

BRIAN SANDOVAL Governor

STATE OF NEVADA COMMISSION ON MINERAL RESOURCES DIVISION OF MINERALS

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> ALAN R. COYNER Administrator

ACTIVITY AND ACHIEVEMENTS OCTOBER 2012

ADMINISTRATION (ALAN)

- 1. Manned the booth at the Geothermal Resources Council annual meeting at the Peppermill in Reno.
- 2. Participated in panel discussion on the Economic Impacts from Mineral Exploration at the Nevada Mineral Exploration Coalition annual meeting at the Atlantis in Reno.
- 3. Responded to Bruce Holmgren of NDEP concerning and bonding and reclamation conducted by NDOM and BLM at the MacArthur mine site near Yerington.
- 4. Coordinated meeting with Jeff Schwarz of Noble Energy with state regulatory agencies for a December meeting. Hydraulic fracturing will need to be considered in their permit.
- 5. Provided information to Kyle Davis of the Nevada Conservation League concerning hydraulic fracturing in Nevada.
- 6. Conducted AML revisits at the Queen of Sheba mine near Unionville in Pershing County.
- 7. Conducted AML revisits at the Fairview mine near Seven Troughs in Pershing County.
- 8. Discussed the Kinsley Mountain gold exploration project with an investor.
- 9. Provided information concerning a Nevada company named Solauro that is proposing to remine tailings at the Bonnie Claire mill site in Esmeralda County.
- 10. Attended the midyear meeting of the Interstate Mining Compact Commission in Chicago.
- 11. Attended the IOGCC annual meeting in San Antonio with Commissioner Snow.
- 12. Attended the monthly meeting of the Society of Mining Engineers in Reno.
- 13. Attended the GSN monthly meeting in Reno.
- 14. Participated in a networking event for Mackay students at the Crowley at UNR.
- 15. Attended the Mackay Executive Advisory Board meeting with Commissioners Gibson, Bryan, and Snow.
- 16. Attended the Mackay Alumnus of the Year reception with Commissioner Bryan and DeLong.
- 17. Responded to adjusted base budget questions from the Legislative Counsel Bureau.
- 18. Ordered rock and mineral boxes for the Teacher's Workshops.

RECLAMATION BOND POOL (MIKE)

- 1. Executed bond for Gold Standard Ventures.
- 2. Reviewed bond files to research history of bonding with Arimetco as requested by Bruce Holmgren (NDEP).
- 3. Updated bond status report and sent out reminder invoices for overdue premiums on eight notice-level bonds and three plan-level bonds.
- 4. Processed two bond reductions, Kenai Resources and Paradigm Minerals.
- 5. Received the final draft of the MOU for the reclamation bond pool between BLM and NDOM for review.

- 6. Communicated with Cheryl McEachran (Entrée Gold) regarding a bond refund to MIM, their precursor.
- 7. Sent preparatory bonding paperwork to Terrace Resources and bond increase spreadsheet to Redstar Gold. Executed bond increase for Redstar Gold.
- 8. Communicated with Consolidated Goldfields regarding change of operator and bond transfer to Terrace Resources.
- 9. Answered questions from claimant David Bauer regarding timing of county payments and claim validity.
- 10. Update bond status report and statewide bond spreadsheets.

MINING, LAND AND OTHER ISSUES (MIKE)

