

BRIAN SANDOVAL Governor

STATE OF NEVADA COMMISSION ON MINERAL RESOURCES DIVISION OF MINERALS

400 W. King Street, Suite 106 Carson City, Nevada 89703 (775) 684-7040 • Fax (775) 684-7052 http://minerals.state.nv.us/ Las Vegas Branch: 2030 E. Flamingo Rd. Suite #220 Las Vegas, Nevada 89119 (702) 486-4343 Fax (702) 486-4345

> ALAN R. COYNER Administrator

ACTIVITY AND ACHIEVEMENTS (SEPTEMBER 2012)

ADMINISTRATION (ALAN)

- 1. Facilitated interviews for the candidates for the AML/Field Specialist position.
- 2. Distributed copies of the RGJ article concerning the AML summer intern program.
- 3. Met with Bernard Venneman to discuss water rights connected with the Entrée Gold exploration being undertaken near Yerington.
- 4. Responded to an interview request from Jennifer Robison of the LVRJ concerning mineral production in Nevada.
- 5. Reported to Homestretch Geothermal concerning a strong H2S smell near their Wabuska geothermal power plant.
- 6. Submitted speaker list for the NWMA annual meeting area reports session.
- 7. Met with representatives of Lippo Industries of Malaysia concerning mining opportunities in Nevada.
- 8. Facilitated John Penton's first week of work at the Division as AML Chief.
- 9. Presented a summary of the NDOM FY14-FY15 budget with Mike Visher and Linda Wells-Carrion to the Department of Administration and representatives from the Legislative Counsel Bureau.
- 10. Visited AML sites in the Virginia City area with John Penton. Met with Barbara Mackey of the 4th Ward Museum.
- 11. Contacted Rob Ghiglieri concerning the AML/Field Specialist position and finalized plans for him to join NDOM. We set a tentative start date of October 29.
- 12. Provided Nevada Excellence in Mine Reclamation award plaques and script to Commissioner Bryan.
- 13. Participated in the monthly IOGCC steering committee call.
- 14. Attended a meeting of the Nevada Geothermal Council.
- 15. Attended the monthly meeting of the Nevada Geological Society.
- 16. Attended Mine Expo in LV and helped man the agency booth with George Bishop, Bill Durbin, and John Penton.
- 17. Attended the inauguration of UNR President Marc Johnson with CMR members Dennis Bryan, John Mudge, and Rich DeLong.
- 18. Facilitated a meeting of the Marigold Royalty Committee of the Mackay EAB.

RECLAMATION BOND POOL (MIKE)

- 1. Executed bond increase for Max Resource Corp.
- 2. Executed bond reduction for Quaterra Alaska.
- 3. Prepped bond release for MIM (USA) Inc./Entrée Gold.
- 4. Answered questions and prepped new bond for Gold Standard Ventures.

- 5. Spoke with Rick Redfern (Mexivada) regarding change of operator and bond requirements. Sent him an email with the necessary paperwork to complete.
- 6. Answered questions from Quaterra Alaska regarding process of converting existing cash bonds with Bond Pool to surety bonds with BLM.
- 7. Updated bond status report and statewide bond status spreadsheet.
- 8. Sent out quarterly invoice reminders to plan-level participants in the Bond Pool.

MINING, LAND AND OTHER ISSUES (MIKE)

