basins are determined to be caused by Project groundwater pumping, active and current water rights (water currently pumped) within the affected basin could be purchased and retired.
- g. Implement technology to reduce water consumption of the Project. Pumping rates may be decreased if alternative technology emerges that could reduce water requirements or increase water recycling rates. Water conservation techniques will be proactively employed in order to reduce other mitigation measures (i.e. before any impact is measured).
- h. If surface fissures develop due to land subsidence, they shall be mitigated by filling with a suitable material to prevent injury to wildlife, livestock or people.
- i. Other measures as agreed to by the Parties and/or required by the NSE.

Mount Hope Mine Project
Attachment A to 3M - Monitoring Plan

This Monitoring Plan has been developed by Eureka Moly, LLC (EMLLC) to provide the monitoring component of the 3M (Monitoring, Management and Mitigation) Plan prepared and submitted to the Nevada State Engineer (NSE). Preparation of the 3M and acceptance by NSE is required by Ruling #6127 dated July 15, 2011.

EMLLC will implement documented quality assurance and quality control procedures. Monitoring data will be recorded using a standardized protocol and format for each monitoring event. It is anticipated that protocols will be based on those described by Rantz and others (1982) for surface water flow monitoring, Lapham and others (1995) for groundwater level monitoring, and Wilde (2005) for water sampling. Laboratory analyses will be conducted by Nevada-certified laboratories using standard laboratory quality control procedures.

Tables 1 and 2, provided at the end of this document, lists the proposed monitoring site locations, type of monitoring, monitoring frequency and a brief rationale for selecting each location. Wells identified in Table 1 include both existing wells and wells that EMLLC proposes to construct upon project approval. Mine Well Sets designate production wells, each with a paired monitoring well nearby. Some wells are located within pit limits that would be mined out as the project advances, and these locations would be dropped from the monitoring plan at that time. Site locations are shown on Figures 1 and 2. The monitoring sites in Tables 1 and 2 are organized by locations corresponding to those shown on the Figures 1 and 2.

REFERENCES

- Lapham, W.W., Wilde, F.D., and Koterba, M.T., 1995, *Ground-water data collection protocols and procedures for the National Water-Quality Assessment Program: Selection, installation, and documentation of wells, and collection of related data*: U.S. Geological Survey Open-File Report 95-398, 70 p.
- Rantz, S.E., et al., 1982, *Measurement and computation of streamflow*, U.S. Geological Survey Water Supply Paper 2175, Volumes 1 and 2, 631 p.
- Wilde, F.D., 2005, *National field manual for the collection of water-quality data*: Book 9, Handbooks for Water-Resources Investigations, U.S. Department of the Interior and the U.S. Geological Survey.

Table 1 – Hydrologic Monitoring

Area	Site Name(s)	Parameters	Frequency	Formation	Rationale
Diamond Valley Groundwater	GMI-PDT-1	Depth to Water	Continuous	Vinini Hornfels	Pit area groundwater drawdown monitoring
	GMI-PDT-2	Depth to Water	Continuous	Vinini and Hornfels	Pit area groundwater drawdown monitoring
	GMI-PDT-3B	Depth to Water	Continuous	Vinini Hornfels	Pit area groundwater drawdown monitoring
	IGMI-152	Depth to Water	Continuous	Vinini Fm	Pit area groundwater drawdown monitoring
	IGMI-155	Depth to Water	Continuous	Qtz Porphyry	Pit area groundwater drawdown monitoring
	IGMI-156	Depth to Water	Continuous	Vinini Fm	Pit area groundwater drawdown monitoring
	IGMI-157	Depth to Water	Continuous	Vinini Fm	Pit area groundwater drawdown monitoring
	IGM-169	Depth to Water	Continuous	Vinini Hornfels	Pit area groundwater drawdown monitoring
	IGMI-226P	Depth to Water	Continuous	Vinini Fm	Pit area groundwater drawdown monitoring
	IGMI-228P	Depth to Water	Continuous	Vinini Fm	Pit area groundwater drawdown monitoring
	IGMI-230P	Depth to Water	Continuous	Tuff	Pit area groundwater drawdown monitoring
	IGMI-232P	Depth to Water	Continuous	Vinini Fm	Pit area groundwater drawdown monitoring
	IGMI-233P	Depth to Water	Continuous	Tuff	Pit area groundwater drawdown monitoring
	IGMI-MH-248	Depth to Water	Continuous	Bedrock	Pit area groundwater drawdown monitoring
	NDWR-15462	Depth to Water	Continuous	Alluvium	Pit area groundwater drawdown monitoring

Area	Site Name(s)	Parameters	Frequency	Formation	Rationale
Diamond Valley Groundwater	MH-300	Depth to Water	Continuous	Alluvium	Monitoring groundwater gradient changes in Tyrone Gap with MH – 301
	MH-301	Depth to Water	Continuous	Alluvium	Monitoring groundwater gradient changes in Tyrone Gap with MH – 300
	MH-302	Depth to Water	Continuous	Alluvium	Monitor influence of potential increased transmissivity zone through Whistler Range.
	MH-303	Depth to Water	Continuous	Alluvium	Monitor groundwater elevation trend on west side of Diamond Valley; Sentinel well.
	MH-304	Depth to Water	Continuous	Alluvium	Monitor groundwater elevation trend on west side of Diamond Valley; Sentinel well.
	MH-305	Depth to Water	Continuous	Alluvium	Monitor drawdown east of pit.
	IGMI-158	Depth to Water	Continuous	Alluvium	Monitor groundwater elevation trend on west side of Diamond Valley; Sentinel well.
	IGMI - 236P	Depth to Water	Continuous	Vinini Fm	Monitor groundwater elevation change in Whistler Range; Sentinel well.
	Romano Well	Depth to Water	Continuous	Vinini Fm	Monitor groundwater elevation trend on west side of Diamond Valley; Sentinel well.
	MH – 306 (153 N21 E52 10AAAC1)	Depth to Water	Continuous		Monitor groundwater elevation trend on west side of Diamond Valley
	MH – 307 (153 N20 E52 26AABC1)	Depth to Water	Continuous		Monitor groundwater elevation changes in Devil's Gate.
	MH – 308 (153 N20 E52 26AABC2)	Depth to Water	Continuous		Monitor groundwater elevation changes in Devil's Gate.
Diamond Valley Springs	KV-059 (Stinking)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	KV-060 (Hash)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	KV-061 (Railroad)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts

Area	Site Name(s)	Parameters	Frequency	Formation	Rationale
Diamond Valley Springs	KV-062 (Trap Corral)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	DV -065 (Shipley)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	SP-1 (McBride)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	SP-2 (Garden pass)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	SP-3 (unnamed)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	SP-4 (Mt Hope)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	SP-7 (unnamed)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
Kobeh Valley Groundwater	All production wells	Flow and Depth to Water	Continuous	Alluvium and carbonate	Measure well field production, individual well response to pumping stress, and drawdown progression in wellfield
	GMI-RWX-228T (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	GMI-RWX-229 (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	IGMI-MH-RWX-206 (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	RWX -205	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
					Monitor groundwater elevation change in alluvium on west side of Whistlers paired w/ MH-401 to assess connection between alluvium and bedrock aquifers; assess effect of inferred structure located to the east.
	MH-400	Depth to Water	Continuous	Alluvium	
	MH-401	Depth to Water	Continuous	Bedrock	Monitor groundwater elevation change in bedrock on west side of Whistlers

Area	Site Name(s)	Parameters	Frequency	Formation	Rationale
Kobeh Valley Groundwater					paired w/ MH-400 to assess connection between alluvium and bedrock aquifers; assess effect of inferred structure located to the west.
	MH-402	Depth to Water	Continuous	Alluvium	Monitor drawdown at east edge of Kobeh Valley.
	MH-403	Depth to Water	Continuous	Alluvium	Monitor potential drawdown in upper Roberts Creek; Sentinel.
	MH-404	Depth to Water	Continuous	Bedrock	Monitor potential drawdown in western part of Robert's Creek watershed; Sentinel.
	MH-405 (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	MH-406 (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	MH-407 (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	MH-408 (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	MH-409 (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	MH-410 (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	MH-411 (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	MH-412	Depth to Water	Continuous	Alluvium	Monitor groundwater elevation change in transition zone between wellfield and pit area
	MH-413	Depth to Water	Continuous	Alluvium	Monitor groundwater elevation change in transition zone between wellfield and pit area

Area	Site Name(s)	Parameters	Frequency	Formation	Rationale
Kobeh Valley Groundwater	MH - 414 (139 N21 E49 25BDDA)	Depth to Water	Continuous	Alluvium	Monitoring of west side of KV wellfield drawdown
	MH - 415 (139 N21 E50 17BACC)	Depth to Water	Continuous	Alluvium	Monitoring of west side of KV wellfield drawdown
	MH - 416 (139 N20 E51 05CBCC)	Depth to Water	Continuous	Alluvium	Monitoring of south side of KV wellfield drawdown
	MH - 417 (139 N21 E51 36DCDB1)	Depth to Water	Continuous	Alluvium	Monitoring of southeast side of KV wellfield drawdown
	MH - 418 (139 N21 E51 24DDDB1)	Depth to Water	Continuous	Alluvium	Monitoring of southeast side of KV wellfield drawdown
	MH - 419 (139 N20 E49 23ACCB1)	Depth to Water	Continuous	Alluvium	Monitoring of drawdown between wellfield and Bean Flat phreatophytes
	MH - 420 (139 N20 E49 24ACAB)	Depth to Water	Continuous	Alluvium	Monitoring of drawdown between wellfield and Bean Flat phreatophytes
	MH - 421 (139 N21 E49 16CCBB1)	Depth to Water	Continuous	Alluvium	Monitoring of west side of KV wellfield drawdown
	RWX - 209 shallow and deep	Depth to Water	Continuous	Alluvium / Vinini	Monitoring of northwest side of KV wellfield drawdown
	MRCMW	Depth to Water	Continuous	Alluvium	Monitoring of potential drawdown in Roberts Creek watershed
	LRCMW	Depth to Water	Continuous	Alluvium	Monitoring of potential drawdown in Roberts Creek watershed
	IGMI-154	Depth to Water	Continuous	Alluvium	Pit area groundwater monitoring
	IGMI-234P	DTW and Chemistry	Continuous	Alluvium	Monitor groundwater elevation change in Whistler Range; Sentinel well
	IGMI-235P	DTW and Chemistry	Continuous	Vinini Fm	Monitor groundwater elevation change in Whistler Range; Sentinel well
	IGMI-237P	DTW and Chemistry	Continuous	Vinini Fm	Monitor groundwater elevation change in Whistler Range; Sentinel well
	TMI-B	DTW and Chemistry	Continuous	Alluvium	Monitoring of east side of KV wellfield drawdown

Area	Site Name(s)	Parameters	Frequency	Formation	Rationale
Kobeh Valley Groundwater	Atlas 1	DTW/ pressure	Continuous	Alluvium	Monitoring northwest of predicted 10 foot drawdown contour
	Bartine Ranch Well 1, 2, 3 (flowing)	DTW/pressure	Continuous	Alluvium	Assess impact of pumping on artesian flows outside predicted 10 foot drawdown contour
	Big Windmill	DTW/pressure	Continuous	Alluvium	Monitor groundwater elevation change in transition zone between wellfield and pit area
	Colby well	DTW/pressure	Continuous	Alluvium	Assess impact of pumping on artesian flows outside predicted 10 foot drawdown contour
	KV 064	DTW/pressure	Continuous	Alluvium	Assess impact of pumping on artesian flows outside predicted 10 foot drawdown contour
	Depco INC	DTW/pressure	Continuous	Alluvium	Monitoring of drawdown between wellfield and Bean Flat phreatophytes
	Etchevery Windmill	DTW/pressure	Continuous	Alluvium	Monitoring of west side of KV wellfield drawdown
	IGMI-MH-RWX-203 T	DTW/pressure	Continuous	Alluvium	Monitor groundwater elevation change in transition zone between wellfield and pit area
	GMI-RWX-219	DTW/pressure	Continuous	Alluvium	Monitor groundwater elevation change in transition zone between wellfield and pit area
	NDWR9211R (Risi Well)	DTW/pressure	Continuous	Alluvium	Assess impact of pumping on artesian flows outside predicted 10 foot drawdown contour
	RWX- 204	DTW/pressure	Continuous	Alluvium	Monitor groundwater elevation change in transition zone between wellfield and pit area
	KFE	DTW/pressure	Continuous	Alluvium	Monitor groundwater elevation change in transition zone between wellfield and pit area
	KFW	DTW/pressure	Continuous	Alluvium	Monitoring northwest of predicted 10

7

Mt Hope 3M – Monitoring Plan
May, 2012

Exhibit 1
Page 20 of 27

3MJA 000028

Area	Site Name(s)	Parameters	Frequency	Formation	Rationale
Kobeh Valley Groundwater					foot drawdown contour
	Treasure Well	DTW/pressure	Continuous	Alluvium	Assess impact of pumping on artesian flows outside predicted 10 foot drawdown contour
	GMI-RWX-223	DTW/pressure	Continuous	Alluvium	Measure drawdown progression in wellfield
Kobeh Valley Streams	LRC (Lower Roberts Creek)	Flow Rate; Water Quality	Continuous		Potential indirect impacts to perennial streams
	URC (Upper Roberts Creek)	Flow Rate; Water Quality	Continuous		Potential indirect impacts to perennial streams
	MH 700 (Cottonwood Canyon)	Flow	Continuous		Potential indirect impacts to perennial streams
	MH 701 (Cottonwood Canyon)	Flow	Continuous		Potential indirect impacts to perennial streams
	MH 704 (West Cottonwood Canyon)	Flow	Continuous		Potential indirect impacts to perennial streams
Kobeh Valley Springs	KV-002 (Potato Canyon)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	KV-026 (Rutabaga)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts near wellfield
	KV-034 (Mud)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts near wellfield
	KV-035 (Lone Mtn)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts south of wellfield
	KV-044 (Hot)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	KV-015 (Unnamed)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	KV-016 (Unnamed)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	KV-020 (Unnamed)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	OT-6 (Unnamed)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts

Area	Site Name(s)	Parameters	Frequency	Formation	Rationale
Kobeh Valley Springs	OT-7 (Nichols Spring)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	MH - 702 (Jack Spring)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts, west side of Roberts Mtn.
Antelope Valley Spring	MH - 703 (Klobe Spring)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts in Antelope Valley
Antelope Valley Stream	Allison Creek	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
Grass Valley Stream	Steiner Creek	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
Pine Valley Springs	PV-059 (Dry Creek headwater spring)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	PV-060	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	PV-061	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	PV-062	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	PV-063	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	PV-064	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	PV-065	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	OT-2	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	OT-3	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	OT-5	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	OT-10A	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts

Area	Site Name(s)	Parameters	Frequency	Formation	Rationale
Pine Valley Springs	OT-11	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
Pine Valley Streams	LBC (Lower Birch Cr.)	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
	LHC (Lower Henderson Cr.)	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
	UHC (Upper Henderson Cr.)	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
	LPHC (Lower Pete Hansen Cr.)	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
	UPHC (Upper Pete Hansen Cr.)	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
	Tonkin Springs	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
	LVC (Lower Vinini)	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
	UVC (Upper Vinini Cr.)	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
	WC (Willow Cr.)	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
Pine Valley Groundwater	MH-500	Depth to Water	Continuous	Bedrock	Sentinel well in mountain block south of Henderson Creek
	MH-501	Depth to Water	Continuous	Alluvium	Henderson Creek groundwater elevations
	MH-502	Depth to Water	Continuous	Bedrock	Sentinel well in mountain block east of springs in upper Henderson Creek