- 1. Provided answers to an investor looking for information on graphite mines in Nevada.
- 2. Answered questions from Susan Elliott (USFS-Elko) regarding removal of plastic claim posts.
- 3. Discussed deliverables expected from claim post pulling grant with Lois Ports of Bristlecone Nevada.
- 4. Answered questions from claimant/investor Dick Herrmann looking for information on exploration logistics and assistance in southern Nevada.
- 5. Provided a "Stay Out, Stay Alive" presentation to the joint Douglas County and Carson City Search and Rescue squad in Minden with John. (1 presentation 20 people)
- 6. Reviewed and researched BLM 2012 closures list from Chris Ross for completeness and requested additional information to assign NDOM numbers to those without.
- 7. John and I met with Cindi Byrns (Comstock) to discuss their plans for additional mine closures and remediation efforts. Logged one hazard and non-hazard near Gold Hill Hotel.
- 8. Attended geothermal meeting led by Lowell to review Gradient Resources' proposed water monitoring plan presented by Alan Welch (7Q10). Representatives from Churchill County, NDEP, DWR and BLM were also present.
- 9. Worked with Alan on Annual Status and Production final numbers and data for Major Mines publication.
- 10. Valerie continued working with David Davis (NBMG) on collecting missing 2011 production reports from non-metallic producers.
- 11. Answered questions from, and provided historical information and Internet links to, Jasmine Vittori (JBR) regarding the Yellow Jacket mine shaft and surrounding features. Comstock is preparing to remediate and salvage some historic features and JBR is working for them and with the Comstock Historical Society to accomplish this.
- 12. Answered questions from BLM-CC regarding our request to secure 13 mine features in the Pine Nut Range east of Gardnerville.
- 13. Communicated with Mine Safety and Training Section to accommodate NDOW biologists and other interested AML participants at next week's MSHA Underground Annual Refresher class.
- 14. Attended the MSHA Underground Annual Refresher class taught by the Mine Safety and Training Section.
- 15. Communicated with BLM-CC regarding planned gating work in Pine Nut Range which unfortunately could not be authorized due to archaeological clearance requirements within the time frame required by NDOW. Closures will be postponed until next year.

- 16. Spoke with Chris Ross (BLM-NSO) and contract archaeologist Stephanie Livingston (GBI) regarding best procedures for future NDOM requests for hard closures, availability, funding, and scheduling.
- 17. Coordinated with EPS and Washoe County to conduct PUF closure work next week at shaft on county-owned site near Mustang.
- 18. Provided hazard ID sheets and photographs to Whitney Wirthlin (BLM-Elko) to complete requisite closure reports for sites at Spruce Mountain.
- 19. Assisted John with MS Access data entry and AML photo file entry, edit, and archiving procedures.

AML / PUBLIC AWARENESS - NORTH (JOHN)

- 1. Mike Visher and I met with Cindi Byrns, Director of Environmental and Regulatory Management with Comstock Mining in Gold Hill regarding AML closures on the Comstock.
- 2. Mike and I logged the Yellow Jacket shaft at Gold Hill for AML closure.
- 3. Mike and I reviewed and discussed the equipment and supplies needed while in the field on AML projects.
- 4. Performed research on potential AML sites in Esmeralda, Mineral, and northern Nye counties for field visits next week.
- 5. Witnessed and assisted Bill Durbin in closure of the Mizpah Mine vent raise air shaft which reopened in the parking lot of the Tonopah Historic Mining Park. Brian Breiter of EPS and his assistant Jeremy completed the polyurethane foam closure. The work was documented through video and time lapse photography by Ted Faye of Gold Creek Films. Persons interviewed for the video were Brian Breiter, Bill Durbin, Mimi Rodden and James Eason.
- 6. Took measurements with Bill at the Tonopah Historic Mining Park for additional AML safety/security fencing proposed by staff at the Park.
- 7. Conducted and completed land status research with Bill for the 11 hazards at the Esmeralda County courthouse in Goldfield.
- 8. Investigated and ranked with Bill 11 hazards and logged 6 non-hazards in Esmeralda County just outside of Tonopah. One shaft was fenced with a hazard rank of 10; at a second shaft the old fence was repaired and new warning signs were posted; two signs were posted at a minimal hazardous third shaft found next to a road; a warning sign was added to an existing fence at a fourth shaft.
- 9. Conducted field visits on potential AML sites on the Klondike and Mud Lake Quadrangles in Esmeralda County, but was turned back by rain and muddy, hazardous conditions. Field visits were also performed on AML sites in in the Downeyville and Quartz Mtn. Quadrangles in northern Nye County; a warning sign was added to replace a stolen one at a shaft. Further work is warranted at some of these visited sites.
- 10. Witnessed and assisted as well as kept an eye out for any possible fire sparked by machine dirt work in the closure of the Shively Strike Abandoned Mine Lands Permanent Closure Project. The project was located on the NE flank of Winnemucca Mountain in Humboldt County. Brian Breiter of EPS and his team completed the backfill and polyurethane foam closure. The backfill work was done with a Cat track hoe and a Cat D7 dozer. A water truck was also used for dust suppression and as a precaution in case of a fire. A total of 5 hazards were backfilled and permanently closed, one of these was a