- 1. Worked with Linda to resolve issues with Work Programs and new bi-annual budgets.
- 2. Worked with Debbie and Valerie to resolve questions/concerns with aspects of the Annual Status and Production Report database.
- 3. Spoke with Jeff Flamini (Monson Engineering) regarding Trimble Gatewing drone aircraft and potential applicability towards AML reconnaissance.
- 4. John and I met with AML contractor Brian Breiter to review and plan hard closure work efforts in October.
- 5. Queried AML database to answer a request from Nicole Weingart (BLM-NSO) regarding number of hazards inventoried by NDOM since 7/12/12.
- 6. Completed final draft of 2011 AML Report and submitted to Alan, Bill, Rachel and Debbie for review. Completed the 2011 AML Report and submitted it to State Printing.
- 7. Attended NAAMLP Business Meeting via conference call.
- 8. Attended quarterly meeting of the Mining Oversight and Accountability Commission (MOAC) and provided a very brief update on agency activities and revenues.
- 9. Spoke with Jenni Jeffers (NDOW) and Joel Hartmann and Daniel Atkinson (BLM-CC) regarding status of NDOM's requests to close AML sites in Douglas County and provided some additional information to facilitate its processing.
- 10. Spoke with Cindi Byrns (Comstock Mining) to discuss additional AML closure plans and arrange meeting with John Penton.
- 11. Welcomed John Penton as new AML Chief and discussed various aspects of the program and assorted office and computer logistics. Reviewed various aspects of the AML Program with John.
- 12. Complied with request from Golden Odyssey for copies of BLM Decision Letters for all of their projects.
- 13. Provided Doug Siple (BLM-NSO) with aggregated 2011, metal production numbers, and aggregated percentage from federally-managed lands, plus those for barite and gypsum.
- 14. Conducted interviews of top five candidates for GIS/Field Specialist position with Alan, Rachel and Valerie. Reviewed and ranked candidates pending an additional follow-up interview next week.
- 15. EPS completed securing work at 21 sites in White Pine County and logged five new sites.
- 16. Taught the "Paste with a Taste" activity to three classes of second graders at Sepulveda Elementary School in Sparks. (3 presentations 66 people)

AML / PUBLIC AWARENESS - NORTH (JOHN)

- 1. Warmly welcomed by entire Nevada Division of Minerals staff and completed new hire paper work under the guidance of Valerie Kneefel.
- 2. Discussed various aspects of the AML program with Mike Visher and reviewed various aspects of the office and computer logistics with him as well.

- 3. George Bishop spent time with me showing me the location of motor pool, and the Division's mini-storage units. He also went over the logistics of fueling State vehicles.
- 4. Visited Virginia City with Alan Coyner where he showed me completed and ongoing AML efforts. He also introduced me to Barbara Mackay at the Fourth Ward School Museum and showed me some of the work the Division sponsors at the museum.
- 5. Mike Visher and I met with contactor Brian Breiter to review AML hard closure work efforts planned for October.
- 6. Attended the monthly meeting of the Geological Society of Nevada in Reno.
- Attended the Las Vegas Mine Expo and helped man the NDOM booth with Alan Coyner, Bill Durbin, and George Bishop from September 17th – 19th.
- 8. Attended dinner meeting with Dennis Bryan and Alan Coyner in Las Vegas.
- 9. Attended dinner meeting with Bill Durbin in Las Vegas and discussed various AML projects and potential AML sites around Tonopah and Esmeralda County.
- 10. Performed research on potential AML sites in Northern Nye County.
- 11. Discussed and reviewed detailed aspects of the AML program with Mike Visher.

AML / GIS (RACHEL)

- 1. Received closure reports from Newmont documenting the securing work completed in the Ten Mile mine area east of Winnemucca. One new site was logged and secured and repairs were made to existing fences. Updated the database with new securing and claimant information.
- 2. Attended interviews for the GIS/Field Specialist position. A total of 5 people were interviewed for the position.
- 3. Added all photos from the August staging folder to the AML photo Archive. Backed up data on shared drives and personal drives.
- 4. Completed routine database inspection and updates. Added new hazards logged by the USFS to the database and updated securing information received from the USFS.
- 5. Received new hazard information from the Elko BLM office. Plotted new hazards and cross referenced those with sites already in our database. Assigned new NDOM numbers to those sites that were new and provided those numbers to the Elko office.
- 6. Worked with Ken Maas (USFS) on sorting out issues with several sites in the Manhattan area. Assigned new numbers to two previously unlogged sites. Ken Maas will send securing information in the coming months.
- Added information received form Jason Williams with NDOW to the AML database. 5 new sites were logged in White Pine County – NDOM numbers were assigned and photos were added to the archive.
- 8. Cross referenced and added new securing information completed by Freeport-McMoRan to the database. Scanned and labeled all photos and entered new securing information for 12 sites. Awaiting securing information on 15 additional closures. All sites had either been backfilled or secured with bat compatible closures.
- 9. Received additional securing information from Victoria Resources regarding additional securings completed at the Nevada Quicksilver mine in Pershing County. Added the new information to the database and sent a thank you letter documenting the work completed to Victoria Resources.
- 10. Addressed information received from Brian Breiter of EPS. Updated the database and added new photos documenting the work completed.