Table 2 - Biological and Meteorological Monitoring

Area	Site Name(s)	Parameters	Frequency
Wet Meadow Complexes in Roberts Mountains	Three to five vegetation transects in each of the WMC. Locations to include areas where phreatophytic and riparian vegetation transitions to upland vegetation and sites within the core of the WMC	Species composition, species richness, and plant cover	Semi-Annually (May and July)
Phreatophytic vegetation in lower Kober Valley	Three to five vegetation transects in phreatophyte vegetation communities. Locations to include areas where phreatophytes transition to upland communities and sites within the core of the phreatophyte vegetation community.	Species composition, species richness, and plant cover	Transects - Semi-Annually (April and June)
Phreatophytic and riparian vegetation in lower Roberts Creek	Three to five vegetation transects in the watershed. Locations to include areas where phreatophytic and riparian vegetation transitions to upland vegetation and sites within the core of the phreatophytic and riparian vegetation	Species composition, species richness, and plant cover	Transects - Semi-Annually (April; June)
Phreatophytic and riparian vegetation in Henderson Creek	Three to five vegetation transects in the watershed. Locations to include areas where phreatophytic and riparian vegetation transitions to upland vegetation and sites within the core of the phreatophytic and riparian vegetation	Species composition, species richness, and plant cover	Transects - Semi-Annually (April; June)
Roberts Mountain	Not applicable	Remote sensing (Aerial photography or satellite imagery)	Initially for entire mountain; Every two years for riparian areas
Streams in Roberts Mountains	Roberts Creek, Vinini Creek, Henderson Creek	Macro-invertebrate monitoring	Annually (late summer/early fall base flow)
Mine site	Existing Mt Hope met station	Temperature, precipitation, humidity,	Hourly

Area	Site Name(s)	Parameters	Frequency
		wind speed and wind direction	
Roberts Mountains	Minimum of 3 high-altitude sites in Roberts Mountains, locations to be determined.	Precipitation	To be determined

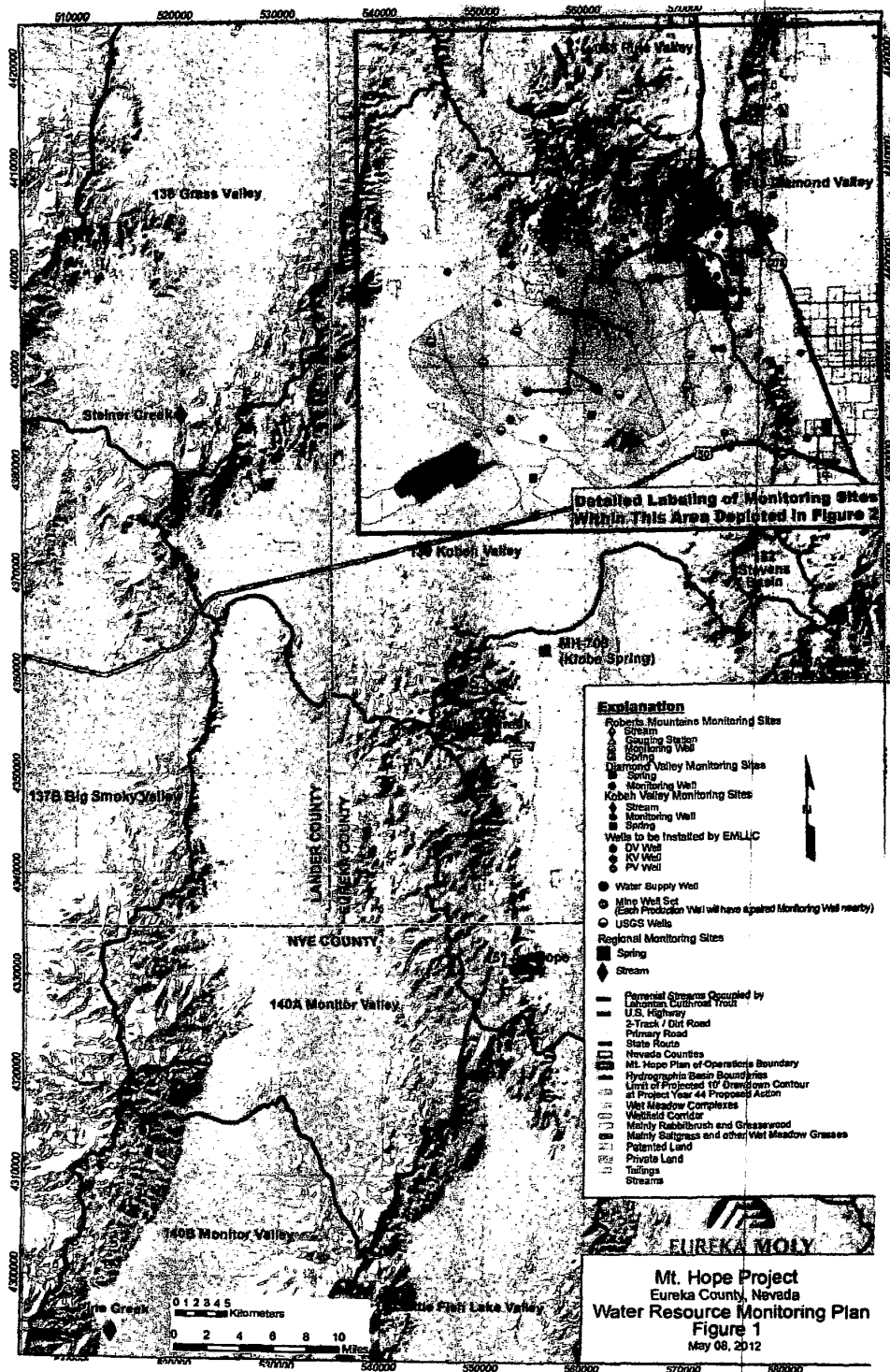


Exhibit 1
Page 26 of 27

3MJA 000034

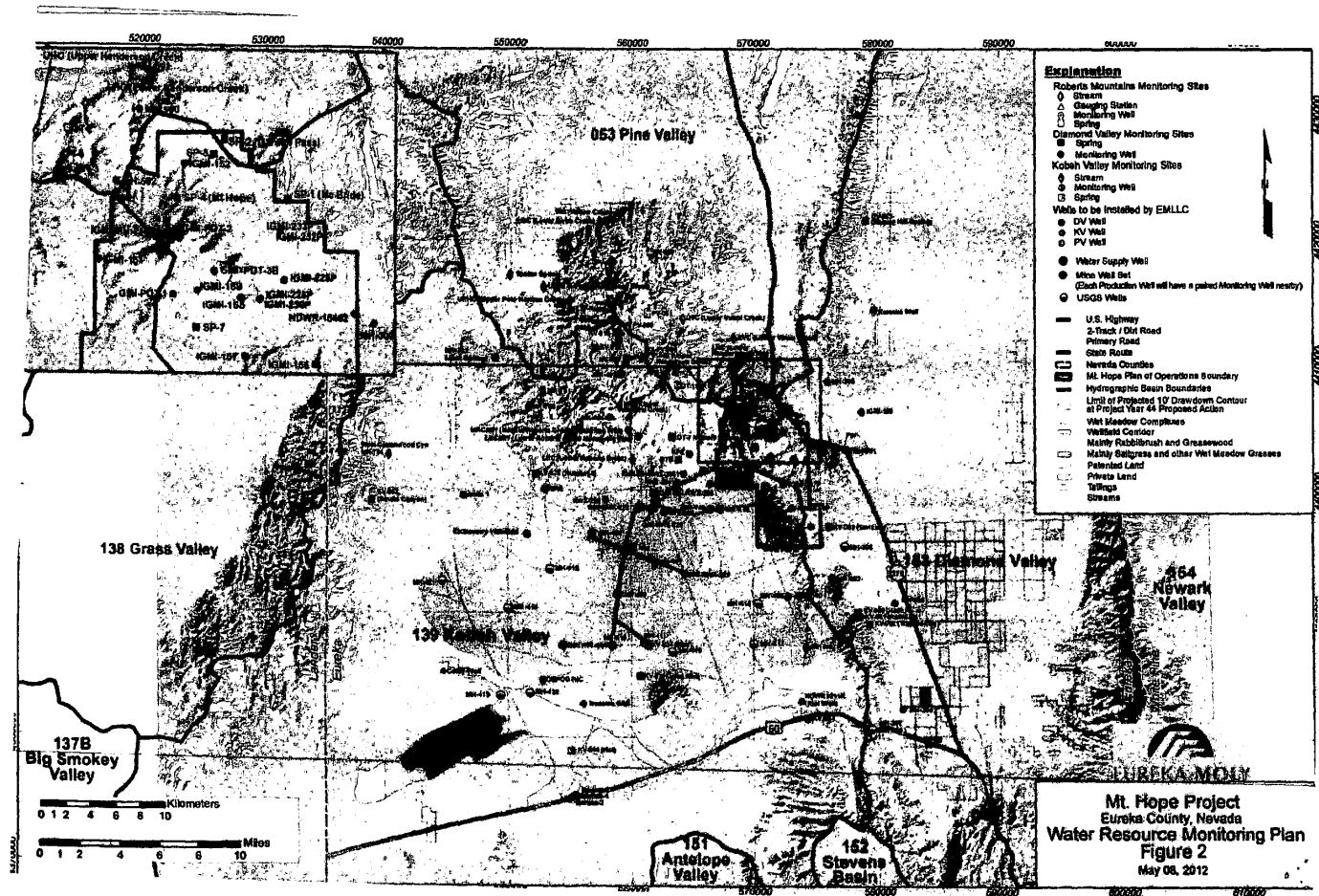


Exhibit 1
Page 27 of 27

3MJA 000035

1 CASE NO.: CV-1207-178
2 DEPT. NO.: 2
3 SCHROEDER LAW OFFICES, P.C.
4 Laura A. Schroeder, Nevada State Bar #3595
5 Therese A. Ure, Nevada State Bar #10255
6 440 Marsh Ave.
7 Reno, Nevada 89509-1515
8 PHONE: (775) 786-8800, FAX: (877) 600-4971
9 counsel@water-law.com
10 *Attorneys for the Petitioners*

11 IN THE SEVENTH JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA
12
13 IN AND FOR THE COUNTY OF EUREKA

14 MICHEL AND MARGARET ANN
15 ETCHEVERRY FAMILY, LP, a Nevada
16 Registered Foreign Limited Partnership,
17 DIAMOND CATTLE COMPANY, LLC, a
18 Nevada Limited Liability Company, and
19 KENNETH F. BENSON, an individual,

20 Petitioners,

21 v.

22 STATE ENGINEER, OF NEVADA, OFFICE
23 OF THE STATE ENGINEER, DIVISION OF
24 WATER RESOURCES, DEPARTMENT OF
25 CONSERVATION AND NATURAL
26 RESOURCES,

Respondent.

AFFIDAVIT OF SERVICE

State of Nevada)

County of Washoe)

SS

21 I, Lisa Marlan, do hereby affirm that on the **5th day of July, 2012** at
22 3:10 AM/PM I made personal service of true copies of the following documents as required
23 by Nevada Revised Statute 533.450:

24 **1. Notice of Petition for Judicial Review; and**



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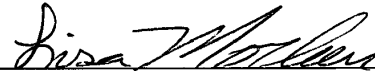
2. Petition for Judicial review.

Upon the Nevada State Engineer's Office, at the following address:


Nevada State Engineer
Nevada Division of Water Resources
901 S. Stewart Street, Suite 2002
Carson City, Nevada 89701

I certify that I am a competent person 18 years of age and that I am not a party to nor an officer, director, or shareholder of, nor attorney for, any party to this action.

Date: 7-9-12


Name: Lisa Morlan

SUBSCRIBED AND SWORN to before me this 9th day of July, 2012 by Lisa Morlan.


Notary Public for Nevada
My Commission expires: 2014



1 **CERTIFICATE OF SERVICE**

2 I hereby certify that on the 18th day of July, 2012, I caused a copy of the foregoing
3 ***AFFIDAVIT OF SERVICE*** to be deposited for mailing, postage prepaid, to the following:

4 ***VIA US MAIL***

5 Karen A. Peterson
6 Allision, Mackenzie, Pavlakis, Wright &
7 Fagan Ltd.
8 P.O. Box 646
9 Carson City, NV 89701

Dale E. Ferguson, Esq.
Gordon H. DePaoli, Esq.
Woodburn and Wedge
6100 Neil Road, Ste. 500
Reno, NV 89511

10 Theodore Beutel, Esq.
11 Eureka County District Attorney
12 701 South Main Street
13 P.O. Box 190
14 Eureka, NV 89316

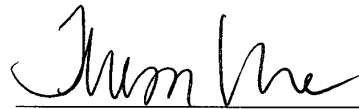
Ross E. de Lipkau, Esq.
Parsons, Behle & Latimer
50 West Liberty Street, Suite 750
Reno, NV 89501

15 Baxter Glenn Tackett
16 72 First Street
17 Woodland, CA 95695

Cedar Ranches, LLC
511 West Robins Street
P.O. Box 942
Eureka, NV 89316

18 Bryan L. Stockton, Esq.
19 Nevada Attorney General's Office
20 100 North Carson Street
21 Carson City, NV 89701

22 Dated this 18th day of July, 2012.



23 THERESE A. URE, NSB# 10255
24 Schroeder Law Offices, P.C.
25 440 Marsh Avenue
26 Reno, NV 89509
PHONE (775) 786-8800; FAX (877) 600-4971
counsel@water-law.com
*Attorneys for Protestant Kenneth F. Benson,
Diamond Cattle Company LLC, and Etcheverry
Family LP*



COPY

Nevada Office of the Attorney General
100 North Carson Street
Carson City, NV 89701-4717

1 CATHERINE CORTEZ MASTO
Attorney General
2 BRYAN L. STOCKTON
Nevada State Bar # 4764
3 Senior Deputy Attorney General
100 N. Carson Street
4 Carson City, Nevada 89701
(775) 684-1228
5 *Attorneys for Respondents*

6 **IN THE SEVENTH JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA**

7 **IN AND FOR THE COUNTY OF EUREKA**

8 MICHEL AND MARGARET ANN
ETCHEVERRY FAMIL, LP, a Nevada
9 Registered Foreign Limited Partnership,
DIAMOND CATTLE COMPANY, LLC,
10 a Nevada Limited Liability Company,
and KENNETH F. BENSON, an
11 individual,

Petitioners,

12 vs.

13 STATE ENINGEER OF NEVADA,
14 OFFICE OF THE STATE ENGINEER,
15 DIVISION OF WATER RESOUCES,
DEPARTMENT OF CONSERVATION
16 AND NATURAL RESOURCES,

Respondents.

Case No.: CV 1207-178

Dept. No.: II

17
18 **SUMMARY OF RECORD ON APPEAL**

19 The Record on Appeal in this case is filed concurrently with this summary and consists
20 of a copy of the following documents:

21 **VOLUME I:**

- 22 1. Eureka Moly Letter re: Monitoring, Management and Mitigation Plan, Mount Hope Plan,
23 dated May 10, 2012. Bates stamped pages 01-02.
24 2. Hull & Branstetter Letter re: Proposed 3M Plan, dated May 18, 2012. Bates stamped
25 pages 03-04.
26 3. Nevada Division of Water Resources Monitoring, Management, and Mitigation Plan for
27 the Mt. Hope Project. Bates stamped pages 05-030.