polyurethane foam/backfill closure. The slope over the "former" hazards was well contoured and tracked and is ready for reclamation seeding. The project took three full days which is one full day sooner than expected. These newly secured hazards are NDOM #'s HU -29 through HU-33.

- 11. Approximately 100-120 t-posts were able to be saved and recycled from the Shively closure project.
- 12. Met with Chris Ross at the Shively site, he is the Abandoned Mine Program Lead with the BLM. Chris had BLM oversight of the Shively Strike project.
- 13. Performed AML prospecting and re-visits at the Jessup Mining District in Churchill County. Repaired one fenced shaft, replaced signage and posts at a minimal hazard adit, and replaced 2 missing signs at 2 other adits.
- 14. Performed AML prospecting and logged seven AML hazards and 2 non-hazards in the Lodi Hills of northern Nye County on the Quartz Mtn. topo quadrangle.
- 15. Assisted Mike Visher with AML presentation to Douglas County/Carson City County new Search and Rescue trainees at the Douglas County Sheriff in Minden. There were 20 attendees.
- 16. Attended GSN October monthly meeting in Reno.
- 17. Attended MSHA underground refresher course in Carson City.
- 18. Spent time learning and entering AML data sheets into the Access database with Mike Visher. Entered Nye County logged hazards and photos from 10-22-2012.

AML / GIS (RACHEL)

- 1. Completed monthly back up and data management of all AML data and shared drives. Updated the AML photo archive and backed up copies to removable drives.
- 2. Received information from Stephanie Livingston regarding new sites logged in the area of the Sulphur Mine in Pershing County. Cross referenced these hazards with ones previously logged and determined they were new sites. Assigned new numbers to 16 hazards and updated the database with the new information.
- 3. Spoke with Adam Knight at the Springer Mine in Pershing County regarding the inventorying of AML features on claims controlled by Springer. Provided Mr. Knight with our hazard and non-hazard inventory forms, AML FAQ forms and information on existing hazards in the area. He will begin logging new hazards and submit the new information to us.
- 4. Received an inquiry from Ken Maas with the USFS regarding sites in the Manhattan and Gabbs areas of Nye Counties. Cross referenced photos with those provided by Ken Maas and assigned new numbers to those hazards that had not been logged by NDOM. Received securing information from Ken Maas regarding backfill projects that were completed on USFS land in the Manhattan area. Added the new information to the database and updated the photos.
- 5. Worked on addressing projection issues in ArcMap 10.1. Found that problems were occurring with the projection of our hazard and non-hazard databases when there were features missing UTM data. Worked with ESRI personnel to find the cause of the issue. Worked with Debbie Selig to find a work around for this issue.
- 6. Added new hazards logged by EPS in White Pine County to the database.