- 11. Added new logging information completed by Russ Jones with Barrick to the AML database. Added new photos and filled out hazard ID sheets for 12 new sites inventoried in the Mill Canyon area north of Cortez. This is the first group of hazards that will be inventories by Barrick personnel.
- 12. Received new hazard and revisit information from Whitney Wirthlin with the BLM office in Elko. Several sites in the Toano area were revisited and additional 24 sites were logged. Added photos and updated the securing information in the database.
- 13. Received a request from Ken Maas with the USFS for new information regarding sites in the Pine Grove area south of Yerington. Sent updated information of that area.
- 14. Updated the database with new securing information received from claimants during the past week. Sent thank you letters acknowledging the work completed.
- 15. Compiled maps and shapefiles showing the hazards and non-hazards logged on Springer claims in Pershing County. Went through the basics of compiling maps and data for claimants with John Penton and discussed reasons for sending what we send.
- 16. Spoke with an individual at the Bald Mountain Mine regarding unsecured and unlogged AML features on BLM claims in the area. There was concern for these unsecured sites on public land and some questions on how best to secure the features.

AML / PUBLIC AWARENESS - SOUTH (BILL)

- 1. Continuing updates of Clark County AML claim research for hazards to be secured or resecured.
- 2. Updating latest AML re-visit information received from Jeff Herrera for work conducted in Lincoln County.
- Meeting held with Clark County Real Property Management staff updates on Arden Mine /Gypsum Ridge. Discussion of potential funding from BLM for mine closure work. Clark County Public Works Department does not have the staffing or equipment to commit for the 30-40 day period estimated for the Arden Mine closures.
- 4. Continuing updates of Clark County AML claim research for hazards to be secured or resecured.
- 5. In response to a "shaft call" from a concerned citizen, investigated, ranked and secured one hazard in Esmeralda County northwest of Silver Peak.
- Participated in the bi-monthly progress report conference call for the BLM/ACOE/BOR AML closure projects – Lincoln and White Pine Counties. The BOR crew has completed the Lincoln County (SNPLMA Round 7) project and is gearing up to begin work in White Pine County.
- Conducted field inspections with Chris Ross and Stephanie O'Dell (BLM Reno and Wash. DC) to Caselton tailings and Comet Mine sites in Lincoln County and re-visits to AML hazards near Searchlight and Arden Mine in Clark County.
- 8. Attended first meeting/training session for the 2012/2013 Mighty Miner 4th and 5th grade tour leaders at McCaw School of Mines. 44 students signed up.
- 9. Attended Nevada Mining Association Education Committee meeting in Reno. Planning session for 2013 Southern Nevada workshop scheduled for March 25-27, 2013.
- 10. Picked up 77 recycled T-posts from the BOR yard in Boulder City. These were from fences removed from permanent closure sites in Lincoln County.
- 11. Confirmed dates of October 8-9 with Brian Breiter and Ted Faye (Gold Creek Films) for PUF closure of the Mizpah air shaft at the Tonopah Historic Mining Park.