28 ///

RECEIVED
8/4/12

3MJA 000039

- 1 4. Summary of Eureka Moly, LLC (EMLLC) and Eureka County (EC) Work on 3M. Bates
2 stamped pages 031-032.
- 3 5. Eureka County's Proposed Mount Hope Project Water Resources Monitoring,
4 Management, and Mitigation Plan. Bates stamped pages 033-052.
- 5 6. E-mail communication from Pat Rogers, Director of Environmental and Permitting,
6 General Moly, Inc. to Jake Tibbits, Dale Bugening, Elise Hoover, Robert Pennington re:
7 3M, dated July 29, 2011. Bates stamped pages 053-0105.
- 8 7. E-mail communication from Michael Branstetter to Karen Peterson re 3M, dated August
9 11, 2011. Bates stamped pages 0106-0132.
- 10 8. Board of Eureka County Commissioners, agendas, minutes of meetings and submitted
11 documents of public meetings from May 20, 2011 through September 14, 2011. Bates
12 stamped pages 0133-0249.
- 13 9. Notarized statement of John West Colby II and Paula Mae Colby re: mitigation
14 agreement with Eureka Moly, LLC, dated September 7, 2011. Bates stamped pages
15 0250-0251.
- 16 10. Draft of Nevada Division of Water Resources, Monitoring, Management, and Mitigation
17 Plan for the Mt. Hope Project, draft dated 8/4/2011. Bates stamped pages 0252-0264.
- 18 11. E-mail communication from Jake Tibbits to Pat Rogers, Robert Pennington, Elise
19 Brachtel, Dale Bugening, dated September 16, 2011. Bates stamped pages 0265-0293.
- 20 12. Eureka Moly Letter re: Monitoring, Management and Mitigation Plan – Mt. Hope
21 Project, dated October 7, 2011. Bates stamped pages 0294-0349.
- 22 13. E-mail communication from Pat Rogers to Rick Felling, Jake Tibbits, Jason King,
23 Kelvin Hickenbottom re: EMLLC 3M Plan, dated October 17, 2011. Bates stamped
24 pages 0350-0352.
- 25 14. Eureka Moly Letter with enclosures re: Monitoring, Management and Mitigation Plan –
26 Mt. Hope Project, dated December 16, 2011. Bates stamped pages 0353-0376.
- 27 ///
- 28 ///

- 1 15. E-mail communication from Jake Tibbits to Rick Felling, Jason King, Adam Sullivan,
2 Pat Rogers, Dale Bugening, Lenny Fiorenzi, re: Eureka County comments on 12/16/11,
3 and attachments dated January 9, 2012. Bates stamped pages 0377-0434.
4 16. E-mail communication from Pat Rogers to Jake Tibbits, Elise Brachtl re: red line edits
5 by Rick Felling dated January 26, 2012. Bates stamped pages 0436-0448.
6 DATED this 1st day of August 2012.

7 CATHERINE CORTEZ MASTO
8 Attorney General

9 By: 

10 BRYAN L. STOCKTON
11 Senior Deputy Attorney General
12 Nevada State Bar # 4764
13 100 N. Carson Street
14 Carson City, Nevada 89701
15 (775) 684-1228
16 (775) 684-1103 fax
17 bstockton@ag.nv.gov
18 Attorneys for Respondents

19 **AFFIRMATION (Pursuant to NRS 239B.030)**

20 The undersigned does hereby affirm that the preceding document does not contain the
21 social security number of any person.

22 DATED this 1st day of August 2012.

23 CATHERINE CORTEZ MASTO
24 Attorney General

25 By: 

26 BRYAN L. STOCKTON
27 Senior Deputy Attorney General
28 Nevada State Bar # 4764
100 N. Carson Street
Carson City, Nevada 89701
(775) 684-1228
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bstockton@ag.nv.gov

Attorneys for Respondents

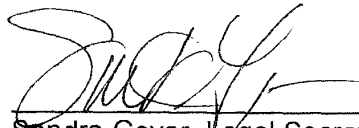
Nevada Office of the Attorney General
100 North Carson Street
Carson City, NV 89701-4717

CERTIFICATE OF MAILING

I, Sandra Geyer certify that I am an employee of the Office of the Attorney General, State of Nevada, and that on this 1st day of August 2012, I deposited for mailing at Carson City, Nevada, postage prepaid, a true and correct copy of the foregoing **RECORD AND SUMMARY OF RECORD APPEAL**, A COPY OF THE SUMMARY OF THE RECORD HAS BEEN SENT TO THE FOLLOWING:

Parsons Behle & Latimer
John R. Zimmerman, Esq.
50 West Liberty Street, Suite 750
Reno, Nevada 89701
*Attorneys for Intervenor
Kobeh Valley Ranch*

Schroeder Law Offices, P.C.
Therese A. Ure, Esq.
Laura Schroeder, Esq.
440 Marsh Avenue
Reno, Nevada 89509
*Attorneys for Benson, Etcheverry
And Diamond Cattle Co.*


Sandra Geyer, Legal Secretary II

COPY

NO. _____
FILED

AUG 03 2012

Eureka County Clerk
By *Sharon M. Cantrell*

Nevada Office of the Attorney General
100 North Carson Street
Carson City, NV 89701-4717

1 CATHERINE CORTEZ MASTO
Attorney General
2 BRYAN L. STOCKTON
Nevada State Bar # 4764
3 Senior Deputy Attorney General
100 N. Carson Street
4 Carson City, Nevada 89701
(775) 684-1228
5 *Attorneys for Respondents*

6 **IN THE SEVENTH JUDICIAL DISTRICT COURT OF THE STATE OF NEVADA**

7 **IN AND FOR THE COUNTY OF EUREKA**

8 MICHEL AND MARGARET ANN
ETCHEVERRY FAMIL, LP, a Nevada
9 Registered Foreign Limited Partnership,
DIAMOND CATTLE COMPANY, LLC,
10 a Nevada Limited Liability Company,
and KENNETH F. BENSON, an
11 individual,

Petitioners,

12 vs.

13 STATE ENGINEER OF NEVADA,
14 OFFICE OF THE STATE ENGINEER,
DIVISION OF WATER RESOURCES,
15 DEPARTMENT OF CONSERVATION
AND NATURAL RESOURCES,
16

Respondents.

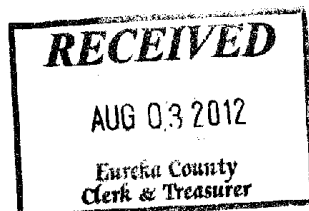
Case No.: CV 1207-178

Dept. No.: II

17
18
19 **VOLUME I**

20 **Bates stamped pages**

21 **SE ROA 01-0251**
22
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24
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27
28



3MJA 000043



2215 North 5th Street
Elko, NV 89801
Phone: 775-748-6000
Fax: 775-753-7722
Email: progers@generalmoly.com
Website: www.generalmoly.com

May 10, 2012

OFFICE OF THE ATTORNEY GENERAL
CARSON CITY, NEVADA

MAY 14 2012

BUREAU OF GOVERNMENT AFFAIRS
GOVERNMENT & NATURAL RESOURCES DIVISION

Mr. Richard A. Felling
Chief, Hydrology Section
Division of Water Resources
State Engineer's Office
901 S Stewart St. Suite 2002
Carson City, NV 89701

Re: Monitoring, Management and Mitigation Plan – Mount Hope Project

Dear Mr. Felling:

This letter transmits Eureka Moly, LLC's ("EMLLC") proposed Monitoring, Management and Mitigation Plan ("3M") for the Mount Hope Project. This 3M is submitted pursuant to the requirements of Nevada State Engineer ("NSE") Ruling 6127. This 3M is labeled Mt Hope 3M May, 2012 and supersedes and replaces the version submitted by EMLLC on December 16, 2011. I am also attaching it in redline to show our changes to the 3M edited by you in January 2012, which is included under #12 in the enclosed Summary.

The modifications set forth in this May 2012 3M are the result of our consideration of: (1) Jake Tibbitts' January 9, 2012 comments and review of the December 16, 2011 3M on behalf of Eureka County, and (2) your edits following Mr. Tibbitts' comments. Mr. Tibbitts' comments and review is included under #11 in the Summary.

A condition of Ruling 6127 was that this 3M Plan be prepared with the input, assistance and cooperation of Eureka County ("EC"). EC has provided input and assistance and EMLLC has worked in cooperation with EC in preparation of this 3M. I am attaching a separate document (along with material) entitled "Summary of EMLLC - EC work on 3M" which sets forth the major events concerning the development of this 3M following issuance of Ruling 6127; collaboration with Eureka County on the 3M also took place prior to issuance of the Ruling. There can be no question that EC has had a major role in development of this 3M. EMLLC appreciates the input, assistance and cooperation of EC in the development of this 3M. As you know, there were a few areas where EMLLC and EC were not able to reach agreement, but EC had a full opportunity to be heard on all aspects of the 3M and the process satisfies the requirement imposed by the NSE.

SE ROA 01

3MJA 000044

EMLLC respectfully requests that the enclosed 3M be presented to the NSE for approval; it meets all the requirements of Ruling 6127 and is a robust 3M. Among other things, it will ensure that if any impacts occur as a result of the Mount Hope Project, they will be detected and mitigated so that there will be no conflict with other water rights holders.

Sincerely,



Patrick C. Rogers
Director, Environmental and Permitting

Enclosures: (1) 3M and attachments: A, Figure 1 and Figure 2
(2) Redline of 3M
(3) Summary of EC – EMLLC work on 3M

Cc: Dave Berger, US Geological Survey - with enclosures
Jake Tibbitts, Eureka County Natural Resources Department - with enclosures
All counsel of record – with enclosures:

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Eureka County District Attorney
701 S. Main Street
P.O. Box 190
Eureka, NV 89316

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Carson City, NV 89702

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Reno, NV 89505

Bryan L. Stockton, Senior Deputy
Attorney General
Nevada Attorney General's Office
100 North Carson Street
Carson City, NV 89701

MICHAEL K. BRANSTETTER

HULL & BRANSTETTER
CHARTERED
ATTORNEYS AT LAW
416 RIVER STREET
P.O. BOX 709
WALLACE, ID 83873-0709

H.J. HULL (1888-1975)
ALDEN HULL (1919-1984)
PIATT HULL (1914-1992)

TELEPHONE: (208) 752-1154
FAX: (208) 752-0951

OFFICE OF THE ATTORNEY GENERAL
CARSON CITY, NEVADA

May 18, 2012

MAY 21 2012

Richard A. Felling
Chief, Hydrology Section
Division of Water Resources
State Engineer's Office
901 S. Stewart St., Suite 2002
Carson City, NV 89701

Therese A. Ure, Esq. BUREAU OF GOVERNMENT AFFAIRS
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Natural Resources Manager
Eureka County Dept. of Nat. Resources
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Karen A Peterson, Esq.
Allison, MacKenzie, et al.
402 N. Division Street
Carson City, NV 89702

David Berger, Supervisor Hydrologist
USGS
2730 N. Deer Run Road
Carson City, NV 89701

Re: Eureka Moly, LLC - 3M Plan

Dear Ladies and Gentlemen:

On May 10, 2012, Patrick Rogers submitted Eureka Moly, LLC's proposed 3M Plan to Mr. Felling and a document entitled "Summary of EMLLC – EC work on 3M". A 3 ring binder of attachments to the Summary was also provided to each of you.

SE ROA 03

3MJA 000046

May 18, 2012

Page - 2

Unfortunately, it was recently discovered that the copy service made copying errors in the attachments in the 3 ring binder. The copying errors included duplications, omissions and pages out of order.

There are 12 sections in the 3 ring binder. Rather than try to walk you through a process to "fix" the affected sections, I am enclosing new sections. Please discard sections 6, 8, 9, 10 and 12 in your 3 ring binder and replace them with the new sections enclosed with this letter.

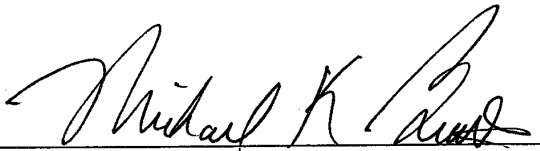
I am also told there may be a "second" section 9 between sections 5 and 6 in the binders – please discard it.

Eureka Moly, LLC apologizes for the errors by the copy service.

Please let me know if you have any questions. Thank you for your cooperation.

Very truly yours,

HULL & BRANSTETTER CHARTERED

By: 
Michael K. Branstetter

MKB/pwk
Enclosures

Replaced 6-1-12
[Signature]

SE ROA 04

3MJA 000047

**NEVADA DIVISION OF WATER RESOURCES MONITORING, MANAGEMENT,
AND MITIGATION PLAN FOR THE MT. HOPE PROJECT**

1. BACKGROUND

- A. This Monitoring, Management, and Mitigation Plan (3M) applies to proposed groundwater extraction from Kobeh Valley and Diamond Valley for mining process water rights granted in Ruling 6127 of the office of the Nevada State Engineer (NSE) dated July 15, 2011. The groundwater extracted will be consumed in activities related to the Mt. Hope Project (Project), including mineral processing and mine dust control. The groundwater will be developed by Eureka Moly, LLC, (EMLLC) through Kobeh Valley Ranch, LLC (KVR), both of which are subsidiaries of General Moly, Inc. (GMI), with KVR being the water rights holder. The Lessee of the water rights and operator of the Project is EMLLC. The groundwater will be supplied primarily from a wellfield in Kobeh Valley and conveyed via pipelines to the mine and mill sites. In addition, groundwater will include water derived from open pit dewatering at rates that are predicted to reach a maximum of 742 af/yr. The distribution of this water from the pit is estimated at 20% from Kobeh Valley Hydrographic Basin and 80% from the Diamond Valley Hydrographic Basin.

2. PURPOSE OF THE 3M

- A. The purpose of this 3M is to assist the NSE in managing development of groundwater resources within and near the Project area to avoid adverse impacts to existing water rights. The 3M is designed to include or develop, as needed or appropriate, express conditions that will protect the rights of domestic well owners, if any, and existing appropriations.
- B. While it is the goal to avoid any adverse impacts due to the groundwater pumping, the 3M outlines a process by which adverse impacts will be identified and ultimately mitigated. It is intended to provide the necessary data to assess the response of the aquifer(s) to the stress of water resource exploitation, provide an early warning capability, and provide safeguards for responsible management of water.

3. AUTHORITIES AND PARTICIPANTS

- A. The NSE has final authority over the 3M, and EMLLC, including all successors and assigns, will be responsible for implementing and complying with the 3M.
- B. In addition to the purpose outlined above, this 3M is intended to provide participation and transparency to the locally affected stakeholders. Eureka County (EC) holds water rights for municipal use in Diamond Valley. Additionally, Eureka County has local natural resource, land-use, and water resource policies, plans, and goals

developed under Nevada State Law that obligate County officials, both elected and appointed, to actively participate in the planning and management of resources within Eureka County. Eureka County, and representatives from locally potentially affected farming, ranching, and domestic interests will be invited to participate in this 3M. In the event there are other water rights holders who may be adversely affected by Mt. Hope Project groundwater extraction, these entities could be invited to participate as described under MANAGEMENT and in accordance with this 3M. The entities that participate in this 3M as outlined in the MANAGEMENT section 5.B are hereinafter referred to as "Parties".

- C. The USGS will be invited to participate expressly to provide impartial technical and scientific input, as described herein.
- D. This 3M is separate from the requirements placed upon EMLLC by other agencies including the United States Bureau of Land Management (BLM) and Nevada Department of Wildlife (NDOW). The BLM has claimed Federal Public Water Reserves (PWR 107) within the area of concern. The BLM and EMLLC have entered into a stipulated settlement agreement as a condition of the BLM withdrawal of protests of EMLLC's water right applications and NDOW is included as a party to the settlement agreement.

4. PRINCIPAL COMPONENTS

The 3M consists of three principal components:

- A. Management
- B. Monitoring
- C. Mitigation

The framework of these components is described in the following sections.