- 7. Reviewed adding new hazards and non-hazards to the database with John Penton. Also went over the procedures for adding photos to the database, updating the weekly mines and adding database points to the GPS units.
- 8. Conducted QA/QC on hazards and non-hazards recently logged. Found that two hazards were plotting in counties other than the counties they were logged in. Researched these discrepancies further to discover that the hazards had been logged in incorrect counties. Amended the database to reflect the correct county data and updated the photos accordingly.
- 9. Spoke with Russ Jones at Barrick regarding logging and securing of AML features on Barrick claims. He was interested in learning more about our Summer Intern program in hopes of acquiring his own interns. Suggested that we would be willing to assist in field work for a few days in order to ensure the work being completed by Barrick personnel contained all the information we needed.
- 10. Completed laptop maintenance uninstalled all Microsoft Office software from the old laptop and installed it on the new one for future use.
- 11. Researched the possibility of adding geotagged photos to ArcMap for review when creating maps. With ArcMap 10.1 it is possible to add a geotagged image to the map it will create a point and display the photo of the hazard in question. Unfortunately, the standard license of ArcMap is needed to view the photos. Began looking into the pros and cons of upgrading our ArcMap license.
- 12. Completed maps showing the recent work completed for the upcoming CMR meeting.
- 13. Worked with Valerie Kneefel on developing a database in order to track the placement of the large AML yellow signs being installed on public lands.
- 14. Revised the shapefiles showing the proposed closure work for the sites in the Pine Nut Range. Updated the spreadsheet and sent it to Chris Ross for review.
- 15. Received a request from Stephanie Livingstone at Great Basin Institute for photos and logging sheets showing 12 hazards on the Sulphur Quadrangle in Pershing County. Assembled the information and submitted it to her on disk.
- 16. Received securing information from Hycroft regarding backfills and PUF closures that were completed in early October on the Sulphur Quadrangle in Humboldt County. Updated the database with the new securing information, added the photos to the archive and sent a thank you letter to the claimants acknowledging the work completed.
- 17. Worked on addressing logging discrepancies with sites submitted to NDOM by the National Park Service in Death Valley. Will be working on assessing if sites logged are hazardous or not and what sites need additional information.
- 18. Traveled to Elmcrest Elementary School in Reno to teach Rocks, Minerals and AML to two 3rd grade classes with Valerie Kneefel. A total of 46 students were taught about rocks and minerals, the importance of mining in Nevada, and "stay out, stay alive" (2 presentations 46 people).

AML / PUBLIC AWARENESS - SOUTH (BILL)

- 1. Logged in AML re-visit information and photos from Jeff Herrera for work in Lincoln County.
- 2. Participated in the bi-monthly progress report conference call for the BLM/ACOE/BOR AML closure projects Lincoln and White Pine Counties. Received and logged in the last 7 Lincoln County mine closures.

