_X Placing a true copy of a CD-ROM version thereof in a sealed postage prepaid envelope in the United States Mail in Carson City, Nevada

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DATED this 21st day of December, 2012.

/s/ Nancy Fontenot

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,

Case No. 61324
Electronically Filed
Dec 27 2012 09:20 a.m.
District Court Case Flacie K. Lindeman
CV 1108-15; CV 1 Clerk of Supreme Court
CV 1108-157; CV 1112-164;
CV 1112-165; CV 1202-170

Appellants,

VS.

THE STATE OF NEVADA STATE ENGINEER; THE STATE OF NEVADA DIVISION OF WATER RESOURCES; AND KOBEH VALLEY RANCH, LLC, A NEVADA LIMITED LIABILITY COMPANY,

Respondents.

JOINT APPENDIX Volume 6

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CHRONOLOGICAL APPENDIX TO APPEAL FROM JUDGMENT

DOCUMENT	<u>DATE</u>	<u>VOL</u>	JA NO.
Petition for Judicial Review	08/08/2011	1	01-06
Notice of Verified Petition for Writ of Prohibition, Complaint and Petition for Judicial Review	08/10/2011	1	07- 08
Verified Petition for Writ of Prohibition, Complaint and Petition for Judicial Review	08/10/2011	1	09-59
Summons and Proof of Service, Kobeh Valley Ranch, LLC	08/11/2011	1	60-62
Summons and Proof of Service, Jason King	08/11/2011	1	63-65
Affidavit of Service by Certified Mail	08/11/2011	1	66-68
Notice of Petition for Judicial Review	08/11/2011	1	69-117
Summons and Proof of Service, Kobeh Valley Ranch, LLC	08/15/2011	1	118-120
Summons and Proof of Service, Jason King	08/15/2011	1	121-123
Summons and Proof of Service, The State of Nevada	08/17/2011	1	124-128
First Additional Summons and Proof of Service, State Engineer, Division of Water Resources	08/17/2011	1	129-133
Order Allowing Intervention of Kobeh Valley Ranch, LLC, to Intervene as a Respondent	09/14/2011	1	134-135

DOCUMENT	<u>DATE</u>	<u>VOL</u>	JA NO.
Partial Motion to Dismiss, Notice of Intent to Defend	09/14/2011	1	136-140
Order Allowing Intervention of Kobeh Valley Ranch, LLC, as a Party Respondent	09/26/2011	1	141-142
Answer to Verified Petition for Writ of Prohibition, Complaint and Petition for Judicial Review by Kobeh Valley Ranch, LLC	09/28/2011	1	143-149
Answer to Petition for Judicial Review by Kobeh Valley Ranch, LLC	09/29/2011	1	150-154
Answer to Petition for Judicial Review by Kobeh Valley Ranch, LLC	09/29/2011	1	155-160
Order Directing the Consolidation of Action CV1108-156 and Action No. CV1108-157 with Action CV1108-155	10/26/2011	1	161-162
Summary of Record on Appeal	10/27/2011	2-26	163-5026
Request for and Points and Authorities in Support of Issuance of Writ of Prohibition and in Opposition to Motion to Dismiss	11/10/2011	27	5027-5052
Order Setting Briefing Schedule	12/02/2011	27	5053-5055
Reply in Support of Partial Motion to Dismiss and Opposition to Request for Writ of Prohibition	12/15/2011	27	5056-5061

DOCUMENT	DATE	<u>vol</u>	JA NO.
Kobeh Valley Ranch's Reply to Conley/Morrison's Request for and Points and Authorities in Support of Issuance of Writ of Prohibition and in Opposition to Motion to Dismiss	12/15/2011	27	5062-5083
Kobeh Valley Ranch's Joinder in the State of Nevada and Jason King's Partial Motion to Dismiss	12/15/2011	27	5084-5086
Petition for Judicial Review	12/29/2011	27	5087-5091
Petition for Judicial Review	12/30/2011	27	5092-5097
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First Additional Summons and Proof of Service, State Engineer, Division of Water Resources	01/11/2012	27	5101-5103
First Amended Petition for Judicial Review	01/12/2012	27	5104-5111
Opening Brief of Conley Land & Livestock, LLC and Lloyd Morrison	01/13/2012	27	5112-5133
Petitioners Kenneth F. Benson, Diamond Cattle Company, LLC, and Michel and Margaret Ann Etcheverry Family LP's Opening Brief	01/13/2012	27	5134-5177
Eureka County's Opening Brief	01/13/2012	27	5178-5243
Eureka County's Summary of Record on Appeal - CV1112-0164	01/13/2012	28	5244-5420
Eureka County's Supplemental Summary of Record on Appeal - CV1108-155	01/13/2012	29-30	5421-5701

DOCUMENT	DATE	<u>vol</u>	JA NO.
Order Granting Extension	01/26/2012	31	5702-5703
Answer to Petition for Judicial Review	01/30/2012	31	5704-5710
Answer to First Amended Petition for Judicial Review	01/30/2012	31	5711-5717
Supplemental Petition for Judicial Review	01/31/2012	31	5718-5720
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Summary of Record on Appeal	02/03/2012	31	5728-5733
Record on Appeal, Vol. I, Bates Stamped Pages 1-216	02/03/2012	31	5734-5950
Record on Appeal, Vol. II, Bates Stamped Pages 217-421	02/03/2012	32	5951-6156
Record on Appeal, Vol. III, Bates Stamped Pages 422-661	02/03/2012	33	6157-6397
Answer to Petition to Judicial Review	02/23/2012	34	6398-6403
Answering Brief	02/24/2012	34	6404-6447
Respondent Kobeh Valley Ranch, LLC's Answering Brief	02/24/2012	34	6448-6518
Reply Brief of Conley Land & Livestock, LLC and Lloyd Morrison	03/28/2012	34	6519-6541
Petitioners Kenneth F. Benson, Diamond Cattle Company, LLC, and Michel and Margaret Ann Etcheverry Family LP's Reply Brief	03/28/2012	34	6542-6565
Eureka County's Reply Brief	03/28/2012	34	6566-6638

DOCUMENT	<u>DATE</u>	<u>VOL</u>	JA NO.
Transcript for Petition for Judicial Review	04/03/2012	35	6639-6779
Corrected Answering Brief	04/05/2012	35	6780-6822
Findings of Fact, Conclusions of Law, and Order Denying Petitions for Judicial Review	06/13/2012	36	6823-6881
Notice of Entry of Findings of Fact, Conclusions of Law, and Order Denying Petitions for Judicial Review	06/18/2012	36	6882-6944
Notice of Appeal	07/10/2012	36	6945-6949
Petitioners Benson, Diamond Cattle Co., and Etcheverry Family LP's Notice of Appeal	07/12/2012	36	6950-6951
Excerpts from Transcript of Proceedings	10/13/2008	36	6952-6964

ALPHABETICAL APPENDIX TO APPEAL FROM JUDGMENT

DOCUMENT	<u>DATE</u>	<u>vol</u>	JA NO.
Affidavit of Service by Certified Mail	08/11/2011	1	66-68
Answer to Verified Petition for Writ of Prohibition, Complaint and Petition for Judicial Review by Kobeh Valley Ranch, LLC	09/28/2011	1	143-149
Answer to Petition for Judicial Review by Kobeh Valley Ranch, LLC	09/29/2011	1	150-154
Answer to Petition for Judicial Review by Kobeh Valley Ranch, LLC	09/29/2011	1	155-160
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Answer to First Amended Petition for Judicial Review	01/30/2012	31	5711-5717
Answer to Petition to Judicial Review	02/23/2012	34	6398-6403
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Corrected Answering Brief	04/05/2012	35	6780-6822
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Eureka County's Summary of Record on Appeal - CV1112-0164	01/13/2012	28	5244-5420
Eureka County's Opening Brief	01/13/2012	27	5178-5243
Eureka County's Reply Brief	03/28/2012	34	6566-6638
Excerpts from Transcript of Proceedings	10/13/2008	36	6952-6964