5. MANAGEMENT

- A. Two committees are established. The Water Advisory Committee (WAC) is to establish and carryout policy under this 3M. The Technical Advisory Committee (TAC) is to provide the technical scientific expertise necessary for collection, evaluation and analysis of data. Separation of the roles and responsibilities of these two bodies is considered crucial to maintaining scientific impartiality of the data collection and analysis program.
- B. **Water Advisory Committee:**

- a. Within 30 days after NSE approval of this 3M, EMLLC, NSE, and Eureka County representatives will convene as the three (3) founding members of the WAC. Upon the three founding members convening, the Diamond Natural Resources Protection and Conservation Association (DNRPCA) and the Eureka Producers Cooperative (EPC) (DNRPCA and EPC represent the bulk of water rights holders in the Diamond Valley Flow System) will each be invited to bring forward one representative nominated from their respective membership for inclusion as members of the WAC. Letters of interest will also be accepted from potentially affected ranching interests (i.e., Koberh Valley rancher) for inclusion as a member of the WAC. Eureka County, NSE, EMLLC, DNRPCA, and EPC will make the determination on the affected ranching interest to be included on the WAC based on letters of interest received. If any of the potentially affected ranching and farming interests ceases to exist, the remaining WAC members will develop a process so that replacement members will be selected to join the WAC. The WAC may also invite other potentially affected water rights holders to participate as members. The WAC will have no more than seven (7) members. The member of the WAC representing the NSE will be invited to participate as the chair of the WAC. If the NSE member representative declines this invitation, the WAC will elect the chairman. Each WAC member, at its sole discretion, may invite such additional staff or consultants to attend WAC meetings as it deems necessary.
- b. After the full WAC has been convened, the WAC will establish policy and define additional roles and responsibilities of the WAC and TAC, such as scheduling of meetings, agenda setting, publication of minutes, receiving input from the public, and any other necessary components.
- c. The WAC will meet no less than one time in each quarter starting at the execution of this 3M with the primary focus to ensure water monitoring is actively in place. Future meeting frequency may then be adjusted as decided by the WAC, but will be no less than once annually.
- d. The WAC will have an annual meeting, open to the public, to review project operations and to review monitoring, management and mitigation actions of the previous year.
- e. Purposes and Functions of the WAC will be to:
 - i. Provide a forum for the WAC to discuss relevant data and analyses.
 - ii. Share information regarding modeling efforts and model results.
 - iii. Make modifications to the Monitoring component of this 3M, including, but not limited to additional data collection and scientific investigations, based on recommendations from the TAC.
 - iv. Provide status reports and recommendations to the Parties.
 - v. Establish values for monitored variables (water levels, spring discharges, vegetation responses, etc.) known as "action criteria" which, if exceeded,

may be of concern to the Parties and could require mitigation or management actions.

- vi. Determine what constitutes an adverse impact on a case-by-case basis.
- vii. Form and ensure implementation of groundwater management or mitigation measures approved by the WAC based on recommendations of the TAC.
- viii. Review financial assurance periodically and make adjustments to amount as appropriate and recommend release of funds for mitigation and/or management measures.
- ix. Provide the NSE, Parties, and the local stakeholders with data and results of any analyses or technical evaluations, along with reports of specific implemented mitigation or management actions.
- x. Develop and implement a procedure to remove and replace WAC and TAC members as it deems necessary, excluding, however, removal of the founding members consisting of the NSE, EC, and EMLCC.

C. Technical Advisory Committee:

- a. The WAC will appoint a Technical Advisory Committee (TAC) as a subcommittee to the WAC. Each Party represented on the WAC is entitled to appoint a representative and is responsible for funding the participation of their respective TAC member. In addition, the USGS will be invited to participate as a member of the TAC. Funding for the USGS's participation in the 3M will be borne by EMLLC either through new or through existing joint funding agreements with USGS sponsored by Eureka County to study the Diamond Valley Flow System or by a "pass-through" agreement with the NSE. TAC members must exhibit a professional level of technical or scientific expertise and a background or experience in land management, natural resources, water resources, or other related field. Each Party, at its sole discretion may invite additional staff or consultants to attend TAC meetings.
- b. The TAC will meet within 30 days after WAC appointment to review the proposed monitoring provided as Attachment A to this 3M. Upon completing this review, the TAC will make recommendations to the WAC for any changes to the monitoring components of this 3M. Thereafter, the TAC will meet at intervals deemed appropriate by the TAC to review and analyze data, but not less than twice annually or as instructed by the WAC.
- c. At a minimum, purposes and functions of the TAC will be to:
 - i. Review the proposed monitoring and recommend to the WAC implementation, including any changes to the specific monitoring elements, as appropriate.
 - ii. Review historic groundwater level trends, spring and stream flows to determine historic hydrologic trends. Where possible, identify wet and dry

regimes, climate effects on groundwater recharge rates and base flows in surface waters.

- iii. Review, develop, and refine standards and quality control procedures for data collection, management, and analysis.
- iv. Inform the entity or entities that collect data of standard accepted protocols of data collection, recording and analysis (e.g., USGS) that will be used.
- v. Evaluate monitoring data, reports, analyses, etc. to determine whether data gaps exist and make appropriate recommendations to the WAC.
- vi. Develop and recommend action criteria to the WAC for management or mitigation measures based upon available data and analyses.
- vii. Evaluate all monitoring data to determine if any action criterion has been or is predicted to be exceeded, indicating a possible adverse impact and report findings to the WAC.
- viii. Recommend mitigation and management measures and related scope of work details to the WAC. This includes individual resources or a comprehensive list of all resources to support WAC evaluation of the adequacy of mitigation funding.
- ix. Evaluate the effectiveness of mitigation, if implemented, and report findings to the WAC.
- x. Make recommendations to the WAC regarding the numerical groundwater flow model, including appropriate times for any model updates and modes of model output.

D. Numerical Groundwater Flow Model:

- a. EMLLC has developed the Numerical Groundwater Flow Model (FM) to simulate the groundwater flow system and the FM will be updated to incorporate the data collected under this 3M. EMLLC will update the FM after recovering data from the first year of wellfield pumping for mineral processing as recommended under the provisions of this 3M. Thereafter, EMLLC will update the FM on a schedule as determined under the provisions of the 3M.
- b. The FM will be used as a management tool to evaluate predictions of drawdown and impacts and to help define action criteria.

E. Prevention of Interbasin Transfer from Diamond Valley Basin:

- a. If excess water is produced within the Diamond Valley Hydrographic Basin which is not consumed in that basin, this water will be returned to the Diamond Valley Hydrographic Basin. As described in Section 6.E., water derived from pit dewatering and consumed will be documented and reported by EMLLC to verify that the volume of water extracted from Diamond Valley is equal to or less than the volume of water consumed in Diamond Valley (i.e. no transfer of water out of Diamond Valley).

F. Action Criteria:

- a. Specific quantitative action criteria will be developed by the WAC with recommendations from the TAC. These criteria will be developed to provide early warning of potential adverse impacts to water rights, determined to be caused by Project groundwater pumping.
- b. When any action criterion that has been adopted as part of this 3M is reached, the following management actions will be triggered:
 - i. The TAC will meet as soon as possible to assess whether the action criterion exceedance is caused by Project groundwater pumping and present their findings to the WAC.
 - ii. If the WAC determines that any action criterion exceedance is caused by Project groundwater pumping, the TAC will expeditiously develop mitigation or management measures for the WAC to consider. The TAC will analyze the feasibility of the specific measures to assess alternatives, evaluate the potential effectiveness of the measures, and evaluate potential impacts created by implementation of the measures.
 - iii. The WAC will determine whether or not to recommend implementation of the mitigation or management measures and to also recommend if the funds described in MITIGATION will be used to implement such measure.
 - iv. The effectiveness of any implemented measure will be evaluated by the TAC to ensure the measure met or exceeded the intended result. Results and recommendations for any additional measures will be reported to the WAC.
 - v. Any member of the WAC may propose an additional action criterion or a change to existing action criteria. Any such change must be presented in writing to the WAC and accompanied by analyses to support the proposed change.

G. Decision-Making Process:

- a. For technical issues, including, but not limited to monitoring modifications, setting action criteria, and appropriate mitigation, decisions under this 3M will be made after considering the evaluation and recommendations of the TAC.
- b. All Parties shall be afforded the opportunity to attend meetings where decisions will be made. Any decisions made by the WAC under this 3M shall be by unanimous vote of Parties in attendance, provided however, both EMLLC and EC must be present for a vote to occur. If unanimity is not achieved, the Parties may jointly agree to conduct additional data collection and/or data review and analyses directed at resolving the different interpretations or opinions. If that is not successful, the Parties may refer the issue, accompanied by their respective opinions, to the NSE for final determination.

- c. Decisions made by the WAC regarding recommended modifications to the 3M, implementation of mitigation, or other management actions that would be required of EMLLC will be subject to the jurisdiction and authority of the NSE.
- d. Nothing herein limits or changes the NSE authority, and any Party can petition the NSE to consider any issue.

H. Modification of the 3M

- a. The Parties may individually or jointly petition the NSE to modify this 3M in the event that mutual agreement cannot be reached. Any such petition shall be concurrently provided to the other Parties. Prior to the NSE decision, all Parties will be provided the opportunity to submit a written response to the NSE no later than 60 calendar days following the date of receipt of the petition by NSE.
- b. Any modification to the 3M must be approved by the NSE.
- c. Nothing herein seeks to limit, alter, modify or change the exclusive authority of the NSE to approve or modify the 3M.

6. MONITORING

- A. Hydrological related studies for the Project contain data concerning water and related resources in Kobeh Valley, Diamond Valley, Pine Valley, and surrounding areas. These data include locations of existing and proposed supply and monitoring wells, groundwater extraction rates, groundwater level measurements, flow from springs and streams, water quality, precipitation data, and wetland/riparian conditions. Additional data relevant to the Project available from other local, state, and federal agencies or other reliable sources will be compiled into a database by EMLLC and expanded as new data are collected under the provisions of this 3M.
- B. The proposed monitoring is provided in Attachment A to this 3M. As described in MANAGEMENT of this 3M, the TAC will review this proposed monitoring and provide recommendations to the WAC regarding changes and/or implementation. In addition to this initial review, the TAC will review the proposed monitoring and make recommendations to the WAC for changes throughout the Project life based on monitoring data and analysis. Such recommended changes may include, but not be limited to, addition or deletion of monitoring sites, addition or deletion of monitoring parameters, changes to monitoring methods, and increases or decreases in monitoring frequencies. Upon acceptance by the NSE of this 3M, EMLLC will implement the monitoring requirements as set forth in Attachment A.

- C. The term “as is feasible” as used in this 3M relates to mechanical failures or other events/reasons outside the control of the Parties, as agreed upon by the Parties, that interfere with data collection.

D. Groundwater

- a. Groundwater pumping will be measured by flow meters installed on each production well, dewatering well and pit dewatering sump.
- b. Water levels in all wells included as part of the Project monitoring network will be measured by recording pressure transducers (data loggers). The measurement frequency will depend on distance to the wellfield and be based on TAC recommendations.
- c. The Project monitoring network will include “sentinel” wells (i.e., wells strategically located to provide early indication of drawdown propagation towards sensitive or important resources). At a minimum these will be located near the boundary between Kobeh, Diamond, Pine and Antelope Valleys; between the pumping wells and the headwaters of Henderson and Roberts Creeks and Tyrone Gap; between the wellfield and Gravel Pit Spring, Bartine artesian wells, the Antelope Valley Hot Springs (Klobe Hot Springs), and the stock wells at Hay Ranch. Nested wells that monitor individual aquifers at a single location where more than one hydrostratigraphic unit is present or strong vertical gradients may exist will be completed, as is feasible.
- d. Test wells constructed at each Project production well site will be maintained as monitoring wells, as is feasible, and equipped with recording pressure transducers.
- e. Several USGS monitoring wells are located near the proposed well field and within the projected drawdown area. If the USGS is not funded to monitor these specific wells, EMLLC will request USGS permission to collect data from these wells. If the WAC determines that monitoring should continue at these locations, EMLLC may be required to drill replacement wells or develop a suitable alternative.

E. Pit Dewatering

Groundwater will be extracted from the Diamond Valley Hydrographic Basin either by wells or pit dewatering sumps. To determine the amount of water from pit dewatering within the Diamond Valley Hydrographic Basin, the total groundwater removed by pit dewatering sumps will be measured by totalizing flow meters and then multiplied by a factor reflecting the portion of the pit area that is located in Diamond Valley Hydrographic Basin. The discharge from dewatering wells will be measured with totalizing flow meters and allocated to the basin in which the well is located. Water truck loads utilized in the pit complex will be counted and recorded to document water used in

Diamond Valley for mine environmental dust suppression. The amount of water used in Diamond Valley for other uses will be metered or estimated and recorded in the database.

F. Surface Water

- a. At a minimum, the monitoring of stream flow will be conducted as follows:
 - i. Monitoring will include continuous measurements of stream stage at selected control sections for each stream, as is feasible.
 - ii. The geometry of the control sections will be measured at the start of monitoring and re-measured at least annually.
 - iii. Stage measurements will be collected with recording pressure transducers on a frequency of not less than one hour.
 - iv. The flow in the streams at the control sections will be gaged monthly, as is feasible, for the first year of record to establish stage-discharge relationship for each gaging station and following any changes in the control section geometry.
 - v. All control sections in streams will be assessed routinely for any changes in the control section geometry and the stage discharge relationship be re-established accordingly.
 - vi. Following the first year of gaging, stream-flow measurements will be collected at least quarterly.
 - vii. Flow data will be recorded at least quarterly and hydrographs updated at least annually.

G. Water Quality

Water quality samples will be collected from selected production and monitoring wells, surface waters and pit water and analyzed by a laboratory certified by the State of Nevada using standard accepted protocols and a standard water test. Macroinvertebrate monitoring will take place in select streams as an indicator of general stream and/or fishery health.

H. Biological Resources

To assess if there is any loss of vegetative communities in phreatophytic and riparian areas, monitoring of vegetation, including phreatophyte vegetation and riparian zones will be conducted. Specific locations are to be determined by the WAC and itemized in Attachment A, and will include sites in Kobeh Valley, Diamond Valley, Pine Valley and Antelope Valley that may be affected by groundwater extraction. Data will be collected using a variety of techniques and will include on-site measurement of vegetation cover, frequency, and type. Shallow wells will be co-located with vegetation monitoring transects. Remote sensing will be employed to help define and monitor the extent of vegetation communities at a larger spatial scale.

I. Meteorology

Weather/Climate stations will be installed and maintained to continuously monitor wind speed and direction, precipitation, temperature, barometric pressure, humidity, and solar radiation. Existing precipitation stations will be used where possible. The purpose of collecting weather/climate data is to provide the WAC with a basis for evaluating whether changes in groundwater levels or stream and spring flow are due to changes in weather or climate.

J. Elevation Control/Subsidence

Monitoring locations for subsidence, groundwater measuring point elevations and ground surface elevations will be established using survey-grade GPS instrumentation. A standard GPS data collection protocol (i.e., common geographic datum) will be used to allow a comparative base for all elevation associated data. Subsidence monitoring will be augmented using remote sensing technologies (e.g. InSAR). Frequency and methodology of remote sensing to monitor subsidence will be reviewed and determined by the WAC in consideration of TAC recommendations.

K. Data Management

- a. All monitoring data will be entered into the 3M database on a regular, timely, and continual basis as it is collected and verified using WAC-approved quality assurance and quality control (QA/QC). Data collected under or as described in this 3M will be fully and cooperatively shared among the Parties. Verified data within the 3M database will become available to the public, upon request.
- b. In addition to updating the 3M database on a regular and continual basis, EMLLC will provide an annual report that summarizes all information and analysis. This report, due in the NSE's office by March 31, will be prepared based on recommendations and in cooperation with the TAC. These reports will summarize water production, the results of monitoring, and all management and mitigation actions taken during the year. Copies of the annual report will be provided to each of the Parties.
- c. All water level, spring discharge, and stream flow data shall be submitted semi-annually to the NSE in an electronic format specified by the NSE. Data shall be submitted within 30 days of the end of the reporting period.

7. MITIGATION

- A. EMLLC will mitigate adverse impacts, if any, as agreed upon under the provisions of this 3M. The WAC will take necessary steps, including recommending whether funding described below may be used as outlined in this 3M, to ensure that mitigation actions are feasible, reasonable, timely, and effective.