- 3. Logged in claimant/property owner securings and photos for 1 site in Lincoln County and 11 sites in White Pine County.
- 4. Witnessed and assisted in closure of the Mizpah Mine air shaft at the Tonopah Historic Mining Park (NY-2035). Brian Breiter of EPS completed the polyurethane foam closure. The work was documented through video and time lapse photography by Ted Faye of Gold Creek Films. Persons interviewed for the video were Brian Breiter, Bill Durbin, Mimi Rodden and James Eason.
- 5. Took measurements at the Tonopah Historic Mining Park for additional safety/security fencing proposed by staff at the Park. Prepared a revised fencing assessment for James Eason and Mimi Rodden.
- 6. Investigated and ranked 11 hazards and logged 6 non-hazards in Esmeralda County. Land status research for the 11 hazards was completed at the Esmeralda County courthouse. Fenced one shaft with a hazard rank of 10; repaired fence and posted new warning signs at a shaft; posted two signs at a shaft and added a sign to an existing fence at a fourth shaft.
- 7. Received word from Chris Ross of a cache of old explosives found in a natural cave near a mine site in the Mormon Mountains Wilderness in Lincoln County. BATFE has been contacted for disposal and Friday, October 26 is the tentative date for site visit and disposal. Will accompany the disposal team and investigate AML sites in the area.
- 8. Traveled to Mormon Mountains Wilderness area in Lincoln County with BLM and BATFE personnel to witness disposal of old explosives found in a natural cave by a BLM wilderness ranger. Ten sticks of 1964-vintage ANFO based powder destroyed.
- 9. Investigated, ranked and secured one hazard and logged three non-hazards in the Mormon Mountains Wilderness area Lincoln County.
- Prepped materials for Southern Nevada National Trail Days Celebration event scheduled for Saturday, October 6. Set up display at Southern Nevada National Trail Days Celebration event - Henderson. Bill and Debbie manned the display visited by approximately 200 people.
- 11. Completed inventory of materials and supplies at Las Vegas office and storage unit for the 2013 Las Vegas teacher workshop.
- 12. Set up mineral and commodity and AML display and "birdseed mining" activity at Old Mormon Fort State Park Nevada History Day event – Las Vegas. Visited by approximately 30 people (one presentation – 30 people).
- 13. Set up display at Spring Mountain Ranch State Park Pioneer Days Las Vegas. Visited by approximately 300 people (one presentation 300 people).
- 14. AML presentation at monthly meeting of the Mesquite Outdoor Club Mesquite. Attended by 15 people (one presentation – 15 people).
- 15. Attended Nevada Mining Association Education Committee meeting Reno. Planning for 2013 Southern Nevada teacher workshop and Reno-area Earth Science Week.
- 16. Received word that the Nevada Mining Association made a \$4,000 donation to the McCaw School of Mines.
- 17. Attended a McCaw School of Mines Foundation Board meeting.
- 18. Assisted with the McCaw School of Mines Haunted Mine Halloween celebration/open house Thursday and Friday evenings.
- 19. Display table and presentation at Advanced Technologies Academy High School Career Fair Las Vegas. Visited by approximately 75 sophomores through seniors. Handed out

Mackay School of Earth Sciences and Engineering course and scholarship information provided by Liz Ball.

- 20. Made a "Claim Staking and Filing", 2011 mineral production and AML presentation at the monthly meeting of the Nye Gold Seekers in Pahrump attended by 60 members and guests (1 presentation 60 people).
- 21. Assisted with the McCaw School of Mines Haunted Mine Halloween celebration/open house Saturday evening. The three-day event brought in 1,000 to 1,100 people. Proceeds to be announced.
- 22. Presented 6 sessions of minerals and commodities and AML at Griffith Elementary School's annual Nevada Days Celebration for 165 students in grade levels Pre-K, K, 2nd grade and Special Ed. (6 presentations 165 people).

GEOTHERMAL (LOWELL)

- Reviewed Gradient Resources' permit application and drilling program for the Patua 38(51-28)-21 production well. The proposed total depth of the well is 10,500 feet. Received BLM notification of approval. Mike approved.
- 2. Reviewed Enel Salt Wells LLC's permit application and drilling program for the Salt Wells 46A-35 production well. The proposed total depth is 1,000 feet. Received BLM notification of approval. Mike approved.
- 3. Reviewed Ormat Nevada's sundry notice for a near surface casing repair in the Steamboat 35-28 injection well. Received UIC notification of approval. Mike approved.
- 4. Reviewed ORNI 39 LLC's sundry notice to repair separated casing in the McGinness Hills 66B-22 injection well. Repair procedure was reviewed by UIC and BLM and approved. Alan approved.
- 5. Reviewed HSS II's sundry notice for pump repair, or replacement in the Tuscarora 65C-8 production well. Mike approved.
- 6. Reviewed ORNI 39 LLC's permit application and drilling program for the McGinness Hills 77-21 injection well. The proposed total depth is 4,810 feet. The BLM and UIC are in the process of reviewing.
- 7. Reviewed Gradient Resources' Patua ground water monitoring plan.
- 8. Reviewed ORNI 3 LLC's sundry notice to log and perforate the Desert Peak 43-21 production well. Well was drilled in 2003-2004 and has never produced. Alan approved.
- 9. Reviewed ORNI 39 LLC's permit application and drilling program for the McGinness Hills 77-21 injection well. The proposed total depth is 4,810 feet. Received BLM and UIC approval notifications. Alan approved.
- 10. Reviewed Gradient Resources' permit application and drilling program for the Patua 21-28 production well. Well is proposed to be directionally drilled to the southeast to a total vertical depth of 9,400 feet. Received BLM's notification of approval. Mike approved.
- 11. Reviewed Oski Energy sundry notices to plug and abandon Hot PotTG-1-1, TG 3-1, TG 9-1, TG 13-1, TG 15-1, and TG 27-1. Mike approved.
- 12. Reviewed Ormat Nevada Sundry notice for to perform a surface casing repair and pump repair or replacement. Mike approved.
- 13. Reviewed Ormat Nevada's sundry notice to perform mechanical integrity tests on the Desert Peak 22-22 and 21-2 injection wells. Received UIC's notification of approval for the procedures. Mike approved.