- 12. Made final contacts and preparations for the McCaw School of Mines "Mighty Miner" tour at the Mine Expo on Wednesday, September 26.
- 13. Prepped and loaded up materials for Mine Expo. Set up display and manned the NDOM booth at the International Mine Expo.
- 14. Assisted with a tour of McCaw School of Mines for State Assemblyman Steven Brooks (District 19 North Las Vegas) and 8 members of Women in Mining.
- 15. Interviewed by R and R Partners at the Mine Expo regarding the McCaw School of Mines its background and history, what it contributes to education, why the "Mighty Miners" came to tour Mine Expo and what they do.
- 16. Prep and load materials for Spring Mountain Ranch State Park Pioneer Days scheduled for Saturday, Sept. 29.
- 17. Added new Eagle Scout candidates James Reed (#162) and Alexander Barlow (#163). (September 26, 2012 marks the 20th anniversary of the completion of our first Scout project).
- 18. Completed and sent four Eagle Scout project packets.

GEOTHERMAL (LOWELL)

- 1. Reviewed Nevada Geothermal Power's sundry notices to reclassify the Blue Mountain 86(25-23)-22 and 41-27 injection wells to observation wells. Nevada Geothermal submitted a request to Russ Land at UIC to remove the two wells from the UIC permit for Blue Mountain, supplying Russ with photographic evidence the wells are no longer piped into the system. Russ approved the removal of the two wells from the UIC permit. Waiting on BLM approval for the reclassification.
- 2. Reviewed ORNI 47's Wild Rose 65A-11 production well permit application and drilling program. The proposed total depth is 1,800 feet. Requested Ormat to verify the 65A-11 proposed location, due to its close proximity to the 65-11 production well (currently drilling), another vertical well some 42 feet away.
- 3. Reviewed Ormat's Grass Valley wells determining what logs and cuttings have not been turned in to NDOM and the NBMG Sample Library. Contacted Ormat and requested missing items to be sent in.
- 4. Reviewed ORNI 47's Wild Rose 65A-11 production well permit application and drilling program. The proposed total depth is 1,800 feet. Alan and I discussed the very close proximity of the proposed 65A-11 to the currently drilling 65-11 location, 42 feet separation, with Ormat Nevada's Kyle Snyder and Brad Peters. Ormat does not believe the two production wells will interfere with one another when production starts. Alan approved.
- 5. Reviewed Enel Stillwater's sundry notice to repair or replace the down hole pump in the 31A-30 production well. Alan approved.
- 6. Reviewed Magma Energy's sundry notice to replace the pump in the Soda Lake 41B-33 production well. Alan approved.
- 7. Reviewed Magma Energy's sundry notice to replace the pump in the Soda Lake 45A-33 production well. Alan approved.
- 8. Reviewed Gradient Resources Patua 38(51-28)-21 production well permit application and drilling program. The well is proposed to be directionally drilled to a total depth of 10,500 feet, encountering their adjacent BLM lease at depth. Waiting on BLM notification of approval.

- 9. Reviewed Gradient Resources Patua 21-28 production well permit application and drilling program. The well is proposed to be directionally drilled to a total depth of 9,400 feet. Waiting on BLM notification of approval.
- 10. Reviewed Gradient Resources sundry notice to re-enter the Patua 88(18-20)-19 well and drill a directional sidetrack, ST1. The original well bore will be temporarily plugged off (cement) while the sidetrack is being drilled. The sidetrack is proposed to be drilled to a total measured depth of 9,500 feet. The well will remain in fee acreage. Mike approved.
- Reviewed ORNI 43 LLC's Tungsten Mountain 24-23 observation well permit application and drilling program (core). The well is to be drilled in the SW4 NW4 Section 23, T21N, R38E to a proposed total depth of 1,000 feet. Alan approved.
- 12. Wells drilling: ORNI 43 Wild Rose 26-6 production well; ORNI 43 Wild Rose 65-11 production well; Jersey Valley 15-27 injection well; ORNI 43 Wild Rose 54A-11 production well; ORNI 43 Wild Rose 26-6 production well.