- B. Effectiveness of implemented mitigation measures will be evaluated under the provisions of this 3M. Additional measures will be implemented if a previous mitigation measure does not meet its intended purpose(s).
- C. To ensure funding exists for any required future monitoring and mitigation after the cessation of active mining, EMLLC will provide financial assurances under the provisions of this 3M.
- D. EMLLC's financial assurances (FA) funding will be placed into an interest bearing trust account to be established as a part of this 3M. The initial funding will occur in a manner as follows:
 - a. Initial funding of \$250,000 will occur within 60 days of GMI's Board of Directors formal approval authorizing the start of construction of the Project.
 - b. Additional funding of \$750,000 will occur no later than the end of month six of wellfield pumping for mineral processing (plant startup).
 - c. Funding will be examined and adjusted, as recommended by the WAC, every three years to ensure that sufficient funding is in place to mitigate all potential adverse impacts, including funding for operating and maintenance and long-term replacement costs.
- E After cessation of mining and groundwater pumping by EMLLC, if the NSE determines that there is no longer a reasonable potential for future impacts attributable to the Project, any excess funds, including interest, remaining in the account will be returned to EMLLC.
- F. This 3M outlines measures and procedures to identify and mitigate adverse impacts that may result from project pumping, all of which are uncertain. Due to the uncertainty, this 3M is intended to set forth procedures and methods for identifying adverse impacts and require mitigation of those identified impacts.
- G. To ensure wildlife have continued access to customary use, adversely impacted surface water sources will be mitigated through such measures including, but not limited to, installation and maintenance of replacement water sources of equal or greater volume (e.g. guzzlers) in the same area as the impacted water source.
- H. EMLLC will mitigate permitted water rights and determined and undetermined claims of vested or reserved rights should adverse impacts occur.
- I. Mitigation measures, if necessary, will be developed and implemented on a case-by-case basis under provisions of this 3M.
- J. Potential mitigation measures include the following:

- a. Supply (Project) water will be provided from wells located in Kobeh Valley that are completed in the carbonate and alluvial aquifers. Pumping of these different aquifers will have different impacts to the groundwater and surface water flow systems. Adjustment of carbonate/alluvium groundwater pumping ratio could be employed to either minimize or mitigate effects.
- b. Impacts can be greatly influenced by the specific location of groundwater pumping. Mitigation measures include reduction or cessation of groundwater extraction from one or more wells and/or geographic redistribution of groundwater extraction.
- c. Replacement wells can be constructed to mitigate impacted surface water or groundwater rights, or to supply water for wildlife.
- d. Revegetation of affected areas to achieve appropriate vegetative communities.
- e. Financial compensation or, if agreed upon, property (i.e., land and water rights) of equal value could be purchased for replacement.
- f. If adverse impacts to the Diamond Valley Flow System, or other adjacent basins are determined to be caused by Project groundwater pumping, active and current water rights (water currently pumped) within the affected basin could be purchased and retired.
- g. Implement technology to reduce water consumption of the Project. Pumping rates may be decreased if alternative technology emerges that could reduce water requirements or increase water recycling rates. Water conservation techniques will be proactively employed in order to reduce other mitigation measures (i.e. before any impact is measured).
- h. If surface fissures develop due to land subsidence, they shall be mitigated by filling with a suitable material to prevent injury to wildlife, livestock or people.
- i. Other measures as agreed to by the Parties and/or required by the NSE.

Mount Hope Mine Project
Attachment A to 3M - Monitoring Plan

This Monitoring Plan has been developed by Eureka Moly, LLC (EMLLC) to provide the monitoring component of the 3M (Monitoring, Management and Mitigation) Plan prepared and submitted to the Nevada State Engineer (NSE). Preparation of the 3M and acceptance by NSE is required by Ruling #6127 dated July 15, 2011.

EMLLC will implement documented quality assurance and quality control procedures. Monitoring data will be recorded using a standardized protocol and format for each monitoring event. It is anticipated that protocols will be based on those described by Rantz and others (1982) for surface water flow monitoring, Lapham and others (1995) for groundwater level monitoring, and Wilde (2005) for water sampling. Laboratory analyses will be conducted by Nevada-certified laboratories using standard laboratory quality control procedures.

Tables 1 and 2, provided at the end of this document, lists the proposed monitoring site locations, type of monitoring, monitoring frequency and a brief rationale for selecting each location. Wells identified in Table 1 include both existing wells and wells that EMLLC proposes to construct upon project approval. Mine Well Sets designate production wells, each with a paired monitoring well nearby. Some wells are located within pit limits that would be mined out as the project advances, and these locations would be dropped from the monitoring plan at that time. Site locations are shown on Figures 1 and 2. The monitoring sites in Tables 1 and 2 are organized by locations corresponding to those shown on the Figures 1 and 2.

REFERENCES

- Lapham, W.W., Wilde, F.D., and Koterba, M.T., 1995, *Ground-water data collection protocols and procedures for the National Water-Quality Assessment Program: Selection, installation, and documentation of wells, and collection of related data*: U.S. Geological Survey Open-File Report 95-398, 70 p.
- Rantz, S.E., et al., 1982, *Measurement and computation of streamflow*, U.S. Geological Survey Water Supply Paper 2175, Volumes 1 and 2, 631 p.
- Wilde, F.D., 2005, *National field manual for the collection of water-quality data*: Book 9, Handbooks for Water-Resources Investigations, U.S. Department of the Interior and the U.S. Geological Survey.

Table 1 – Hydrologic Monitoring

Area	Site Name(s)	Parameters	Frequency	Formation	Rationale
Diamond Valley Groundwater	GMI-PDT-1	Depth to Water	Continuous	Vinini Hornfels	Pit area groundwater drawdown monitoring
	GMI-PDT-2	Depth to Water	Continuous	Vinini and Hornfels	Pit area groundwater drawdown monitoring
	GMI-PDT-3B	Depth to Water	Continuous	Vinini Hornfels	Pit area groundwater drawdown monitoring
	IGMI-152	Depth to Water	Continuous	Vinini Fm	Pit area groundwater drawdown monitoring
	IGMI-155	Depth to Water	Continuous	Qtz Porphyry	Pit area groundwater drawdown monitoring
	IGMI-156	Depth to Water	Continuous	Vinini Fm	Pit area groundwater drawdown monitoring
	IGMI-157	Depth to Water	Continuous	Vinini Fm	Pit area groundwater drawdown monitoring
	IGM-169	Depth to Water	Continuous	Vinini Hornfels	Pit area groundwater drawdown monitoring
	IGMI-226P	Depth to Water	Continuous	Vinini Fm	Pit area groundwater drawdown monitoring
	IGMI-228P	Depth to Water	Continuous	Vinini Fm	Pit area groundwater drawdown monitoring
	IGMI-230P	Depth to Water	Continuous	Tuff	Pit area groundwater drawdown monitoring
	IGMI-232P	Depth to Water	Continuous	Vinini Fm	Pit area groundwater drawdown monitoring
	IGMI-233P	Depth to Water	Continuous	Tuff	Pit area groundwater drawdown monitoring
	IGMI-MH-248	Depth to Water	Continuous	Bedrock	Pit area groundwater drawdown monitoring
	NDWR-15462	Depth to Water	Continuous	Alluvium	Pit area groundwater drawdown monitoring

Area	Site Name(s)	Parameters	Frequency	Formation	Rationale
Diamond Valley Groundwater	MH-300	Depth to Water	Continuous	Alluvium	Monitoring groundwater gradient changes in Tyrone Gap with MH – 301
	MH-301	Depth to Water	Continuous	Alluvium	Monitoring groundwater gradient changes in Tyrone Gap with MH – 300
	MH-302	Depth to Water	Continuous	Alluvium	Monitor influence of potential increased transmissivity zone through Whistler Range.
	MH-303	Depth to Water	Continuous	Alluvium	Monitor groundwater elevation trend on west side of Diamond Valley; Sentinel well.
	MH-304	Depth to Water	Continuous	Alluvium	Monitor groundwater elevation trend on west side of Diamond Valley; Sentinel well.
	MH-305	Depth to Water	Continuous	Alluvium	Monitor drawdown east of pit.
	IGMI-158	Depth to Water	Continuous	Alluvium	Monitor groundwater elevation trend on west side of Diamond Valley; Sentinel well.
	IGMI - 236P	Depth to Water	Continuous	Vinini Fm	Monitor groundwater elevation change in Whistler Range; Sentinel well.
	Romano Well	Depth to Water	Continuous	Vinini Fm	Monitor groundwater elevation trend on west side of Diamond Valley; Sentinel well.
	MH – 306 (153 N21 E52 10AAAC1)	Depth to Water	Continuous		Monitor groundwater elevation trend on west side of Diamond Valley
	MH – 307 (153 N20 E52 26AABC1)	Depth to Water	Continuous		Monitor groundwater elevation changes in Devil's Gate.
	MH – 308 (153 N20 E52 26AABC2)	Depth to Water	Continuous		Monitor groundwater elevation changes in Devil's Gate.
Diamond Valley Springs	KV-059 (Stinking)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	KV-060 (Hash)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	KV-061 (Railroad)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts

Area	Site Name(s)	Parameters	Frequency	Formation	Rationale
Diamond Valley Springs	KV-062 (Trap Corral)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	DV -065 (Shipley)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	SP-1 (McBride)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	SP-2 (Garden pass)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	SP-3 (unnamed)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	SP-4 (Mt Hope)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	SP-7 (unnamed)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
Kobeh Valley Groundwater	All production wells	Flow and Depth to Water	Continuous	Alluvium and carbonate	Measure well field production, individual well response to pumping stress, and drawdown progression in wellfield
	GMI-RWX-228T (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	GMI-RWX-229 (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	IGMI-MH-RWX-206 (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	RWX -205	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	MH-400	Depth to Water	Continuous	Alluvium	Monitor groundwater elevation change in alluvium on west side of Whistlers paired w/ MH-401 to assess connection between alluvium and bedrock aquifers; assess effect of inferred structure located to the east.
	MH-401	Depth to Water	Continuous	Bedrock	Monitor groundwater elevation change in bedrock on west side of Whistlers

Area	Site Name(s)	Parameters	Frequency	Formation	Rationale
Kobeh Valley Groundwater					paired w/ MH-400 to assess connection between alluvium and bedrock aquifers; assess effect of inferred structure located to the west.
	MH-402	Depth to Water	Continuous	Alluvium	Monitor drawdown at east edge of Kobeh Valley.
	MH-403	Depth to Water	Continuous	Alluvium	Monitor potential drawdown in upper Roberts Creek; Sentinel.
	MH-404	Depth to Water	Continuous	Bedrock	Monitor potential drawdown in western part of Robert's Creek watershed; Sentinel.
	MH-405 (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	MH-406 (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	MH-407 (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	MH-408 (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	MH-409 (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	MH-410 (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	MH-411 (Mine Well Set)	Depth to Water	Continuous	Alluvium	Measure drawdown progression in wellfield
	MH-412	Depth to Water	Continuous	Alluvium	Monitor groundwater elevation change in transition zone between wellfield and pit area
	MH-413	Depth to Water	Continuous	Alluvium	Monitor groundwater elevation change in transition zone between wellfield and pit area

Area	Site Name(s)	Parameters	Frequency	Formation	Rationale
Kobeh Valley Groundwater	MH - 414 (139 N21 E49 25BBDA)	Depth to Water	Continuous	Alluvium	Monitoring of west side of KV wellfield drawdown
	MH - 415 (139 N21 E50 17BACC)	Depth to Water	Continuous	Alluvium	Monitoring of west side of KV wellfield drawdown
	MH - 416 (139 N20 E51 05CBCC)	Depth to Water	Continuous	Alluvium	Monitoring of south side of KV wellfield drawdown
	MH - 417 (139 N21 E51 36DCDB1)	Depth to Water	Continuous	Alluvium	Monitoring of southeast side of KV wellfield drawdown
	MH -418 (139 N21 E51 24DDDB1)	Depth to Water	Continuous	Alluvium	Monitoring of southeast side of KV wellfield drawdown
	MH - 419 (139 N20 E49 23ACCB1)	Depth to Water	Continuous	Alluvium	Monitoring of drawdown between wellfield and Bean Flat phreatophytes
	MH - 420 (139 N20 E49 24ACAB)	Depth to Water	Continuous	Alluvium	Monitoring of drawdown between wellfield and Bean Flat phreatophytes
	MH - 421 (139 N21 E49 16CCBB1)	Depth to Water	Continuous	Alluvium	Monitoring of west side of KV wellfield drawdown
	RWX - 209 shallow and deep	Depth to Water	Continuous	Alluvium /Vinini	Monitoring of northwest side of KV wellfield drawdown
	MRCMW	Depth to Water	Continuous	Alluvium	Monitoring of potential drawdown in Roberts Creek watershed
	LRCMW	Depth to Water	Continuous	Alluvium	Monitoring of potential drawdown in Roberts Creek watershed
	IGMI-154	Depth to Water	Continuous	Alluvium	Pit area groundwater monitoring
	IGMI-234P	DTW and Chemistry	Continuous	Alluvium	Monitor groundwater elevation change in Whistler Range; Sentinel well
	IGMI-235P	DTW and Chemistry	Continuous	Vinini Fm	Monitor groundwater elevation change in Whistler Range; Sentinel well
	IGMI-237P	DTW and Chemistry	Continuous	Vinini Fm	Monitor groundwater elevation change in Whistler Range; Sentinel well
	TM1-B	DTW and Chemistry	Continuous	Alluvium	Monitoring of east side of KV wellfield drawdown

Area	Site Name(s)	Parameters	Frequency	Formation	Rationale
Kobeh Valley Groundwater	Atlas 1	DTW/ pressure	Continuous	Alluvium	Monitoring northwest of predicted 10 foot drawdown contour
	Bartine Ranch Well 1, 2, 3 (flowing)	DTW/pressure	Continuous	Alluvium	Assess impact of pumping on artesian flows outside predicted 10 foot drawdown contour
	Big Windmill	DTW/pressure	Continuous	Alluvium	Monitor groundwater elevation change in transition zone between wellfield and pit area
	Colby well	DTW/pressure	Continuous	Alluvium	Assess impact of pumping on artesian flows outside predicted 10 foot drawdown contour
	KV 064	DTW/pressure	Continuous	Alluvium	Assess impact of pumping on artesian flows outside predicted 10 foot drawdown contour
	Depco INC	DTW/pressure	Continuous	Alluvium	Monitoring of drawdown between wellfield and Bean Flat phreatophytes
	Etcheverry Windmill	DTW/pressure	Continuous	Alluvium	Monitoring of west side of KV wellfield drawdown
	IGMI-MH-RWX-203 T	DTW/pressure	Continuous	Alluvium	Monitor groundwater elevation change in transition zone between wellfield and pit area
	GMI-RWX-219	DTW/pressure	Continuous	Alluvium	Monitor groundwater elevation change in transition zone between wellfield and pit area
	NDWR9211R (Risi Well)	DTW/pressure	Continuous	Alluvium	Assess impact of pumping on artesian flows outside predicted 10 foot drawdown contour
	RWX- 204	DTW/pressure	Continuous	Alluvium	Monitor groundwater elevation change in transition zone between wellfield and pit area
	KFE	DTW/pressure	Continuous	Alluvium	Monitor groundwater elevation change in transition zone between wellfield and pit area
	KFW	DTW/pressure	Continuous	Alluvium	Monitoring northwest of predicted 10

Area	Site Name(s)	Parameters	Frequency	Formation	Rationale
Kobeh Valley Groundwater					foot drawdown contour
	Treasure Well	DTW/pressure	Continuous	Alluvium	Assess impact of pumping on artesian flows outside predicted 10 foot drawdown contour
	GMI-RWX-223	DTW/pressure	Continuous	Alluvium	Measure drawdown progression in wellfield
Kobeh Valley Streams	LRC (Lower Roberts Creek)	Flow Rate; Water Quality	Continuous		Potential indirect impacts to perennial streams
	URC (Upper Roberts Creek)	Flow Rate; Water Quality	Continuous		Potential indirect impacts to perennial streams
	MH 700 (Cottonwood Canyon)	Flow	Continuous		Potential indirect impacts to perennial streams
	MH 701 (Cottonwood Canyon)	Flow	Continuous		Potential indirect impacts to perennial streams
	MH 704 (West Cottonwood Canyon)	Flow	Continuous		Potential indirect impacts to perennial streams
Kobeh Valley Springs	KV-002 (Potato Canyon)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	KV-026 (Rutabaga)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts near wellfield
	KV-034 (Mud)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts near wellfield
	KV-035 (Lone Mtn)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts south of wellfield
	KV-044 (Hot)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	KV-015 (Unnamed)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	KV-016 (Unnamed)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	KV-020 (Unnamed)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	OT-6 (Unnamed)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts

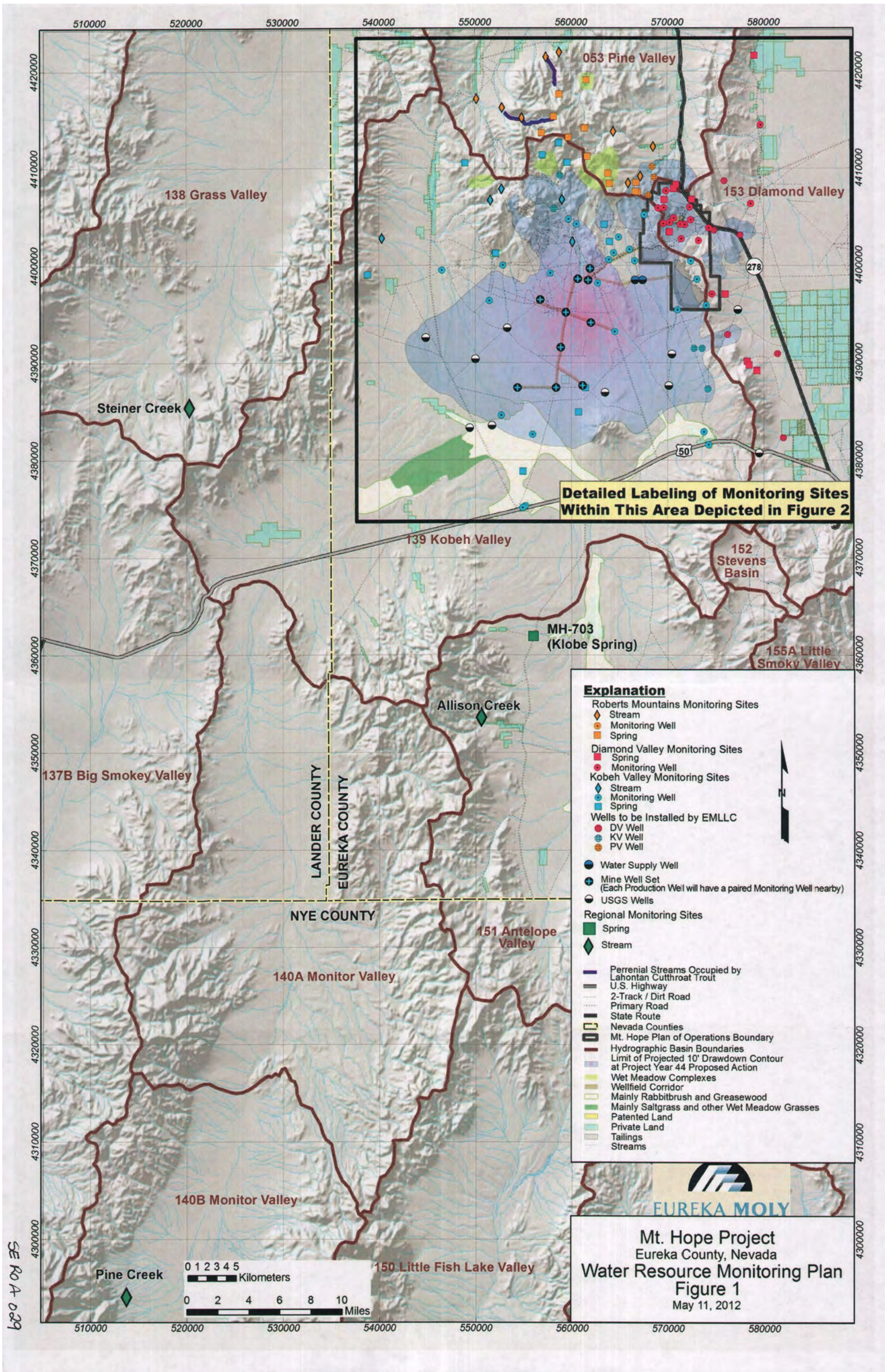
Area	Site Name(s)	Parameters	Frequency	Formation	Rationale
Kobeh Valley Springs	OT-7 (Nichols Spring)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	MH - 702 (Jack Spring)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts, west side of Roberts Mtn.
Antelope Valley Spring	MH - 703 (Klobe Spring)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts in Antelope Valley
Antelope Valley Stream	Allison Creek	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
Grass Valley Stream	Steiner Creek	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
Pine Valley Springs	PV-059 (Dry Creek headwater spring)	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	PV-060	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	PV-061	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	PV-062	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	PV-063	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	PV-064	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	PV-065	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	OT-2	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	OT-3	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	OT-5	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
	OT-10A	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts

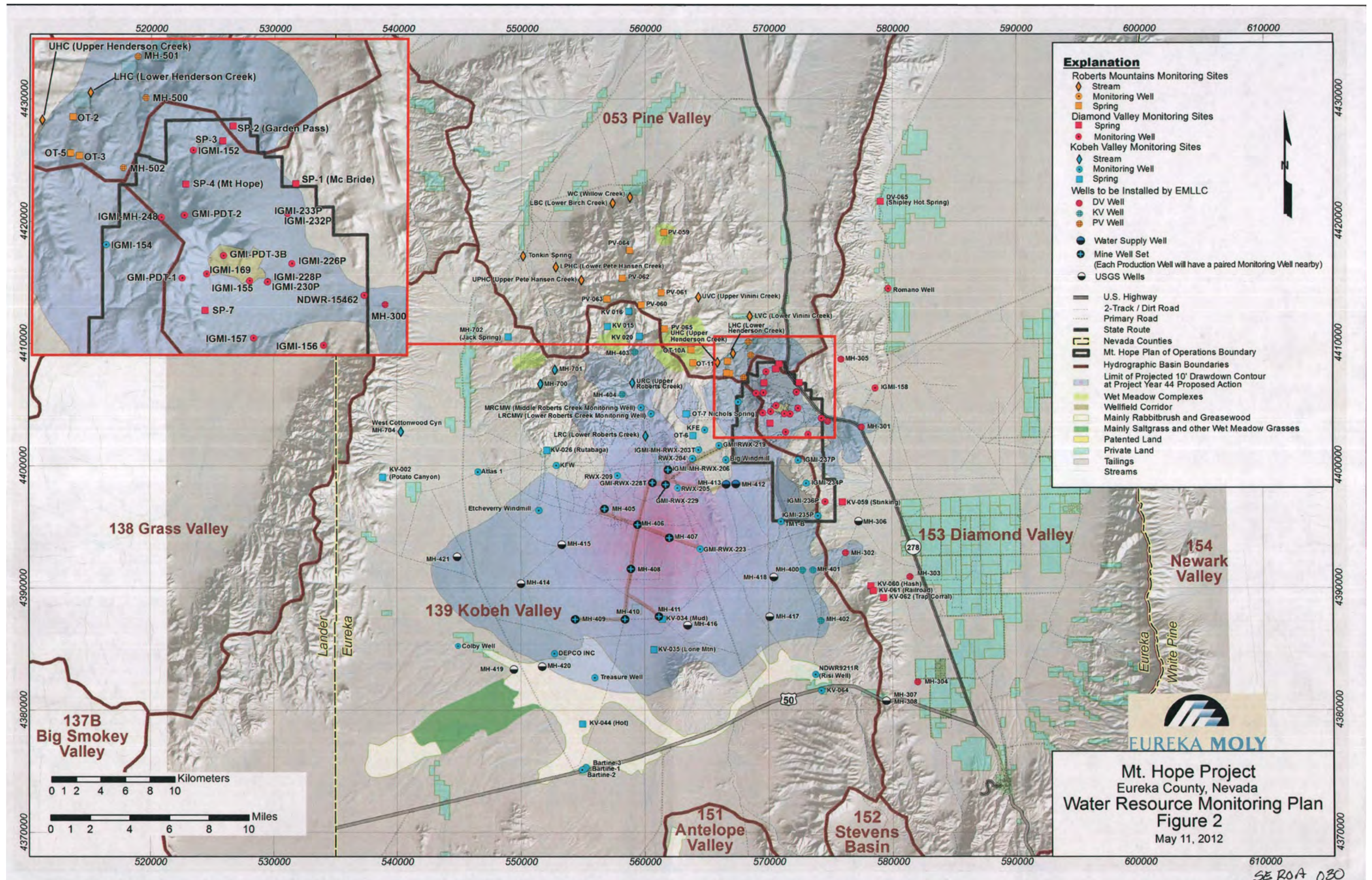
Area	Site Name(s)	Parameters	Frequency	Formation	Rationale
Pine Valley Springs	OT-11	Flow, Photograph	Quarterly		Monitor potential indirect spring impacts
Pine Valley Streams	LBC (Lower Birch Cr.)	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
	LHC (Lower Henderson Cr.)	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
	UHC (Upper Henderson Cr.)	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
	LPHC (Lower Pete Hansen Cr.)	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
	UPHC (Upper Pete Hansen Cr.)	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
	Tonkin Springs	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
	LVC (Lower Vinini)	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
	UVC (Upper Vinini Cr.)	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
	WC (Willow Cr.)	Flow, Photograph	Continuous		Potential indirect impacts to perennial streams
Pine Valley Groundwater	MH-500	Depth to Water	Continuous	Bedrock	Sentinel well in mountain block south of Henderson Creek
	MH-501	Depth to Water	Continuous	Alluvium	Henderson Creek groundwater elevations
	MH-502	Depth to Water	Continuous	Bedrock	Sentinel well in mountain block east of springs in upper Henderson Creek

Table 2 - Biological and Meteorological Monitoring

Area	Site Name(s)	Parameters	Frequency
Wet Meadow Complexes in Roberts Mountains	Three to five vegetation transects in each of the WMC. Locations to include areas where phreatophytic and riparian vegetation transitions to upland vegetation and sites within the core of the WMC	Species composition, species richness, and plant cover	Semi-Annually (May and July)
Phreatophytic vegetation in lower Kobeh Valley	Three to five vegetation transects in phreatophyte vegetation communities. Locations to include areas where phreatophytes transition to upland communities and sites within the core of the phreatophyte vegetation community.	Species composition, species richness, and plant cover	Transects - Semi-Annually (April and June)
Phreatophytic and riparian vegetation in lower Roberts Creek	Three to five vegetation transects in the watershed. Locations to include areas where phreatophytic and riparian vegetation transitions to upland vegetation and sites within the core of the phreatophytic and riparian vegetation	Species composition, species richness, and plant cover	Transects - Semi-Annually (April; June)
Phreatophytic and riparian vegetation in Henderson Creek	Three to five vegetation transects in the watershed. Locations to include areas where phreatophytic and riparian vegetation transitions to upland vegetation and sites within the core of the phreatophytic and riparian vegetation	Species composition, species richness, and plant cover	Transects - Semi-Annually (April; June)
Roberts Mountain	Not applicable	Remote sensing (Aerial photography or satellite imagery)	Initially for entire mountain; Every two years for riparian areas
Streams in Roberts Mountains	Roberts Creek, Vinini Creek, Henderson Creek	Macro-invertebrate monitoring	Annually (late summer/early fall base flow)
Mine site	Existing Mt Hope met station	Temperature, precipitation, humidity,	Hourly

Area	Site Name(s)	Parameters	Frequency
		wind speed and wind direction	
Roberts Mountains	Minimum of 3 high-altitude sites in Roberts Mountains, locations to be determined.	Precipitation	To be determined





Summary of Eureka Moly, LLC ("EMLLC") and
Eureka County ("EC") Work on 3M

1. The starting point for the 3M Plan was Eureka County's Proposed Mount Hope Project Water Resources Monitoring, Management, and Mitigation Plan. Admitted into evidence as EC Exhibit 126 at the December 2010 administrative hearing. Copy attached.
2. EMLLC presented revisions to EC's Exhibit 126 for discussion at meetings to occur on August 2-4, 2011. Copy attached.
 - Meetings occurred to discuss and work on 3M on August 2-4, 2011 between EMLLC and EC representatives in Eureka. The participants were:

Jake Tibbitts – EC
Dale Bugenig – EC
Pat Rogers – EMLLC
Bob Pennington – EMLLC
Elise Brachtl – EMLLC
3. Correspondence and enclosures to EC's attorney on August 9, 2011 and August 11, 2011 concerning 3M: 3M Draft 2011-08-04 rev 02 prepared as a result of discussions between representatives of EMLLC and EC. Copy attached.
4. Copies of Agendas and Minutes of Eureka County Commissioners public meetings of May 20, 2011, June 6, 2011, June 20, 2011, August 5, 2011, August 19, 2011, September 6, 2011 and September 19, 2011: Consideration of 3M.
5. Letter signed September 7, 2011 by John and Paula Colby, owners of MW Cattle Company, witnesses called by EC at December's 2010 administrative hearing; Colby and EMLLC have entered into a mitigation agreement and Colby is satisfied with mitigation terms. Copy attached.
6. Revised 3M from EC representatives, labeled "3M Draft 2011-08-04 rev 02-EC edits v2". Copy attached.

7. Revised 3M from EC representatives, labeled "3M Draft 2011-08-04 rev 02-EC edits v4". Delivered to EMLLC after Commissioners' meetings and comments. Discussed at Commissioners' meeting of September 19, 2011. Copy attached.
8. October 7, 2011 letter from EMLLC to State Engineer's Office enclosing proposed 3M. Enclosed 3M is labeled "3M Draft 2011-10-03" and is a revision of EC's "3M Draft 2011-08-04 rev 2 EC edits v4". Copy attached.
9. Rick Felling's email to Jake Tibbitts dated October 17, 2011 to schedule meeting to discuss. Copy attached.
 - Meeting scheduled for October 28, 2011 to discuss 3M was rescheduled due to a death in the family of one of EC's representatives. Meeting rescheduled and occurred on December 8, 2011. The meeting was in the State Engineer's office in Carson City. Those in attendance were:

Rick Felling – State Engineer's Office
Jason King – State Engineer's Office
Kelvin Hickenbottom – State Engineer's Office
Adam Sullivan – State Engineer's Office
Jake Tibbitts – EC
Lenny Fiorenzi – EC
Dale Bugenig – EC
Pat Rogers – EMLLC
Elise Brachtel – EMLLC
10. EMLLC transmittal of proposed 3M Plan on December 16, 2011, after discussions at the December 8, 2011 meeting. Copy attached.
11. January 9, 2012 email and comments made by Jake Tibbitts to Rick Felling regarding EMLLC's 3M submitted on December 16, 2011. Comments (pop-ups) printed separately. Copy attached.
12. Rick Felling's revisions in redline after Jake Tibbitts' January 9, 2012 comments to the 3M submitted on December 16, 2011. Email of Pat Rogers to Jake Tibbitts with Felling's edits in redline. Copy attached.

1

**EUREKA COUNTY'S PROPOSED
MOUNT HOPE PROJECT
WATER RESOURCES MONITORING, MANAGEMENT, AND
MITIGATION PLAN**

- 1) The purpose of this Monitoring, Management, and Mitigation Plan (Plan) is to describe monitoring and management activities of water resources and related potential impacts due to development of groundwater resources associated with the proposed Mount Hope Project (Project). The Plan also outlines a process to follow in order to mitigate adverse impacts, should they occur. This Plan applies to proposed groundwater extraction rates of up to 11,300 acre-feet per year (af/yr) in Kobeh Valley for mining process water and dewatering rates of 160-800 af/yr for pit dewatering within three hydrographic basins—Pine, Kobeh, and Diamond Valleys—with the majority (80%) of dewatering being in Diamond Valley. The groundwater extracted for process water and pit dewatering will be consumptively used in processing activities of the Project (i.e. no water will be returned to the aquifer). The groundwater would be extracted by Eureka Moly, LLC through Kobeh Valley Ranch, LLC (KVR) which are wholly-owned subsidiaries of General Moly, Inc. (GMI), with KVR being the water rights holder; these parties are referred to as "Proponents". The groundwater would be conveyed via pipelines to the mine site and also be subject to water right appropriations from the Nevada State Engineer and conformance with Nevada State Law concerning adverse impacts to public resources.
- 2) This Plan will be included in the EIS due to the potential for the project to impact water resources and the inherent uncertainty in the numerical groundwater flow model in predicting impacts and substantiating sustainable annual groundwater extraction levels in the Project area. Further, inclusion of this Plan in the EIS maintains openness and transparency by facilitating full public review of the process in addition to documenting the commitment on the part of all parties to mitigate any adverse effects from the Project. This Plan is intended to provide the necessary data, provide an early warning capability, and provide safeguards for responsible management of water resources.