- 14. Reviewed ORNI 15's sundry notice to perform 29 day injection tests on the Jersey Valley 15-27 injection well when the drilling of the well has been completed. Received UIC notification of approval for the injection tests. Mike approved.
- 15. Wells drilling: ORNI 43 Wild Rose 26-6 production well; ORNI 43 Wild Rose 65A-11 production well; ORNI 43 Wild Rose 85A-11 production well; ORNI 15 Jersey Valley 15-27 injection well.

OIL AND GAS (LOWELL)

- 1. Reviewed MTS Energy's sundry notice for a hole and casing size change in the Ferguson Spring 7-33, to be spudded within a few weeks. Mike approved.
- 2. Reviewed Major Oil's sundry notice to add additional perforation and testing intervals to the Eblana 1 testing program. Received BLM notification of approval. Mike approved.
- 3. Reviewed Winn Exploration's sundry request to use a modified BOP stack for the drilling at Ragged Ridge 30-1 in Railroad Valley. The well is permitted to 7,500 feet. Received BLM notification of approval. Mike approved.
- 4. Reviewed Makoil's Leoman Springs 1-32 permit application and drilling program. The well is proposed to be located in T10N, R56E, SW4 NW4 Section 1, and drilled to 4,000 feet. Target formation not described. BLM has requested more information on the proposed well, as well as access and the drilling pad.
- 5. Reviewed Makoil's answers to additional questions pertaining to the Leoman Spring1-32 proposed well in Railroad Valley. Questions given to Makoil pertained primarily to access road construction, pad construction, geological formations to be encountered, possible lost circulation zones, abnormal temperatures and pressures, and reclamation.
- 6. Met with Plains Exploration and the BLM at the Reno State Office to discuss permitting of oil wells in Nevada.
- 7. Drilling/Completion: Tomera Ranch 6X; Major Oil International Eblana 1; Winn Exploration Ragged Ridge 1-31; MTS Energy Ferguson Spring 7-33.

OTHER (LOWELL)

- 1. Worked booth at the Geothermal Resource Council annual convention Sunday through Wednesday, September 30th through October 3rd. The booth had a lot of traffic, in part due to the presence of John Snow, Ron Hess, and Judy Kareck representing the Nevada Petroleum and Geothermal Council (NPGS). NDOM shared the booth with NPGS in order for NPGS to attract new members to the society. NPGS raffling off a silver ingot helped with the traffic flow at the booth.
- 2. Met with representatives from Churchill County on Wednesday, October 10th. Discussed what NDOM, NDEP, DWR, and the BLM cover in their oversight of the geothermal industry. Churchill County is trying to decide if additional geothermal regulations are needed by the county. Eleanor Lockwood, Churchill County Manager, appeared to have been pleased with the discourse of the meeting.
- 3. Met with Plains Exploration and the BLM.
- 4. Attended the Interstate Oil and Gas Compact Commission annual meeting in San Antonio, Texas. The meeting took place from October 29th to October 31st. Principal topics of discussion were related to hydraulic fracturing activities in numerous States.