DOCUMENT	<u>DATE</u>	<u>vol</u>	JA NO.
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Notice of Petition for Judicial Review	08/11/2011	1	69-117
Notice of Entry of Findings of Fact, Conclusions of Law, and Order Denying Petitions for Judicial Review	06/18/2012	36	6882-6944
Notice of Appeal	07/10/2012	36	6945-6949
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Petition for Judicial Review	08/08/2011	1	01-06
Petition for Judicial Review	12/29/2011	27	5087-5091
Petition for Judicial Review	12/30/2011	27	5092-5097
Petition for Judicial Review	02/01/2012	31	5721-5727
Petitioners Kenneth F. Benson, Diamond Cattle Company, LLC, and Michel and Margaret Ann Etcheverry Family LP's Opening Brief	01/13/2012	27	5134-5177
Petitioners Kenneth F. Benson, Diamond Cattle Company, LLC, and Michel and Margaret Ann Etcheverry Family LP's Reply Brief	03/28/2012	34	6542-6565
Petitioners Benson, Diamond Cattle Co., and Etcheverry Family LP's Notice of Appeal	07/12/2012	36	6950-6951

DOCUMENT	DATE	<u>vol</u>	JA NO.
Record on Appeal, Vol. II, Bates Stamped Pages 217-421	02/03/2012	32	5951-6156
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Summons and Proof of Service, Jason King	08/15/2011	1	121-123
Summons and Proof of Service, Kobeh Valley Ranch, LLC	08/15/2011	1	118-120

DOCUMENT	<u>DATE</u>	<u>VOL</u>	JA NO.
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Supplemental Petition for Judicial Review	01/31/2012	31	5718-5720
Transcript for Petition for Judicial Review	04/03/2012	35	6639-6779
Verified Petition for Writ of Prohibition, Complaint and Petition for Judicial Review	08/10/2011	1	09-59

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: December 21, 2012.

/s/ KAREN A. PETERSON
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2		
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5		Hearing Section RICK FELLING, Chief
6		Hydrologist TIM WILSON, Hearing Officer
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25		

INDEX APPLICANT'S WITNESSES PAGE PATRICK ROGERS Direct Examination by Mr. de Lipkau Cross-Examination by Ms. Peterson Cross-Examination by Ms. Ure Redirect Examination by Mr. de Lipkau Examination by Mr. Felling PROTESTANT'S WITNESSES PAGE DALE BUGENIG Direct Examination by Ms. Peterson Cross-Examination by Mr. de Lipkau JAKE TIBBITTS Direct Examination by Ms. Peterson Cross-Examination by Mr. de Lipkau

TUESDAY, MAY 10, 2011, 8:58 A.M.

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1.0

HEARING OFFICER WILSON: As set forth in the hearing notice of April 22nd 2011, it's the time and place noticed for additional hearing time on Kobeh Valley Ranch applications previously heard December 6th, 7th, 9th and 10th of 2010.

The purpose of this hearing is to receive testimony and evidence on additional information from the applicant consisting of the memorandum of March 18th 2011 in response to the State Engineer's request for additional information regarding proposed water usage as set forth in Nevada Administrative Code 533.220.

The court reporter will file an original and one copy of the transcript with the State Engineer. Anyone wanting a copy of the transcript should make arrangements with the court reporter. The cost of the transcript will be borne by the applicant and protestants as set forth in Nevada Administrative Code.

I'm Tim Wilson, Hearing Officer with the Division of Water Resources. To my right is Susan Joseph-Taylor, the Chief Hearing Officer. To her right is Deputy State Engineer Kelvin Hickenbottom. To my left is State Engineer Jason King. To his left is Rick Felling, Chief Hydrologist. And to his left is Bryan Stockton, our Deputy AG.

At this point I would like to take appearances 1 2 for the record. 3 MR. DE LIPKAU: Ross de Lipkau on behalf of the applicant, Kobeh Valley Ranch, LLC. To my left is Mr. 4 Michael Branstetter, in-house counsel. 5 6 HEARING OFFICER WILSON: Thank you. 7 MS. URE: Therese Ure for Protestant Ken Benson. MS. PETERSON: Karen Peterson, Allison MacKenzie 8 law firm for Eureka County. And to my left is the Eureka 9 10 County District Attorney, Ted Beutel. And then I would also 11 like to note for the record that Eureka County Board of Commissioners are here. And that's Chairman Lenny Fiorenzi, 12 Commissioner Jim Ithurralde and Commissioner Mike Page. 1.3 14 HEARING OFFICER WILSON: Thank you. Are there 15 any preliminary matters anybody wants to bring up? MS. PETERSON: I have one. 16 17 HEARING OFFICER WILSON: Go ahead. 18 MS. PETERSON: May I ask a question about the 19 procedure today? HEARING OFFICER WILSON: Go ahead. 20 21 MS. PETERSON: It's my understanding based on the 22 notice that you would also be taking testimony from the 23 protestant based on the additional information that was submitted in response to your letter. 24 25 HEARING OFFICER WILSON: Yes.

1	MS. PETERSON: That's correct?
2	HEARING OFFICER WILSON: Yes.
3	MS. PETERSON: Okay. Thank you.
4	MR. DE LIPKAU: Excuse me. I didn't understand
5	the question.
6	HEARING OFFICER WILSON: The question was the
7	protestants were allowed to file a response to Mr. Rogers'
8	memorandum and they were also given 15 days to file their
9	response after they received the applicant's response and
10	they asked if they could have witnesses.
1 1.	MS. PETERSON: And evidence.
12	HEARING OFFICER WILSON: And evidence to bring in
13	their response.
14	MR. DE LIPKAU: All right.
15	HEARING OFFICER WILSON: With that, let's begin
16	with Mr. Rogers testifying on his memorandum, which was the
17	submittal in response to the State Engineer's request for
18	additional information. Go ahead and stand and be sworn.
19	(Witness was sworn in)
20	HEARING OFFICER WILSON: Go ahead, Mr. de Lipkau.
21	
22	PATRICK ROGERS
23	Called as a witness on behalf of the
24	Applicant, having been first duly sworn,
25	Was examined and testified as follows:
- 1	

1	DIRECT EXAMINATION										
2	By Mr. de Lipkau:										
3	Q. Please state your full name.										
4	A. Patrick Rogers.										
5	Q. What is your occupation?										
6	A. I'm the director of the environmental and										
7	permitting for General Moly.										
8	Q. What is your business address?										
9	A. 2215 North 5th Street in Elko, Nevada.										
10	Q. I believe you testified at the earlier hearings.										
11	You have a Master's degree in the field of geology?										
12	A. Yes.										
13	Q. And how many years have you been in the mining										
14	industry?										
15	A. I've worked in mining about 25 years.										
16	Q. Okay. And in this 25-year experience how many										
17	mills have you been associated with?										
18	A. I've been associated with several dozen mills.										
19	I've had working knowledge of about ten operating mills, I										
20	would estimate.										
21	Q. Do you believe you know and understand how a mill										
22	operates?										
23	A. Yes.										
24	Q. All right. On December 6th, you gave testimony										
25	before the State Engineer regarding the same applications										

1	with which we are here concerned; is that correct?									
2	A. That's correct.									
3	Q. Do you affirm that testimony?									
4	A. Yes.									
5	Q. And you've reviewed it?									
6	A. Yes.									
7	Q. Do you desire to make any changes to your									
8	December 6th, 2010 testimony?									
9	A. No.									
10	Q. During the 2010 hearing you presented Exhibit 35,									
11	did you not?									
12	A. That's correct.									
13	Q. Do you have Exhibit 35 in front of you?									
14	A. I do.									
1.5	Q. All right. Do you desire to make any changes to									
16	Exhibit 35 at this time?									
17	A. No.									
18	Q. At the December 10th Pardon me. At the									
19	December 2010 hearing you stated that approximately 95									
20	percent of the water developed in Kobeh Valley would be									
21	returned to Kobeh Valley via the slurry; is that correct?									
22	A. That's correct.									
23	Q. What happens to the water in the slurry when it									
24	gets to the dam or storage?									
25	A. The water that's consumed A substantial amount									

of the water that reports to the tails is actually recycled back to the mill. But the water that is not recycled, it's lost. It's consumed both by evaporation and entrainment, which is just material that is wet, water that stays in the intricacies of the particles.