- 3) The two agencies with primary importance with respect to this Plan are:
- A. Nevada State Engineer (Nevada Dept. of Conservation and Natural Resources – Division of Water Resources): This state agency has authority to administer the use of water resources in Nevada, including the issuance of water rights.
 - B. U.S. Geological Survey (U.S. Dept. of the Interior): This federal agency is the primary water resources data collection agency in the United States. It is in the process of studying and monitoring of the Diamond Valley Flow System in which the Mt. Hope Project is located.
- 4) These agencies should together provide impartial oversight for development of groundwater for this Project.
- 5) Along with the Bureau of Land Management (BLM) as lead agency, Eureka County and Nevada Department of Wildlife are cooperating agencies for the Mount Hope Project EIS and would participate in this Plan. As there are other groups not involved in the EIS process that have a vested interest in water resources and this Plan, it is anticipated that these other groups (i.e., representatives from the local farming and ranching industries) would be invited to participate. Therefore cooperating agencies and all other stakeholders hereinafter are referred to as "Parties".
- 6) Even outside of the EIS process, Eureka County as the local government entity representing the people affected by the Mt. Hope Project must be afforded participation in the Plan.
- 7) This Plan consists of four principal components:
- i. Monitoring Requirements, related to production wells, monitoring wells, elevation control, spring flow, riparian areas, biologic resources, water quality, precipitation stations, quality of data, and reporting. Incorporated in the development of the monitoring plan should be the inclusion of data from previous monitoring related to monitoring of surface water and groundwater resources in and near the Mt. Hope Project including, but not limited to location of existing supply and monitoring wells, groundwater extraction rates, groundwater level measurements, flow from springs, water quality, precipitation data, and wetland/riparian conditions.

- ii. Management Requirements, related to the creation and role of a Water Advisory Committee (WAC), and a subcommittee of the WAC – the Technical Advisory Committee (TAC), continued use and development of numerical groundwater flow models, establishment of action criteria, and details of the decision-making process;
 - iii. Mitigation Measures, related to potential mitigation measures that could be implemented if “unreasonable adverse impacts” (to be defined) occur as a result of groundwater extraction associated with the Mount Hope Project; and
 - iv. Modification of Plan, related to procedures that could be followed to modify the Plan if future changing conditions or mitigations warrant modifications.
- 8) The common goal of the Proponents, BLM, Stakeholders, and the Nevada State Engineer (all referred to as “Parties”) in proposing and adopting this plan is to develop water resources data relating to a better understanding and analysis to assist the Nevada State Engineer in managing development of groundwater resources within and near the Project area without resulting in unreasonable adverse impacts to public resources and the prior water rights of other appropriators.
- 9) The Parties agree that groundwater extraction and management decisions can be based on data collected and analyzed for this proposed Mt. Hope Project and from the ongoing USGS study and regional monitoring program of the Diamond Valley Flow System. The Parties will collaborate via the WAC on technical data collection and analysis provided by the TAC.
- 10) The Parties acknowledge that pursuant to NRS 534.110(4) each right to appropriate groundwater in the State of Nevada carries with it the right to make a reasonable lowering of the static groundwater level at the appropriator’s point of diversion and that pursuant to NRS 534.110(5) the Nevada State Engineer may allow, at his discretion, the groundwater level to be lowered at the point of diversion of a prior appropriator with the provision that rights of holders of existing appropriations can be satisfied under such express conditions.

- 11) The Parties expressly acknowledge that the Nevada State Engineer has, pursuant to both statutory and case law, broad authority to administer groundwater resources in the State of Nevada. Nothing contained in this Plan shall be construed as waiving or diminishing such authority.

MONITORING REQUIREMENTS

- 12) The EIS and hydrological studies for the Mt. Hope Project contain information about water resources data in Kobeh Valley, Diamond Valley, Pine Valley, and surrounding areas. This information includes location of existing supply and monitoring wells, groundwater extraction rates, groundwater level measurements, flow from springs, estimates of stream flow, water quality, precipitation data, and wetland/riparian conditions. This information, as well as additional data relevant to the Project available from other local, state, and federal agencies, will be compiled into a central database by the Proponents and expanded as new data are collected.
- 13) Project specific monitoring including costs associated with data collection, compilation of data into a central database, and maintenance of the dataset will be the responsibility of the Proponents as recommended or agreed to by the TAC; however, the USGS has developed a monitoring network of the Diamond Valley Flow System and recently published a report entitled *Hydrogeologic Framework and Groundwater in Basin-fill Deposits of the Diamond Valley Flow System, Central Nevada* (Tumbusch and Plume 2006). This study was funded by Eureka County, and is part of an ongoing hydrogeologic study in which the Proponent contributed monies to Eureka County to supplement phase 1. Phase 1 included updated water level data and review of historic water level changes, and a review of the geologic and hydrologic setting. The study is currently in phase 2 which includes drilling monitoring wells in the vicinity of Devil's Gate to more adequately define subsurface outflow from Kobeh Valley to Diamond Valley, drilling a monitoring well in Diamond Valley to the north of Whistler Peak to aid in assessment of possible outflow through this portion of Sulphur Springs Range, operation of micrometeorological stations in Diamond and Kobeh Valleys, and detailed mapping of phreatophyte vegetation in these basins in order to review and update the water budgets for the basin. USGS is nearing the end of phase 2 of the project and has already moved forward with augmenting and continuing this network through phase 3. Objectives of phase 3 are to continue groundwater level monitoring set forth in phases 1

and 2, and augment the monitoring network by additional collection of climate and evapotranspiration (ET) data. The USGS monitoring network would supplement rather than replace individual Mt. Hope Project monitoring programs. For example, Mt. Hope Project monitoring will be conducted by the technical agents of the Proponents while the USGS maintains its own monitoring network. The USGS monitoring may include wells in the Project monitoring groups. In addition to the Proponents, other agencies also may volunteer to participate in some monitoring activities.

- 14) The term "as is feasible" as used in this Plan relates to mechanical failures or other events/reasons outside the control of the Parties, or agreed by the Parties, that do not permit data collection.

15) Quality of Data

- A. The TAC will ensure that the entity or entities that collect water resources data follow standard protocols of data collection, recording and analysis (e.g., USGS) including review of the data (i.e., peer-review) before being brought forward to the TAC.
- B. The water quality sampling program will include standard field and laboratory quality control procedures.

16) Production Wells

- A. Discharge rates and groundwater levels will be measured in production wells on a continuous or frequent basis, as is feasible, using permanent recording devices. Water levels should be measured during pumping and non-pumping periods.
- B. The proposed action includes production wells in the well field of Kobeh Valley with wells in both carbonate and alluvial aquifers, therefore, the production wells should be monitored accordingly.
- C. All production well monitoring data will be entered into the Project database recommended by the TAC.

17) Monitoring Wells

- A. A network of monitoring wells will be proposed by the Proponents to measure groundwater levels over time. These proposed monitoring networks would be subject to concurrence from the TAC. The USGS may establish additional monitoring wells in the Mt. Hope Project area that includes some surrounding valleys that may be affected by groundwater extraction.
- B. Groundwater levels will be measured, as feasible, using permanent recording devices in selected monitoring wells. For those monitoring wells without continuous monitoring instruments, water levels should be measured initially on a quarterly basis to establish seasonal variations, followed by semi-annual or annual measurements after such seasonal trends have been established.
- C. The TAC will recommend that new monitoring well(s) be installed in key areas where there are no existing wells available for monitoring. The network shall include "sentinel" wells located near the boundary between Kobeh Valley and Diamond Valley and the headwaters of Henderson Creek specifically located to provide early-warning detection of impacts, if any in these areas arising from the Project's groundwater extractions. While a single sentinel well in a given area may indicate a change in the groundwater regime, two or more sentinel wells in a general area will help to identify the source of water declines and well couples are recommended. Consideration will be given to completing nested wells that monitor individual aquifers at a single location. The Proponent will be responsible for completing new monitoring well(s), unless another member of the Parties or the USGS agrees to complete the well(s). Water levels in these new wells should be monitored with a frequency of not less than twice daily through the first year of operation to establish diurnal and seasonal trends in the data.
- D. Test wells constructed at each production well site should be maintained as monitoring wells and equipped with recording pressure transducers. During the initial start up of well-field operations, say the first three to six months, water levels should be collected at a high frequency, with the measurement frequency decreasing with time, using an "event" measurement strategy. That is, the loggers will be polled at a high frequency, but only changes in water level beyond a specified threshold will be logged to minimize the size of the data files. These high-frequency data collected during the initial

startup of the well field will provide for a comprehensive stress test of the aquifer for comparison with projected well-field performance.

- E. Several USGS monitoring wells are located near the proposed well field and within the projected extent of the 10-foot drawdown contour after 44 years of operation. If the USGS is not funded to monitor these specific wells, permission to collect data should be obtained from the USGS. If permission cannot be obtained, new wells should be installed by the Proponent in these areas.
- F. Although some baseline data have already been collected, initiation of groundwater level monitoring in this Plan should commence as soon as possible, recognizing the desire to obtain as much baseline data as possible prior to groundwater extraction. Groundwater levels should be measured in each aquifer from which ground water is extracted, as is feasible, in basins including and immediately surrounding the Mt. Hope well field including Kobeh Valley, Diamond Valley, and Pine Valley.
- G. Locations and monitoring frequency of the monitoring well network will be reviewed by the TAC and may be reduced or expanded in scope upon the TAC recommendation to the WAC.
- H. All groundwater level monitoring data will be entered into the project database on a regular basis, reflecting the monitoring interval chosen. Water level data collected by Eureka County will be incorporated into the database.

18) Elevation Control

- A. Ground surface and measuring point elevations will be established using survey-grade GPS instrumentation at production and monitoring wells used as part of this Plan. Elevations for surface water and spring monitoring locations will also be established. A standard GPS data collection protocol (i.e. common geographic datum) will be used to allow a comparative base for all elevation associated data including the possibility of the occurrence of subsidence due to groundwater extraction. If subsidence is of concern, then augmenting subsidence monitoring with remote sensing technologies (e.g. InSAR, Lidar) may be recommended by the TAC.
- B. All elevation measurements will be added to the project database that contains project data.

19) Monitoring Surface Waters, Riparian Areas, and Biological Resources

- A. Selected springs and associated riparian areas will be monitored on a quarterly basis located in Kobeh Valley, Diamond Valley, Pine Valley, and additional surrounding valleys that may be affected by groundwater extraction. Monitoring will consist of measuring spring discharge rate, photo-documenting general site conditions, and conducting proper functioning condition (PFC) assessments of riparian areas. Discharge can be estimated for low-flow conditions or where discharge is diffuse on the ground surface. Monitoring frequency may be reduced later as recommended by the TAC to semi-annually or annually.
- B. The flow of perennial streams arising from the Roberts Mountains will be monitored. These include Roberts Creek and Coils Creek in Kobeh Valley and Henderson, Vinini, Pete Hansen, Denay and Pine Creek in Pine Valley. Monitoring shall commence as soon as practicable to ensure that background data have been collected prior to commencing groundwater extractions. Monitoring shall comprise continuous measurements of stream stage at selected control sections for each stream. The geometry of the control sections shall be surveyed. Stage measurements will be collected with recording pressure transducers on a frequency of not less than one hour. The flow in the streams at the control sections shall be gaged monthly for the first year of record to establish stage-discharge relationships for each gaging station. Following the first year of gaging, stream-flow measurements will be collected quarterly. Flow data shall be recorded quarterly and hydrographs updated annually. The geometry of the control sections shall be re-surveyed annually.
- C. Monitoring of biotic variables including phreatophyte vegetation and other vegetation communities will be done on an annual basis in Kobeh Valley, Diamond Valley, Pine Valley, and some surrounding valleys that may be affected by groundwater extraction. These data will be collected in a variety of ways including on-site measurement of vegetation cover, frequency, and type. Further, remote sensing may be employed to help define and monitor the extent of vegetation communities. The purpose in collecting vegetation data is to support conclusions regarding changing groundwater levels and corresponding changes in vegetation and the species reliant on this vegetation (i.e. sage grouse, pygmy rabbits, grazing livestock).

- D. In addition to data that have already been collected, initiation of monitoring for springs, riparian areas, and biotic variables will commence as soon as possible, recognizing the desire to obtain baseline data prior to groundwater extraction. Monitoring data will be recorded using a standard protocol (i.e., USGS) for each monitoring event.
- E. All surface water, riparian area, and biological monitoring data will be entered into the project database on a regular basis, reflecting the monitoring interval chosen.

20) Water Quality

- A. Groundwater quality samples will be collected from selected production and monitoring wells and analyzed by a laboratory, using standard protocols (i.e., USGS), for major ions, trace elements, and isotopes. Wells to be sampled, schedule of sample collection, and list of parameters will be determined by recommendations of the TAC.
- B. Frequency, sampling location, and water quality parameters will be reviewed by the TAC on an annual basis, and reduced or expanded in scope upon its recommendation to the WAC.
- C. All water quality monitoring data will be entered into the project database on a regular basis, reflecting the monitoring interval chosen.

21) Precipitation Stations

- A. A meteorological station shall be maintained at the mine to continuously monitor wind speed and direction, precipitation, temperature, barometric pressure, humidity, and solar radiation. Supplemental precipitation stations will be established, as feasible, in areas where monitoring data are being collected. Existing precipitation stations may be used where possible. The purpose of collecting precipitation data is to support conclusions regarding changes in groundwater levels with corresponding changes in precipitation, if it occurs.
- B. Frequency and station location will be reviewed by the TAC, and reduced or expanded in scope upon its recommendation to the WAC.
- C. All precipitation data will be entered into the project database.

22) Reporting

- A. All data collected under or as described in this Plan will be fully and cooperatively shared among the Parties, and made available to the public after appropriate QA/QC evaluation procedures (i.e. USGS) have confirmed its accuracy.
- B. All water resources information, including related biological resources information, collected for the Mt. Hope Project will be downloaded to the project database and updated periodically on a website that is accessible to all Parties and the public.
- C. In addition to updating the water resources project database on a regular basis, an annual summary report will be prepared by the TAC that summarizes all information collected during the previous calendar year, including an analysis of any trends. These reports will be provided to the WAC for annual assessment of potential impacts to water resources resulting from groundwater extraction of the Mt. Hope Project.

MANAGEMENT REQUIREMENTS

Water Advisory Committee (WAC) and Technical Advisory Committee (TAC)

- 23) These two committees are to establish and carry out policy (WAC), and to provide the technical scientific expertise (TAC) necessary to impartially develop, evaluate and analyze data. Separation of the roles and responsibilities of these two bodies is crucial to the maintenance of scientific impartiality of the data program.
- A. The Parties will establish a Water Advisory Committee (WAC) with membership created from representatives from cooperating agencies and other stakeholders. The WAC may also decide to include representatives of water rights holders in the hydrographic basins and the areas surrounding Kobeh, Pine, and Diamond Valleys. The WAC may also invite other affected groups to participate. A representative of the Nevada State Engineer's Office would be invited to participate as the chair of the WAC.