OIL AND GAS (LOWELL)

- 1. Reviewed Major Oil's revised testing program for the Eblana 1 well in Hot Creek Valley.
- 2. Sam Webb, at Andromeda Oil, contacted me requesting the permit application for Tomera Ranch #8 be withdrawn.
- 3. Reviewed Major Oil's revised testing program for the Eblana 1 well in Hot Creek Valley. Alan gave verbal approval to Major Oil, with the condition Major Oil receives BLM approval for the testing program before starting any work related to the program.
- 4. Reviewed Tomera Ranch 6X permit application and drilling program. The proposed total depth of the Tomera Ranch 6X well is 1,800 feet. Alan approved.
- 5. Reviewed Major Oil's sundry notice to perforate an additional intervals in the Eblana 1 well in Hot Creek Valley approved. This request is in addition to their revised perforation program previously approved. Received BLM's notification of approval. Mike approved.
- 6. Reviewed Major Oil's sundry notice to perform a cement squeeze job through open perforations. Mike approved.
- 7. Reviewed Kelpetro's Christina 30-1 permit application and drilling program. The well is to be drilled in Railroad Valley, T7N, R55E, SW 1/4 NW 1/4 Section 30. The proposed total depth is 1,800 feet. Received BLM's notification of approval. Mike approved.
- 8. Drilling/Completion: Tomera Ranch #4; Tomera Ranch #6; Tomera Ranch 6X; Tomera Ranch 7; Major Oil Eblana 1.

OTHER (LOWELL)

- 1. Attended the Nevada Petroleum and Geothermal Society meeting on Thursday, September 4th.
- 2. Gave a presentation on the geothermal industry and permitting to a class on the geothermal industry at UNR's Redfield campus. There were only two students and the instructor, Steve Williams, previously with Oski Energy. However, all were quite inquisitive and the session lasted over two hours.
- 3. Reviewed the USFWS report on sage grouse dated August 1, 2012. I found the report did not give specific details on locations of sage grouse in Nevada. The USFWS is relying on studies by NDOW.
- 4. Reviewed the Bloomberg News Service article on FracFocus. I thought the article was a bit misleading, for their study covered a period from April 11, 2011 through December

31, 2011. FracFocus started operations on April 11, 2011. Approximately 18,000 wells were fracked, or proposed to be fracked, throughout the various States with fracking activities. The industry had reported 8,000+ fracked wells by December 31, 2011. Bloomberg looked at the total numbers, but I do not believe they separated out those States that may not require reporting fracking chemicals on FracFocus from those States that do require reporting. At least I did not see this in the article. The lower reporting numbers obviously made the industry look like they were not 'complying', which may have been the purpose of the article. Also, FracFocus was just starting out with bugs to be worked out.

- 5. Reviewed Churchill County's revised proposed geothermal regulations. This revision of the regulations essentially strips away the \$50,000 deposit to the County from the operator to cover consulting expenses. Instead, the revision states the operator will be billed for any consulting expenses. If the operator gives data to the County to be reviewed, the data will become public. The operator does have an option to have Churchill County's consultant review data at the operator's office and have the consultant enter into a confidentiality agreement with the operator. Numerical reservoir models will still be required, as well as restrictions from drilling near any domestic, agricultural, or County wells.
- 6. Completed NREL's geothermal flow charts. The charts are completed by all agencies involved, State and federal. The purpose of developing the charts is to help streamline the geothermal permitting process.
- 7. Attended the Nevada Geothermal Council meeting on Thursday, September 20th. Randy Peterson, Permitting Manager at Ormat Nevada, spoke on sound monitoring at the Tuscarora Power Plant. The monitoring is related to the sage grouse habitat in this area, where measured decibels cannot exceed 35 decibels at a certain distance from the plant.
- 8. Prepared for the upcoming Geothermal Resource Council convention locating material to be used, printing materials to be used.