- Q. Have you ever been involved in a milling operation that does not have a tailing pond?
- A. I'm familiar with one facility that does not have a tailings pond.
 - Q. How are tailings disposed of in that instance?
- A. In that instance it's a small mill circuit and they still have residual gold values in the tails so that they commingle those, the tails with their leach ore and put it on the pad.
- Q. Could the subject mining operation, milling operation operate without a tailing dam?
- A. No. Tailings dam is essential for this operation.
- Q. You are aware that there are appurtenant water rights to these mining properties at this time, are you not?
 - A. Yes, I am.
- Q. Do you know approximately how many acre-feet are encompassed by those permits?
 - A. I believe it is 453 acre-feet.
 - Q. All right. Do you know what the place of use is

1 estimate 129 acre-feet per year.

MR. DE LIPKAU: Mr. Wilson, do we have an exhibit number for the memorandum of March 18th?

HEARING OFFICER WILSON: Yes. I actually premarked that as Exhibit Number 3. And I might as well do the hearing notice as well. And the hearing notice of April 22nd, 2011 is marked as Exhibit Number 2. Is there any objection to the notice?

MS. PETERSON: None.

HEARING OFFICER WILSON: Hearing no objection, that will be admitted. And the memorandum is marked as Exhibit 3. And I'll go ahead and tell you I've premarked the Eureka County response of April 5th 2011 as Exhibit 4, if we could refer to that.

MR. DE LIPKAU: Okay.

- Q. (By Mr. de Lipkau) Did you prepare Exhibit 3?
- A. I prepared this with assistance from some others that were working under my direction, yes.
- Q. All right. What is primarily the source of your preparation regarding Exhibit 3?
- A. I used the engineering estimates of the water consumed in the various elements of the water balance and I used the hydrologic projections of water that flow in to the pit and the engineering footprints of the pit and the waste-off facilities during the various years of mine

- Q. Would it be a true statement that Exhibit 3 is based upon evidence and testimony introduced before the State Engineer at either the '08 hearing or the 2010 hearing?
 - A. Yes, that's correct.
- Q. Would it be a true statement then that Exhibit 3 conforms to the existing testimony and exhibits?
 - A. Yes.
- Q. Let's start with the conclusion. It's true, you testified to many times, that the consumption in the mill and the various cycles is approximately 11,300 acre-feet annually; is that correct?
- A. Yes. 11,300 feet is the total used in the entire mine and mill operation.
- Q. All right. What is the diversion of Kobeh to Diamond Valley consumption?
- A. There is about 513 acre-feet per year that's used in Diamond Valley every year from Kobeh Valley. There's also some water from Kobeh Valley that's used in Diamond Valley for dust suppression in the pit and the dumps and that changes year to year.
- Q. All right. What is the maximum volume of water that will be transported from Diamond Valley to Kobeh Valley?
- A. The maximum amount would be 129 acre-feet if you consider that water that flows in to the pit can be

- Q. We'll get in to further detail. Let's go to Exhibit 3. Please turn to that. Would you please turn to Figure A. Do you have that in front of you, Mr. Rogers?
 - A. I do.

1.8

- Q. What does Figure A depict?
- A. It shows the mine footprint in year one of our operation. And as you can see, most of the disturbance occurs in Diamond Valley. The entirety of the pit is in Diamond Valley. The disturbance shown in the blue hatching that's in Kobeh Valley is much smaller. But all of those hatched areas will require dust suppression, road watering if you will, to keep dust down. And that's a consumptive use of that water which will primarily derive from the pit, the open pit.
- Q. Is dust suppression required by federal and state environmental law?
 - A. Yes.
 - Q. It's absolutely indispensable then?
 - A. Yes.
 - Q. Let's go to Figure B.
- A. Figure B is the same depiction, just shown in year 32, which is the maximum footprint of the mine. You can see that some of the pit at this point overlaps in to Kobeh Valley so that the water that reports in to the pit will be a

mixture of Kobeh Valley water and Diamond Valley water. And that water will be used for dust suppression in the hatched area, which as you can see is mostly Diamond Valley but also Kobeh Valley.

- Q. And it shows the location of the process plant?
- A. Correct.
- Q. What is the processing plant? Would that be synonymous with the mill?
 - A. Yes.
 - Q. Why did you stop the footprint in year 32?
 - A. That's the maximum extent of the mine operation.
- Q. But I believe we -- you testified earlier that the life of the project is 44 years; is that correct?
- A. That's correct. This project is designed to mine for 32 years. During that time we'll feed the mill approximately 60,000 tons of ore per day. Economically it's beneficial to feed the mill the highest grade material. The lower grade material during that 32 years will be stockpiled. At the end of 32 years, mining stops, the miners go home, the mill stays operational. We continue to feed from that lower grade stockpile to the mill to process.
- Q. So mining itself will occur some 12 years prior to cessation of all activities?
- A. Milling will occur for 12 years after mining has stopped.

Q.	Why	did	the	app.	licant	desi	gn	and	cor	ntempla	ate	the
construction	of	the	tail	ing	storaç	ge fac	cil	ity	in	Kobeh	Val	ley:

- A. Based on a number of factors, operational, maintenance, efficiency. Really in this case there really isn't a location in Diamond Valley other than one that would involve moving the state highway to fit the tailings dam of the size needed for the capacity of tails. Essentially had to go in to Kobeh Valley.
- Q. Can you state whether or not the tailing dam was contemplated to be located in Kobeh Valley in an effort to minimize water transfer of Kobeh Valley groundwater to Diamond Valley?
- A. No. It was placed there, like I said, because that was the best location from an operational perspective and because topographically it was feasible.
- Q. Why isn't the mill building installed in Kobeh Valley?
- A. Economically you want your mill building close to your pit. The ore, all the waste, all the material comes out of that pit right there in the southeast side of the pit and you want your mill building as close as possible to that.
- Q. Was it done for economic improvement mining majors?
 - A. Yeah, exactly.
 - Q. There would in fact be added cost to the mining

operation if the mill were to be located in Kobeh Valley?

- A. Yes. It would be less economic to have it located in Kobeh Valley.
- Q. Okay. Do you agree and consent that the State Engineer in his upcoming ruling and as part of the permit terms that the existing permits in Diamond Valley, existing permits in Diamond Valley, and the applications to change with their points of diversion in Diamond Valley as their source cannot collectively move or transfer more than 250 acre-feet to Kobeh Valley?
- A. Those terms would be fine with us. They would be workable.
 - Q. Okay. Is that your request?
 - A. Yes.
 - Q. Okay. What is mass balance?
- A. Mass balance is an accounting of the ins and outs. In this situation it was used for the water balance. So it accounts for the massive water going in to the circuit and coming out of the circuit.
- Q. Okay. Could you please explain that in a little more detail?
- A. Sure. It looks at the water sources and the water uses. You can think of the milling circuit as a loop where the water is used in the mill reports to the tails, there's water recycled from the tails back to the mill.

There's continually fresh water added from Kobeh Valley and from the pit area so it's the sum of all of those inputs and outputs. And they will equal zero. It's an accounting type practice. It's a balance.

- Q. Water balance?
- A. Correct.
- Q. Okay. Would you classify Exhibit 3 as conservative or as liberal?
- A. It's conservative in that it maximizes the estimate of the water that's transferred between basins. And that's simply because that pit is located on the hydrologic divide the water that flows in to that pit is commingled. It includes Diamond Valley and Kobeh Valley water. What we've done with this exhibit is taken all of that water and mixed it and then determined where it would be used in Diamond and Kobeh and we consider that to be a transfer.
- Q. All right. Let's go back through the existing rights again and the applications that were approved by the State Engineer for the predecessors to KVR. Do you recall again what the number of acre-feet is for that?
 - A. 543, I believe.
- Q. 543. And is it true that the applications before the State Engineer seek to change 616 acre-feet of certificated groundwater to the mine site?
 - A. Yes. Water from the Gail Ranch up to the mines,

shown on Table 2. We also need a variable amount of water for dust suppression in Diamond Valley, and that number depends on the footprint of the disturbance.