- B. The WAC will create a Technical Advisory Committee (TAC) as a subcommittee to the WAC. TAC members will be appointed by the WAC.
- C. The WAC will meet no less than one time in each quarter of each year and at other times as mutually agreed upon.
- D. The TAC will meet initially to establish and execute the monitoring plan and, thereafter, at intervals deemed appropriate to review and analyze data.
- E. Roles and responsibilities of the WAC and TAC will be determined by the Parties under advisement of the Nevada State Engineer's Office.

24) Purposes and functions of the WAC will be to:

- A. Provide a public forum for discussion of relevant data and analyses.
- B. Share information regarding modeling efforts and model results, if used as part of the monitoring and management program.
- C. Discuss needs for additional data collection and scientific investigations as recommended by the TAC.
- D. Provide status reports and recommendations to the Parties.
- E. Form recommendations for groundwater management actions based on reports from the TAC.
- F. Recommend values for monitored variables (water levels, spring discharges, etc.) known as "action criteria" or "triggers," which, if exceeded, may be of concern to the Parties. The values would be based on evaluations of historic hydrologic conditions and trends reported by the TAC.
- G. Determine what constitutes an "unreasonable adverse impact" on a case-by-case basis.
- H. Provide the Nevada State Engineer, Eureka County, BLM, NDOW, other relevant agencies, and the public with results of any analyses or technical evaluations, along with recommendations for specific mitigation.

25) Purposes and functions of the TAC will be to:

- A. Review proposed project monitoring plans and recommend implementation as appropriate.
- B. Review historic groundwater level trends, spring and creek flows to determine historic hydrologic trends. Where possible, identify wet and dry regimes, climate effects on groundwater recharge rates and base flows in surface waters. Where possible, identify critical lows for detrimental impacts on habitat and resource sustainability.
- C. Develop/refine standards and quality control procedures for data collection, management and analysis.
- D. Evaluate monitoring plans and data to determine whether data gaps exist and make appropriate recommendations to the WAC.
- E. Evaluate all monitoring data to determine if any action criteria or triggers have been exceeded, indicating a possible unreasonable adverse impact and report findings to the WAC.

26) Numerical Ground-Water Flow Modeling

- A. Observed water levels will be compared to predictions made by the numerical model previously prepared for the Mt. Hope Project. These comparisons will be made semi-annually as a minimum and the results provide to the TAC/WAC. The TAC will recommend when the numerical groundwater flow model previously prepared for the Mt. Hope Project should be updated for use by the TAC/WAC for predicting future impacts. The TAC will also recommend the intervals in which the model will be updated.
- B. Model output may be in the form of drawdown maps at appropriate intervals, plots of simulated and observed water levels for the aquifer systems, results of model calibration, or other outputs as requested by the State Engineer or WAC. The TAC will provide scientific review of modeling updates and hydrogeologic assumptions.

27) Action Criteria

- A. Specific quantitative criteria (action criteria) will be developed by the WAC, based on data developed by the TAC, and recommended to the Nevada State Engineer for possible use to "trigger" management actions.
- B. Action criteria will be developed by the WAC and recommended to the Nevada State Engineer to provide early warning of unreasonable adverse impacts to public resources and water rights of senior appropriators. These criteria will be based on changes in groundwater levels, discharge of springs, perennial-stream flow rates, water quality, and/or changes in wetland/riparian or other habitat that can be attributed to groundwater extraction by the Mt. Hope Project.
- C. If and when any action criterion is reached, the following management actions will be triggered:
 - a. The WAC will request that the TAC conduct a thorough fact-finding to determine the level and extent of impacts and the TAC will report findings to the WAC;
 - b. If WAC members agree that any action criterion exceedance is attributable to groundwater extraction by the Mt. Hope Project, then the TAC will make recommendations to the WAC for mitigation actions to alleviate the impacts;
 - c. The WAC members will determine whether or not to implement the recommended mitigation actions. The Nevada State Engineer's Office will determine whether the appropriate actions were implemented to conserve the resource.
- D. In the event that adverse environmental impacts are determined by the WAC or Nevada State Engineer to be unrelated to Project operations, the Nevada State Engineer should consult with the USGS regarding regional hydrologic conditions that may be contributing to the impacts.
- E. Any member of the WAC may propose a change to any action criterion. Any such change must be presented in writing to other members of the WAC, and accompanied by data and scientific analyses to support the

proposed change. If the supporting analyses are found to be technically sound by the TAC, then the WAC may recommend to the Nevada State Engineer that the action criterion be adjusted, as appropriate.

28) Decision-Making Process

- A. If the WAC determines that an action criterion is exceeded and attributable to groundwater extraction by the Mt. Hope Project, based on reports from the TAC, the WAC will recommend a course-of-action (i.e., management activity or mitigation measure). If within the WAC there are: (1) different interpretations regarding relationship of an adverse impact to the Project's groundwater extraction; or (2) different opinions on the course-of-action, the Parties may jointly agree to conduct additional data collection and/or data review and analysis directed at resolving the different interpretations or opinions, if possible. If that is not successful, the Parties could refer the issue to their respective managers and the Nevada State Engineer. Nothing herein limits or changes the Nevada State Engineer's authority, and any Party can petition the State Engineer to consider the issue.
- B. In the event that any of the Parties disagree as to whether the Proponents' proposed or ongoing groundwater extraction are resulting or will result in unreasonable adverse impacts, any Party may petition the Nevada State Engineer to request that the Nevada State Engineer determine whether there is or is not adverse impact(s) that require implementation of management or mitigation measures.

29) MITIGATION MEASURES

- A. The Proponents will mitigate unreasonable adverse impacts either as agreed upon by the Parties or after the Nevada State Engineer determines whether there are unreasonable adverse impacts due to Project groundwater extraction. The Parties will take necessary steps to ensure that mitigation actions are feasible and reasonable. An analysis of the feasibility of specific mitigation measures will be performed to assess alternatives, evaluate the potential effectiveness of the measures, and to evaluate potential impacts created by implementation of mitigation measures.
- B. There will be a bond, escrow, or trust account established by the Project Proponents to fund possible mitigation actions. This account will give assurance that mitigation will take place even if operations of the Mt. Hope

Project cease as some impacts may be delayed and effects emerge years after groundwater pumping starts and/or ceases.

- C. Mitigation measures may include one or more of the following analysis of the feasibility of specific mitigation measures will be performed to assess alternatives, evaluate the potential effectiveness of the measures, and to evaluate potential impacts created by implementation of mitigation measures:
- a. Adjust carbonate/alluvium groundwater pumping ratio. Supply water will be provided from wells located in Kobeh Valley that are completed in the carbonate and in the alluvial aquifers and supplemented by dewatering wells surrounding the mine pit. Pumping of these different aquifers will have different impacts to the groundwater and surface water flow systems. Should monitoring indicate that impacts could be reduced by decreasing the pumping amount from these aquifers, the pumping ratio could be adjusted;
 - b. Reduction or cessation of groundwater extraction from one or more wells and/or geographic redistribution of groundwater extraction. Impacts can be greatly influenced by the specific location of stressors (i.e. pumping wells). Abandonment of some specific well or wells and replacing them with wells at new locations may ameliorate these impacts;
 - c. Restoration/modification of existing habitat or establishment of new habitat. Impacts from decreased surface flows (i.e. habitat loss) may be mitigated by improving wildlife habitat using a variety of means. These measures may include installation of watering guzzlers or establishment of vegetation communities requiring less water. Also, establishment of replacement habitat at a new location (i.e. off-site mitigation) may mitigate impacted habitats;
 - d. Augmentation of water resources with groundwater extracted for the Mt. Hope Project. Alternative sources may be provided to enhance or replace existing sources. For example, replacement wells may be drilled if lowering of groundwater impacts an existing groundwater right or water could be obtained from alternate sources and discharged to the surface to mitigate decreased surface water flows. If livestock water sources are impacted, it should be ensured that augmented or

replacement water sources are coordinated with the grazing permittees season-of-use;

- e. Purchase other currently used and active water rights in the area, if available. Any impact to individual water rights attributable to the Mt. Hope Project could be compensated financially. If basin-wide recharge impacts are attributable to the Mt. Hope Project, active and current water rights could be purchased and retired to help re-balance the appropriated amounts with actual recharge;
- f. Implement technology to reduce fresh-water consumption of the Project. Pumping rates may be decreased if alternative technology emerges that could reduce water requirements or increase water recycling rates. Water conservation techniques should be proactively employed as to reduce other mitigation measures (i.e. before any impact is measured);
- g. Other measures as agreed to by the Parties and/or required by the Nevada State Engineer.

30) MODIFICATION OF THE PLAN

- A. The Parties may modify this Plan by mutual written agreement. The Parties also acknowledge that the Nevada State Engineer has authority to modify this Plan. In addition, the Parties may individually or jointly petition the Nevada State Engineer to modify this Plan in the event that mutual agreement cannot be reached. Any such petition shall only be filed after 90 days written notice to the remaining Party members. Any Party member, including the Proponents, may submit written comments to the Nevada State Engineer regarding the merits of any such petition for modification.

ATTACHMENT A

PROPOSED MONITORING FROM EUREKA MOLY, LLC

This section will contain the preliminary, proposed monitoring by the Proponents including proposed monitoring wells and surface waters. Included in this Attachment could be a description of previously collected and current data. The proposal from the Proponents could be a starting ground for the WAC and TAC to consider. The example below could be used as a template to what this Attachment could include with figures as needed. The following example was used in the North Valleys ROW EIS.

EXAMPLE ATTACHMENT A

PROPOSED MONITORING PLAN FOR HONEY LAKE VALLEY

ATTACHMENT A PROPOSED WATER RESOURCES MONITORING PLAN FOR HONEY LAKE VALLEY AREA

This water resources monitoring program is proposed by Fish Springs Ranch for groundwater extraction of up to 8,000 acre-feet per year (af/yr) from six production wells located in eastern Honey Lake Valley, Nevada. The monitoring program would document changes that could be caused by the transition from agricultural pumping to a municipal well field, with groundwater pumped and transported to the Stead/Lemmon Valley areas.

GROUNDWATER LEVELS

In 2003-04, Fish Springs Ranch equipped 14 wells with pressure transducers that automatically record water levels every hour. These wells are shown on Figure D-1 and are all located in the Nevada portion of eastern Honey Lake Valley. Most of these wells are completed in valley-fill deposits and/or volcanic bedrock. One of the wells (Jarboe MW-1) is completed in alluvial deposits which overlie the volcanic rock aquifer that is monitored by Jarboe MW-2. The existing monitoring network will be expanded to include a monitoring well near the California-Nevada state line.

The proposed six new production wells for Fish Springs Ranch would each be located near one of the existing monitoring wells. Each production well will be equipped with a flow meter to record cumulative water production. Cumulative well production will be recorded at least once per month

along with manual measurements of depth to water table made at least weekly at each production well.

Ground surface and measuring point elevations will be measured at each production and monitoring well using a survey-grade GPS instrument. Groundwater level data will be downloaded at least semiannually into a project database and the accuracy of the HLV - 1 measurements checked with manual measurements using an electronic sounder. Future groundwater monitoring will be performed by the well field operator and USGS.

Sand and Astor Pass Wells

The monitoring network includes the Sand and Astor Pass areas. One monitoring well is located in the Sand Pass area (Sand Pass MW-1) and two monitoring wells are located in the Astor Pass area (Astor Pass MW-1 and MW-2) (Figure D-1). Each is equipped with a recording pressure transducer.

Well Field Perimeter Wells

The monitoring network includes four wells located around the perimeter of the primary well field. These include Neversweat MW-2, Cottonwood MW-2, BB MW-A, and Ferrel Playa Well (Figure D-1). Each well is equipped with a recording pressure transducer.

California-Nevada Border

The monitoring well network will be expanded to include an existing well located west of the well field near the California-Nevada border. Prospective wells include USGS-1, USGS-4, or LB-2 (Figure D-1). These wells are located approximately 1 mile west of the state line. Permission to utilize the well would be sought from the respective owners. The selected well would be equipped with a recording pressure transducer.

Regional Wells

The USGS will monitor water levels periodically in regional wells that are located within Honey Lake Valley and in other surrounding basins. Specific well locations will be established by the USGS in the near future and added to this monitoring plan at that time.

GROUNDWATER QUALITY

Groundwater quality samples will be collected from all six production wells and selected monitoring wells and analyzed by a laboratory for major ions, trace elements, and/or isotopes. The wells to be sampled, schedule of sample collection, and list of parameters are described below.

The wells to be sampled for laboratory analysis include all production wells and the following monitoring wells: Neversweat MW-2, Cottonwood MW-2, BB MW-A, Ferrel Playa Well, Schaufus Well, and Wilson MW-1 (Figure D-1).

The following parameters will be measured in each water sample:

- Field Parameters: Water temperature, pH, and specific conductance.
- Common Ions: Calcium, sodium, potassium, magnesium, chloride, fluoride, sulfate, bicarbonate, nitrate, total dissolved solids, and total suspended solids.
- Trace Elements: Arsenic, barium, copper, iron, lead, manganese, and zinc.

- Isotopes: Oxygen-18 and deuterium.

More extensive water quality analysis will be performed for samples from the production wells to meet Safe Drinking Water requirements. Samples will be collected and analyzed from the selected wells on a quarterly basis for the first two years of production well pumping to establish seasonal variations. Thereafter, the wells will be sampled and analyzed semiannually. An exception is that the isotopes will be analyzed only once per year for the first two years.

Frequency, sampling location, and water quality parameters will be reviewed by the WAC on an annual basis, and may be reduced or expanded in scope upon its recommendation.

SPRINGS AND RIPARIAN AREAS

Selected springs and associated riparian areas will be monitored in eastern Honey Lake Valley to determine if pumping from Fish Springs Ranch would have an adverse effect on flow and/or vegetative conditions. The springs selected for monitoring are: HLV-206 (depressional wetland area); HLV-165 (High Rock Spring inside CA border); and one of the springs in Smoke Creek Desert near Sand Pass (HLV-168 through HLV-183) (Figure D-1). Monitoring activities will be conducted on a quarterly basis, with information periodically entered into the project database. Monitoring activities will include the following:

- Flow: Flow rate of water discharging from the spring will be measured using a flow meter or portable flume. Alternatively, a staff gage can be installed to measure relative changes in water level if the flow is in a well-defined channel. For low flows or dispersed flows on the ground surface, flows can be estimated.
- Photo-Documentation of Vegetation: One or more photographs will be taken of the spring site from the same location each time so that relative changes in vegetation and overall site conditions can be evaluated.

PRECIPITATION

A precipitation gage will be installed at Fish Springs Ranch to measure precipitation amount on a daily basis. This information will be recorded weekly by the well field operator, and periodically entered into the project database.

CERTIFICATE OF APPENDIX NRAP 30(G)(1)

In compliance with NRAP 30(g)(1) I hereby certify that this Appendix consists of true and correct copies of the papers in the District Court file.

Dated this 26th day of July, 2013.

/s/ Therese A. Ure

THERESE A. URE, NSB# 10255

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PROOF OF SERVICE

Pursuant to NRAP 25(d), I hereby certify that on the 26th day of July, 2013, I caused a copy of the foregoing ***JOINT APPENDIX VOLUMES 1 THROUGH 8*** to be served on the following parties as outlined below:

VIA COURT'S EFLEX ELECTRONIC FILING SYSTEM:

Francis Wikstrom
Jessica Prunty
Cassandra Joseph
Dana Walsh
Gary Kvistad
Bradford Jerbic
Daniel Polsenberg
Bradley Herrema
Michael Pagni
Jeffrey Barr
Debbie Leonard
Josh Reid
Theodore Beutel
Karen Peterson
John Zimmerman
Francis Flaherty
Paul Taggart
Michael Rowe
Gregory Walch
James Erbeck
Jennifer Mahe
Dawn Ellerbrock
Neil Rombardo
Ross de Lipkau

///

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***VIA US MAIL, POSTAGE PRE-PAID
ADDRESSED AS FOLLOWS:***

William E. Nork, Settlement Judge
825 W. 12th Street
Reno, NV 89503

Dated this 26th day of July, 2013.

/s/ Therese A. Ure

THERESE A. URE, NSB# 10255

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