- Q. Let's go to year 32 to get the footprint.
- A. Okay. Year 32 the amount of water needed for dust suppression in Diamond Valley would be 555 acre-feet.
 - Q. Okay. So let's add the 513 and the 555.
 - A. 1068.
 - Q. 1068, okay.
- A. That would be the maximum use in any year in Kobeh Valley of water.
- Q. Okay. Let's now go to Table 1, and as an example let's use year 20.
 - A. Okay.
- \mathbb{Q} . And assist us all in describing what Table 1 depicts.
- A. Okay. Table 1 if we're looking at year 20 we can see that the amount of water, and I'm looking at these four columns on the right side of the table, the amount of water in Diamond Valley that's required for dust suppression is 466 acre-feet. The amount of water that's required for dust suppression in Kobeh Valley is 135 acre-feet. Those numbers are based on the disturbance footprint in that mine area and they are the acres within each basin are multiplied by a factor that's used to estimate on a per-acre basis the amount

1.8

of water for dust suppression. I believe the number is .108 gallons per minute per acre. So if you do the math, you can determine that for that footprint you need that many acre-feet of dust suppression on Kobeh and Diamond sides.

In year 20, you can also see going over to the left four columns you can see that the Kobeh Valley side of the pit is estimated to generate 88 acre-feet. The Diamond Valley side of the pit is estimated projected to generate 486 acre-feet. Those numbers are derived from the projected pit inflows that are in Exhibit 50, I believe, the regional hydrologic report, ratioed by the footprint of the pit.

Early on in the pit, as I was showing, the pit is entirely in Diamond Valley. At the end of the mine life, the pit is about 20 percent in Kobeh Valley and 80 percent in Diamond Valley. So for each year we took the amount of water that flows in to the pit and assigned that ratio of that year's pit footprint to determine how much water comes from each valley in to the pit.

In year 20 you can also see that those two numbers added up, the 88 and the 486, are less than the sum of the water needed. The 466 plus the 135 on the right side of table are the amount needed. They total 601 acre-feet. It requires that an additional 27 acre-feet from Kobeh Valley be pumped to use for dust suppression.

When you mix all those waters together, the water

that flows in to the pit plus the water that you need from Kobeh Valley for dust suppression, it is 19 percent from Kobeh Valley, 81 percent from Diamond Valley.

- Q. Is it a true statement then that the pit in 20 years has 19 percent in Kobeh Valley and 81 percent in Diamond Valley?
 - A. That's correct.
- Q. And we go to, up to say year one there is zero percent of the pit in Kobeh Valley?
 - A. That's correct.
- Q. And these calculations are based upon the percent of the permit -- Pardon me -- of the pit in each basin; is that correct?
- A. The water inflows are, yes. And then that 19 percent Kobeh Valley number is used to determine the amount of interbasin transfer that would happen due to dust suppression required in Diamond Valley. In other words, that 466 acre-feet that's needed in Diamond Valley, 19 percent of that we assume came from Kobeh Valley would equal 89 acre-feet that would be a transfer.

So this whole table was built on the premise that the water that's commingled, if you have say red molecules and blue molecules of water you could combine them and then use them and go back on the ground and count up the molecules, you could see which water went to which basin.

- Q. Is it your testimony that more than 250 acre-feet of Kobeh Valley groundwater will be pumped and placed to a beneficial use in Diamond Valley?
 - A. Yes, that's correct.
- Q. Does the volume of water used in -- on the Diamond Valley side of the Granite Basin always exceed the volume developed in Diamond Valley?
- A. Yes. Every year there's 513 acre-feet that's required in Diamond Valley plus the amount shown under water uses in Diamond Valley total. Every year that number is more than the water that flows in to the pit from Diamond Valley. So that allows it -- I mean different interpretation would be that there would never be a transfer from Diamond Valley in to Kobeh Valley.
 - Q. Of any water?
 - A. Of any water.
- Q. Are you saying that using the conservative approach there therefore is no transfer of Diamond Valley groundwater to Kobeh Valley?
- A. Yes. Using a mass balance approach where you count the amount of water that's used in Diamond Valley and the amount of water that's generated in Diamond Valley, there's no transfer from Diamond to Kobeh. But if you use this approach where we comingle the water and count for which basin it's used in and which basin it comes from, that gives

MR. DE LIPKAU: Right. I'd like to move for the									
admission of Exhibit 3.									
HEARING OFFICER WILSON: Any objection to Exhibit									
3.									
MS. PETERSON: Exhibit 3, just so I'm clear, is									
the March 18th memorandum to the State Engineer from									
Mr. Rogers?									
HEARING OFFICER WILSON: Yes.									
MS. PETERSON: Just that document?									
HEARING OFFICER WILSON: Yes.									
MS. PETERSON: No objection.									
MS. URE: I have none.									
HEARING OFFICER WILSON: All right. Exhibit 3									
will be admitted.									
And we'll go ahead, cross-examination. Any									
preference on who goes first?									
MS. PETERSON: I was going to go first if that's									
okay.									
HEARING OFFICER WILSON: Go ahead.									
MS. PETERSON: Thank you.									
CROSS-EXAMINATION									
By Ms. Peterson:									
Q. Mr. Rogers, I'm Karen Peterson. I'm the attorney									
for Eureka County. And I did have some questions. I was									

A. Yes.

- Q. And just so that it's clear on the record what you're referring to, it's my understanding that the applicant is willing to agree to a permit term that it will not in its development of the water resource and use of the water resources in Diamond Valley, it will not, it will not use more than 250 acre-feet per year exported from Diamond Valley to Kobeh Valley to avoid the inventory statute kicking in; is that correct?
 - A. We would agree to that restriction.
- Q. With that restriction. And how would that restriction be measured and how would it be monitored?
- A. We would -- We could do it. I mean we have flow meters to measure flow from various sources. It's just a matter of a mechanical, the logistics of measuring water flow.
- Q. From your wells, you're talking about the dewatering wells?
- A. Yes, could do it from the dewatering wells. Within the pit it's more complicated, but certainly you could dig sumps on either side of the pit, measure the flow that comes out of those sumps. You could put dewatering wells on either side of the pit. It can be tracked.
 - Q. And then it's my understanding that you would put

JA1052

1	Α.	Yes.								
2	Q.	And that's located in Kobeh Valley?								
3	А.	Yes.								
4	Q.	And that will have ten production wells?								
5	Α.	Yes.								
6	Q.	And then you state all of that water will go to a								
7	booster tar	booster tank?								
8	А.	Yes.								
9	Q.	And that is the booster that's still located in								
10	Kobeh Valley; is that correct?									
11	Α.	Yes.								
12	Q.	From there it gets piped to the mill storage								
13	tank?									
14	Α.	Yes.								
15	Q.	And that tank is located in Diamond Valley; is								
16	that correc	t?								
1.7	Α.	Yes.								
18	Q.	And that's commingled with water that's been								
19	moved from the pit?									
20	Α.	Yes.								
21	Q.	And that's also depicted on your Exhibit 35?								
22	Α.	Yes.								
23	Q.	And that is basically the 11,300 acre-feet that								
24	are applied	for in this case?								
25	А.	Yes.								

1	yes.
2	Q. And then again the water, the 95 percent you're
3	talking about is the 11,300 acre-feet that comes from Kobeh
4	Valley; is that correct?
5	A. It comes from Kobeh Valley and Diamond Valley,
6	the total 11-3, most of it gets used in the mill.
7	Q. Okay. And then you go on to state the water is
8	discharged as a slurry to the thickener. Do you see that?
9	A. Yes.
10	Q. Okay. And then the thickener is depicted on
11	Exhibit 35 also; is that correct?
12	A. Yes.
13	Q. And that's also located in Diamond Valley, the
14	thickener?
1.5	A. Yes.
16	Q. And there is a use of the water there in the
17	milling process; is that correct?
18	A. Yes.
19	Q. Mining and milling process?
20	A. Yes.
21	Q. And then it looks like an arrow, some of that
22	water goes back from the thickener and is used again in the
23	mine in the mill; is that correct?
24	A. Yes.
25	Q. And then it goes back to the thickener, some of

JA1059

1 redirect? I'm sorry. Therese, Ms. Ure. 2 MS. URE: Yes. 3 CROSS-EXAMINATION 4 By Ms. Ure: 5 Looking at your Exhibit 35, is the only water then that comes back in to Kobeh Valley what is in that stays 6 in the tailings pond? 8 The only water that comes back to Kobeh is what? 9 Ο. Okay. I'll rephrase it. So on Exhibit 35 from the mill to the thickener, the water then goes in to Kobeh 10 Valley in to the tailings; is that true? 11 12 Α. Yes. 13 Okay. So is that the only point where water from the mining and milling operation goes back in to Kobeh 14 15 Valley? 16 Yes. All the water from the mill is discharged in to the tailings impoundment. As I said, in the pit area, 17 18 the water that flows in to the pit is used for dust suppression, road watering, and that happens in both Diamond 19 20 and Kobeh Valley. 21 And that's on the footprint that you testified 22 to? 23 Α. Yes. 24 Do you know how much of the water then is 25 recharged from that tailings pond back in to the groundwater

JA1064

HEARING OFFICER WILSON: 1 Thank you. Recross? 2 MS. PETERSON: None. 3 HEARING OFFICER WILSON: Ms. Ure? 4 MS. URE: No. 5 HEARING OFFICER WILSON: All right. You may step 6 down, Mr. Rogers. Oh, sorry. If you could remain seated. I 7 have some questions of staff. 8 EXAMINATION 9 By Mr. Felling: 10 Mr. Rogers, is there any groundwater production in Diamond Valley outside of what is -- what's needed for pit 1 1 dewatering? 12 13 Α. No, no. All the water that's produced in Diamond 14 Valley would be used for dust suppression. 15 My question was groundwater production, not its 16 use but its source. Are all the wells going to be pit 17 dewatering wells? Is there going to be a well that would be 18 used for, say, QM uses around the mill? Are there any wells anticipated in Diamond Valley other than the pit dewatering 19 wells? 20 21 Α. No. Monitoring wells may be in Diamond Valley but not producing wells. 22 23 MR. FELLING: Okay. Thank you. No more 24 questions. 25 HEARING OFFICER WILSON: Any other questions of

staff? All right. Thank you, Mr. Rogers. You may step down. Let's take a short break.

(Recess was taken)

HEARING OFFICER WILSON: We left off with the end of the applicant's case. Ms. Peterson, do you have a witness?

MS. PETERSON: Yes. Actually we're going to have two. We're going to have Dale Bugenig. And I was hoping that his affidavit could be marked as Exhibit 4. And then we would also offer Jake Tibbitts. And I would mark his affidavit maybe as Exhibit 5. We're not going to overlap their testimony, so I'll try to cover, you know, some with one witness and not duplicate it with the other witness. But I did want to make them both available for cross-examination in case anybody had any question on their affidavits.

HEARING OFFICER WILSON: Okay. Did you want to separate and just put the affidavits in or your entire package as one exhibit?

MS. PETERSON: You know what, you shouldn't put my letter in as exhibit because it's argument and I would argue against it if it was anybody else. So why don't we just mark the affidavits. I think that would be better.

HEARING OFFICER WILSON: That will be fine. I'll do Dale Bugenig's affidavit as Exhibit 4 and as Exhibit 5 the affidavit of Mr. Tibbitts.

1	MS. PETERSON: Thank you.									
2	HEARING OFFICER WILSON: Go ahead.									
3	MS. PETERSON: We would call Dale Bugenig.									
4	HEARING OFFICER WILSON: Please come forward and									
5	be sworn.									
6	(Witness sworn in)									
7										
8	DALE BUGENIG									
9	Called as a witness on behalf of the									
10	Protestant, having been first duly sworn,									
11	Was examined and testified as follows:									
12										
13	DIRECT EXAMINATION									
14	By Ms. Peterson:									
15	Q. Could you please state your name for the record.									
16	A. Dale Bugenig, B-u-g-e-n-i-g.									
17	Q. And are you here representing Eureka County									
18	today?									
19	A. Yes, I am.									
20	Q. And what is your profession?									
21	A. I am a consulting hydrogeologist. I've been									
22	retained by Eureka County to address a number of water									
23	issues.									
24	Q. And you testified, you previously testified in									
25	the December 2010 hearing and you also testified in the									
i										

could be. My interpretation, and it's not to put words in to Mr. Wilson's mouth, but my thought that what we sort of expected was Exhibit 35 with very annotated so that you could see a visual representation of the various components of the water balance that Mr. Rogers described in quite detail here

earlier.

So I'm a visual person. So maybe I am imparting my way of looking at things. But it was a nice diagram, very well laid out with the various components. And so what we tried to do was go through first Mr. Rogers' exhibit to try and put numbers to these various ones. So in one page you could have a representation of this water balance.

Now, all of these numbers that you see on the version of the -- the annotated version of Exhibit 35, those numbers came from documents provided by Eureka Moly.

And to be honest with you, I truly do not envy the State Engineer having to go through these myriad of documents because these various components have different numbers from one document to the next. So the question is which document is the most up to date and which is correct. I realize that -- And it's a very complicated water system, I believe. In some tables and figures they talk about averages, maximums, minimums. So trying to delve through these various numbers to come up with a number that maybe represents it. And perhaps my opinion of what the number

that might be represented on this figure might be different from somebody else's interpretation.

But this was my best shot and working in collaboration with Mr. Tibbitts to try and lay this information out on a single sheet of paper for easy reference.

I think we've all heard the number 11,300 acre-feet per year. That's the amount of water that I think everybody is in agreement with is that the project is — the applicant is requesting for their project. And so what we tried to do then was to take these various components and break down these various areas on the figure so that you have a better understanding of what water was where and how much water here and how much water might be transferred across a basin, that sort of thing. And so I don't have a pointer. But if you look at the note above the thickener — Oh, thank you.

- Q. And just for the record, again, you're looking at the color map that's included in Exhibit 4. We have that up on the screen; is that correct?
- A. That's correct. So here, above the thickener there's a number, 11,266 acre-feet per year of water that's beneficially used for mining and milling at the mill.

Now, in Mr. Rogers' report, if I correctly interpreted his tables, there's approximately of that total

water of all sources perhaps 34 acre-feet per year will be used in -- will be used in Kobeh Valley for dust suppression, but that water appears to originate in Diamond Valley.

So what I did was took -- Well, let me backtrack a little bit. If we start with 11,300 acre-feet per year and subtract 605 acre-feet per year of water that appears to be the maximum that might originate in the pit from Diamond Valley, we come up with this number, 10,695 acre-feet per year.

That really has to be exported from, potentially exported from Kobeh Valley well field to the milling operation. You take that number and subtract from it 137 acre-feet per year, which appears to be water originating in Kobeh Valley but flows in to the pit. So it might be 137. It might be 129. There's a possibility that I might have used the wrong number there.

But the end point of all of that is that there appears as if there would be this 10,695 acre-feet that really seems to be exported from Diamond Valley in to Kobeh Valley that ultimately is used at the mine.

- Q. Could I ask you to think about that for a second, what you just stated.
 - A. Okay. What did I say?
- Q. You said water is exported from Diamond Valley in to Kobeh Valley.

- A. I apologize. I transposed that. From Kobeh Valley to Diamond Valley. There's a lot of water that goes round and round and round in the circuit here, 20 to 30,000 gallons a minute of water. But we don't really talk about that because it stays in this area.
 - Q. And which area are you referring to?
- A. In the area of the mill. The mill circuit let's call it. At the mill. Out of this total water, approximately 513 acre-feet, as Mr. Rogers testified, is consumed in the milling operation in Diamond Valley.

Now, where things get a little fuzzy really is the amount of water that really is pumped or allowed to flow back from the mill circuit where the water is beneficially used to Kobeh Valley. Now, I offered here one of several --

- Q. Mr. Bugenig, just so the record is clear, you're talking about that line that goes from the thickener to the tailings pond?
- A. Affirmative. Now, there are a myriad of numbers that address what is the fluid content of that water. One number that I elected here from several is that it was from the, a report done for the tailings impoundment design by M3 Engineering. And they give an estimate of the volume of that slurry and assume that the water content is somewhere, the solids content is somewhere between 50 and 55 percent. And that volume of the slurry is 16,400 acre-feet per year.

That's what they say in their report. Now, if you assume that 50 percent of that slurry is water and you take that 20 -- that 16,400 acre-feet per year of slurry at 50 percent solids and convert that to acre-feet per year, that's where this number, 13,202 acre-feet of water comes from. And that comes from a report that was prepared for Eureka Moly and is an appendix to their plan of operation. So that number is probably in the realm of possibilities.

Now there's other numbers out there. If you take, if you look at I believe it's Exhibit 105, which is Mr. Moore's water balance, there's a very nice depiction schematically of the water balance from Mr. Moore and he's a very, very thorough person based on how this is laid out. If you take his number, he has a nice little table that's keyed to this drawing, and if you take his table and he shows in this area 18,531 acre-feet of water going back to Diamond Valley. Now, Mr. Rogers, I believe --

- Q. Wait, wait, wait.
- A. I'm sorry. Going back to Kobeh Valley.
- Q. From the thickener?
- A. From the thickener.
- Q. In to the tailings pond?
- A. That's correct.

HEARING OFFICER WILSON: And Mr. Bugenig, just real quick, the exhibit you're referring to is from the 2008

hearing. I just want that in the record.

THE WITNESS: Yes. Thank you. So this number, you know, it varies from this 13,202 to 18,531, if you believe Eureka Moly's consultant's numbers. And I have no reason to doubt Mr. Moore's assessment.

Now, in the vicinity of the tailings impoundment here are three numbers. Now, I took those directly from Mr. Rogers' Table 2, I believe. And that gives you the total of water lost to evaporation, water that is entrained in the solids at the tailings storage facility and a trivial amount of water that seeps through this engineered impermeable liner. And those add up to somewhere around 10,000 acre-feet per year.

Now, I know that those numbers are somewhat different than in Mr. Moore's report, and I realize that things evolve over time so that information in one report may be somewhat different than another. But again, it shows the complexity of trying to arrive at how much water is being utilized beneficially in one area and consumed by evaporation somewhere else.

And then we come back with a certain amount of this water everybody agrees with gets returned back to the mill, the water is reclaimed. I came up from one of their sources at 5,716. And if you look at Mr. Moore's report, again, it's 8,499. So there's a pretty big spread of water

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used. And I think it's really important that sort of the unified theory of water mass balance get developed so that the State Engineer's job is made a lot easier to really understand where water is going, where it's being used and where it might be lost to evaporation. But that's the, a significant part, I believe, of the memorandum that Mr. Tibbitts and I collaborated on.

- Q. (By Ms. Peterson) And then just one clarification. You were talking about the calculation you did to come up with the 13,202 acre-feet per year figure there that goes from the thickener to the tailings pond. Do you see that?
 - A. Yes.
- Q. And just to clarify for the record, I believe the conversion was from gallons per minute to acre-feet. I'm not sure that's what you said.
- A. Okay. The 3M Engineering and Technology
 Corporation report that is an appendix to the plan of
 operation states that the water moves to the tailings and
 that the slurry moves to the tailings impoundment at a
 nominal rate of 16,400 gallons per minute. And throughout
 the documentation they suggest that perhaps 50 to 55 percent
 of this slurry by volume is water. So I just assumed 50
 percent water and then converted that to acre-feet per year
 of water that is flowing in the slurry from the thickener to

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- And where is the moly removed in this mining and milling process?
- Α. Well, the moly is removed at the mill as Mr. Rogers described in Diamond Valley.
- And do you agree with Mr. Rogers' statement in his memo that he states that the tailing dam used is not considered an interbasin transfer and that the source of the water is derived from the Kobeh Valley and the tailing impoundment is in Kobeh Valley?
- Α. This is a really interesting and complicated situation, you know, I find extremely fascinating. Because the water originates in Kobeh Valley, is exported to Diamond Valley where it's beneficially used at the mill because it's a mining and filling process. And then the waste is sent to, back to Kobeh Valley and then water is reclaimed and is exported again to Diamond Valley.

And I was trying to come up with an analog to try and get my hands around this. And so I'm thinking what if I had a water bottling plant and my plant is at the mill site here in Kobeh Valley, I mean in Diamond Valley but my well field is in Kobeh Valley. So I have a water right from the State Engineer to bottle water. But my water is distributed to all points west, Las Vegas, Reno, who knows, Seattle perhaps. Is the place of use Reno, Seattle? You know, so

again, trying to get my head around an analog is the beneficial use is mining and milling, you have a process that sends some water back and then you capture some of that water and you export it again. It's complicated.

And my opinion is that the water is beneficially used at the mill, the place of use, and that the tailings impoundment and that part of the circuit is just part of the production circuit. It's the most practical and economical way to get rid of the tailings. There's no other way economically or practically to do it. But the end result of that is water. You're assuming — It almost seems like you're assuming that the evaporation of those tailings, of the water in the tailings is now a beneficial use. And I'm not sure that I would call it that.

I know I had a discussion with one of the commissioners from Esmeralda County who has been trying to get, she tells me, and I can't tell -- I don't know how accurately I portray this. But they would like to see evaporation at a mining operation in Esmeralda County be termed beneficial use. And apparently they haven't -- That's not so. They don't have permits for evaporation at other mining operations. But that's secondhand. I can't -- I don't know about that first -- No first-hand knowledge of that.

Q. And then directing your attention to Exhibit 4,

your memo. It's on the third page.

A. Okay.

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- Q. You also have pit inflows. Do you see that section there?
 - A. Yes.
- Q. And maybe you can just briefly highlight to the State Engineer what you're stating there in your memorandum.
- Yeah. I think we all know and we've gone through a series of hearings here and I see Mr. Smith is in the audience and he's done a great deal of work putting together a groundwater flow model to help people get their hands around where the water goes, the effects of not only withdrawing water from the well field but what happens in the pit. Because it's important to know this water coming out of the pit, where does it originate. Because I could foresee a potential issue coming up if after they excavate the pit and they start pumping and they run in to a fracture zone that they have yet to intercept through any of the testing and what happens if a lot more water comes in to the pit from different orientations than what you predict. How do you retroactively deal with if more water from -- there's actually an interbasin transfer that might develop as a result of the hydrogeology once you start -- or the stress of excavating the pit and dewatering. I don't know how you get around that.

So I could envision a possibility where in reality at some point in the operation you might be actually using and citing more flow and creating a situation where more water is actually -- where you might actually have an interbasin transfer from Diamond Valley.

- Q. That was greater than 250 acre-feet?
- A. Yeah, greater than 250 acre-feet. That's the statutory limit where certain things start to happen. But that's going to be a very, very -- I think it's going to be a fairly difficult scenario, because how do you -- it's going to be hard to differentiate one molecule of water in one basin and in another and looking at it. That's going to be a fairly complicated budget-keeping process just because of where that pit is located, I believe.
- Q. And you're referring to the permit term that's been proposed by the applicant, is that what you're saying is difficult?
- A. That's right. I think it might be -- You know, Mr. Rogers said that it would be fairly complicated to do but he thought they could do it. Well, I think it might be a fairly difficult undertaking so that they would be in full compliance with the statute.

MS. PETERSON: That's all the questions I have. HEARING OFFICER WILSON: Thank you.

Cross-examination.

State of Nevada as a hydrologist?

milling or water cycle can be removed?

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No, sir, I don't work with the mines very often.

All right. Can you tell me what component of the

		Α.	V	Vell,	. let	me	see	if	Ι	can	rephrase	your	question
so	Ι	think	Ι	can	answe	er.	it.						

- Q. Let me rephrase the question. What component is set forth on Exhibit 35 is not indispensable?
- A. I think for Mr. Moore's testimony, his transcript, that virtually every part of that circuit is —
 There aren't any effective options. So they're all indispensable.
- Q. I see. Just to make it clear, every part of what's called the water cycle, the liquid cycle is indispensable?
- A. That's what Mr. Moore's testimony would lead me to believe.
 - Q. And you agree with that testimony?
- A. I believe that his water balance is correct and there are very few effective means to reduce the amount of water going to the tailings impoundment.
- Q. Okay. What part of the Exhibit A, the memo of Exhibit 4 was prepared by you?
- A. Well, it was, I think it was done, it was a collaboration. Mr. Tibbitts and I discussed our different points of view and we attempted to put it in to a single memorandum that incorporated our -- We have unique perspectives, and so the goal was to put it in to a single cohesive memorandum. So all of the numbers, I would say if I

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- I think you would have to ask Mr. Tibbitts. it's my recollection is that we both relied on my discussion.
 - The phone call? 0.
 - Α. Face to face. I met with this commissioner.

MR. DE LIPKAU: All right. I would like to offer as administrative records Permit 52921 on file with the State Engineer. The remarks section of that permit reads as follows: "The brine solution is pumped to evaporation ponds where the lithium is recovered from the dehydrated solution." I'll represent to the State Engineer that the total combined duty at the lithium mine now known as chemical foot is 20,000 acre-feet annually and all water is placed to a beneficial use by evaporating the brine solution until such time as the concentration reaches the desired high level where it is then run through the mill. The tailings ore discharged from the mill is then again ran back in to the ponds. There are about 15 to 20 ponds there. They change. The entire mining operation is based upon evaporation. That is increasing the salinity or concentration of the lithium brine solution.

Therefore, I'm stating that the comment is absolutely incorrect.

HEARING OFFICER WILSON: Mr. de Lipkau, we can't accept your testimony. You're not the witness.

> MR. DE LIPKAU: That's true. But I'm

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Kobeh Valley.

All right. Do you agree with that statement?

1	A. Yes, sir.
2	MR. DE LIPKAU: I think that's all the questions
3	I have.
4	HEARING OFFICER WILSON: Thank you. Any
5	redirect?
6	MS. PETERSON: Just one. Mr. Bugenig, to your
7	knowledge is any of the moly extracted from the tailings
8	storage facility?
9	THE WITNESS: To my knowledge no.
10	MS. PETERSON: Okay. That's all I had.
11	HEARING OFFICER WILSON: Thank you. Anything
12	else, Mr. de Lipkau?
13	Questions of staff? None. You may step down,
14	Mr. Bugenig.
15	THE WITNESS: Thank you.
16	HEARING OFFICER WILSON: Go ahead and call your
17	next witness, please.
18	MS. PETERSON: Yes. Mr. Jake Tibbitts.
19	(Witness was sworn in)
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21	JAKE TIBBITTS
22	Called as a witness on behalf of the
23	Protestant, having been first duly sworn,
24	Was examined and testified as follows:
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- Q. (By Ms. Peterson) And directing your attention to question 13 on that exhibit, do you see that?
 - A. I do.
- Q. And have you read the question and read the answer that was submitted by General Moly in response to the Division of Water Resources' question?
 - A. Yes, I've read it.
- Q. And that's related to mine dewatering or pit dewatering? I'm sorry.
 - A. Yes.
- Q. And could you just relay the information that was presented I guess in 2007 to the State Engineer regarding the amount of water that would be part of the dewatering operation for the pit?
- A. The question is, "Will all dewatering be consumed by mining and other related mining uses? Submit an estimate of the consumption in acre-feet annually."

In this letter the response was that there would be — the annual dewatering rates would start from an amount of 484 acre—feet and when the groundwater is initially encountered to approximately 1,613 acre—feet at the end of mining. So it starts at the beginning when groundwater is first encountered to the end of mining, the end of dewatering at 1,613 feet, acre—feet.

Q. And did you use the same methodology that

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- I did. Using the basic geographic analysis of where the pit is located and 80 percent of the pit occurs in Diamond Valley and 20 percent of the pit occurs in Kobeh Valley. Using the 484 acre-feet times .8 or 80 percent is 387.2 acre-feet annually, which is higher than 250 acre-foot. And using the higher amount, 1,613 times 80 percent is 1,290, which is well above 250 acre-feet annually.
- At that time the estimates were that there could Ο. possibly be an interbasin transfer that was greater than 250 acre-feet from Diamond Valley to Kobeh Valley; right?
- Α. Right. The statute applied in 2007. It would have been accurate to assume that there could be above greater than 250 acre-foot dewatering water transferred from Diamond Valley in to Kobeh Valley.
- So that if no inventory is done, this permit is Ο. crucial to compliance with the statute; is that correct?
- I believe so. I think this is just another example to show how these are estimates. I know more work has been done to refine these estimates. But the important thing is that they are estimates. And I think there should be an overly conservative approach taken to assure that the statute is applied now rather than retroactively. Because I don't think the statute could apply retroactively to this situation.

1	statement also that you did not check the statement in your
2	records regarding the lithium mining?
3	A. That's correct.
4	MR. DE LIPKAU: No further questions.
5	HEARING OFFICER WILSON: Thank you. Any
6	redirect?
7	MS. PETERSON: Just one clarification for the
8	record. Mr. de Lipkau was asking you about some numbers on
9	Exhibit 35. And I believe you were referring to the map
10	that's in your Exhibit 5 that's in your memo; is that
11	correct?
12	THE WITNESS: Yes.
13	MS. PETERSON: Okay. That's all I have.
1 4	HEARING OFFICER WILSON: Thank you.
15	Any questions of staff? No questions of staff.
16	Go ahead and step down, Mr. Tibbitts.
17	Ms. Ure, did you have anybody to present on the
18	memo?
19	MS. URE: I do not.
20	MS. PETERSON: I just needed to ask to have
21	Exhibits 4 and 5 admitted.
22	HEARING OFFICER WILSON: Are there any objections
23	to Exhibits 4 and 5.
24	MR. DE LIPKAU: No.
25	HEARING OFFICER WILSON: Exhibit 4 is the

affidavit of Mr. Bugenig. That will be admitted. 1 Exhibit 5 is the affidavit of Mr. Tibbitts and that will be admitted. 2 3 MR. BRANSTETTER: 3 got in, didn't it? MR. DE LIPKAU: And 3? 4 5 HEARING OFFICER WILSON: And Exhibit 3 has been admitted previously. And Exhibit 2 was the hearing notice. 6 Are there any other documents that anyone wants to make part 7 of the record? 8 9 MR. DE LIPKAU: Yes. I would like to incorporate, as I previously stated, Permit 52921. 10 11 HEARING OFFICER WILSON: We'll take 12 administrative notice of that permit. 13 Ms. Peterson, was that your last witness? MS. PETERSON: Yes. 74 15 HEARING OFFICER WILSON: With that, what we'd like to do at this point we'd like to give each party five 16 minutes to give us a summary of what was presented here today 17 18 and as a closing statement. And let's take a short break so you have some time to prepare. Let's come back at 11:05, 19 20 please. 21 (Recess was taken) HEARING OFFICER WILSON: We'd like to have 22 23 closing arguments to summarize what you feel you've accomplished here today. So Mr. de Lipkau, we would like to 24 25 start with you.

MR. DE LIPKAU: Okay. Thank you. What I think we've accomplished here today is to explain to the State Engineer and his staff, which of course I believe they already know, and that is the liquid or water cycle for a milling system. I believe it's a true and correct statement that every single component of the milling cycle is absolutely indispensable and to take away one or more of the components would render the cycle inoperable. Same principle applies to a steam cycle or a refrigeration cycle.

I'd like the State Engineer to take administrative notice that Exhibit 50 in the 2008 hearing, which was prepared by Hanlong Engineers, the expert witness called by the county agreed with the water balance as previously testified to by Mr. Moore. I'd also like to point out that in the early stages and at the 2008 hearing the volume of water sought was 16,000, not 11,300. That number has been reduced from the 16,000 originally sought to the 11,300. That's where we are. So the prior numbers that were set forth in the exhibit that was testified to is based upon different numbers.

Mining in Nevada is the paramount use, the paramount industry in the state as set forth in NRS 37.010(6). Mining has been paramount since 1866 to present.

A tailings pond for a mill is absolutely indispensable. And to suggest otherwise I would submit is

sheer falling. Water must be evaporated from the tailings pond, meaning that water which cannot be recycled back in to the system is used. No mining company wants to pump one more drop than it has to. They all try to recycle as much of the water as is possible. There's always evaporation and there's always water ingrained in the tailings waste. The waste is quite small like a very fine sand. Water is ingrained and will be there for basically hundreds of years.

Evaporation is a beneficial use of water.

Consumption of water or evaporation of water, whether it be an air cooled or a water cooled power plant, consumes water through evaporation. The chemical foot lithium mine in Esmeralda County evaporates every single drop of water toward beneficial use.

We will freely admit that there is more than 250 acre-feet of Kobeh Valley groundwater being transferred to Diamond Valley. That being true, NRS 533.364 in to play.

It's our firm and unequivocal position that there is substantially less, perhaps zero, groundwater from Diamond Valley being transferred to Kobeh Valley.

We have agreed that the State Engineer in his ruling and in his ultimate granting of the subject applications can have a term in there to the effect that no more than — that a sum less than 250 acre-feet of Kobeh Valley, Diamond Valley water can be used in Kobeh Valley.

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The testimony of Mr. Rogers stated that more water will be utilized and placed to a beneficial use in Diamond Valley than is generated in Diamond Valley, therefore under this scenario there will be no interbasin transfer of Diamond Valley water to Kobeh Valley.

With that, I will conclude with the effect that — to the effect that we will look forward to receiving the State Engineer's ultimate ruling regarding these issues. Thank you all very much for your attention and time.

HEARING OFFICER WILSON: Ms. Ure, would you like to go next?

MS. URE: That's fine. In summary I would like to say that from what we learned today the water is diverted from Kobeh Valley and is through a transbasin delivery system is beneficially used in Diamond Valley. And tailing waste is not beneficial use in Kobeh Valley. None of the water tailings go in to the hydrologic cycle in Kobeh Valley. The only water that comes back, the only water that comes back to Kobeh Valley is no longer available for appropriation. It is lost in the tailing solids or in evaporation. The mine's 100 percent consumptive use in Diamond Valley and minor use for dust control in Kobeh Valley diminishes the total amount for future water for recharge and use in Diamond Valley and Kobeh Valley flow systems accounting provided by the applicant are only estimates.

And finally, every process in a water right has a waste component. Evaporation in molybdenum mining as a waste component is not used for the production, actual production and removal of the mineral. Arguing that this component for that evaporation on the tailings in this mining process is beneficial use is a slippery slope. I mean if we have a stock water permit, that's a beneficial. The stock water is then used to feed those livestock. Their livestock then produces some waste. So are you saying that the evaporation off that waste is a beneficial use? And that's it.

HEARING OFFICER WILSON: Go ahead, Ms. Peterson.

MS. PETERSON: Thank you. In regard to the basin inventory and what we accomplished today, your letter, Mr. Wilson, to the applicant asked for information about whether the inventory statute would apply from water going from Diamond Valley to interbasin transfer to Kobeh Valley. And I guess what we've established through Mr. Rogers' memorandum and testimony today and the information submitted by Eureka County is that that number is definitely an estimate and the applicant certainly understands that it needs a permit term on its permit so that it doesn't violate the inventory statute if there is going to be any water moving from an interbasin transfer from Diamond Valley to Kobeh Valley. So that's what we've accomplished today.

Because the first time the permit term came up

today and I think the applicant understands that if there's an interbasin transfer greater than 250 acre-feet from Diamond Valley in to Kobeh Valley that either the inventory needs to be done or its permits need to be curtailed or restricted so that that doesn't occur. So that's what was accomplished there, I guess, in response to your letter.

And then with regard to the consumptive use of the water, the interbasin transfer statute, it's 533.007, defines an interbasin transfer of water is a transfer of groundwater for which the proposed point of diversion is in a different basin than the proposed place of beneficial use.

And you specifically asked in your letter, you referenced pages, transcript pages 104 to 106 of Mr. Rogers' testimony and asked him to relate that to Exhibit 35. And so information was submitted by Mr. Rogers and his testimony. And I'll read from it again. All of it was, I thought, pretty clear as to what was happening with regard to Exhibit 35. But when the information was submitted by the applicant, and I'm not trying to pick on Mr. Rogers, but when the information was submitted by the applicant, that information seemed to differ from what was laid forth in the transcript at pages 104 to 106. So it was important that we had a hearing and that we had the opportunity today to cross-examine the witnesses and to go back and try to clarify the record on that.

And again, reading -- So I'm looking at beneficial use when I'm referring to an interbasin transfer because that's what the statute requires as I guess opposed to Mr. Rogers who is talking about consumptive use. But whether you want to talk about, or he uses the term consumptive use or just use or beneficial use, he does admit in that answer starting at page 106 for most of the paragraph that I asked him about in the cross-examination when he's talking about this whole process that it just goes to the thickener. So the fresh water consumption, now he's talking about consumption, is a total of 7,000 gallons a minute. And it's again his 11,300 acre-feet annually that they're requesting.

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So mining and milling is the proposed manner of use of these applications. The moly, which is the reason for this project and it's the reason for the need for the water, the moly is extracted in Diamond Valley at the mill and the mill and the thickener are that process that extracts the moly. And while we understand that there's a whole circuit to this mining and milling process, it's our understanding that there's no moly that's extracted from the tailings impound facility and that the beneficial use of the whole appropriation that's sought for here, the beneficial use is in Diamond Valley in the mining and milling, that part of the circuit.

And I guess, I mean the one thing I've been wanting to say since December is if you look at Exhibit 35, and if the -- if there's no interbasin transfer because the water is diverted from the well field in Kobeh Valley and then it's consumed, "consumed" in the tailings in Kobeh Valley, how come there's not an arrow that just goes right here?

The whole process needs Diamond Valley and the milling and the mining in Diamond Valley that we heard today is so crucial to the mining operation. So this is an interbasin transfer and I think that's what we've established today.

HEARING OFFICER WILSON: All right. Thank you. Thank you, everyone. I appreciate everyone coming down and having the witnesses available. And with that we'll close the hearing and submit the matter to the State Engineer for determination. Thank you.

(Hearing concluded at 11:19 a.m.)

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2)ss. COUNTY OF WASHOE)
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4	I, CHRISTY Y. JOYCE, Official Certified Court
5	Reporter for the State of Nevada, Department of Conservation
6	and Natural Resources, Division of Water Resources, do hereby
7	certify:
8	That on Tuesday, the 10th day of May, 2011, I
9	was present at the Division of Water Resources, Carson City,
10	Nevada, for the purpose of reporting in verbatim stenotype
11	notes the within-entitled public hearing;
12	That the foregoing transcript, consisting of
13	pages 853 through 929, inclusive, includes a full, true and
14	correct transcription of my stenotype notes of said public
15	hearing.
16	
17	Dated at Reno, Nevada, this 6th day of June,
18	2011.
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22	CHRISTY Y. JOYCE, CCR #625
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CERTIFICATE OF SERVICE

Pursuant to NRAP Rule 25(1)(c), I hereby certify that I am an
employee of ALLISON, MacKENZIE, PAVLAKIS, WRIGHT & FAGAN, LTD.,
Attorneys at Law, and that on this date, I caused a CD-ROM version of same to be
served to all parties to this action by:
Placing a true copy thereof in a sealed postage prepaid envelope in the United States Mail in Carson City, Nevada Hand-delivery - via Reno/Carson Messenger Service Facsimile Federal Express, UPS, or other overnight delivery E-filing pursuant to Section IV of District of Nevada Electronic Filing Procedures
fully addressed as follows:

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