IN THE MATTER OF PERMIT 44411,

CERTIFICATE 13613, FILED FOR AN

UNDERGROUND SOURCE WITHIN

THE CLAYTON VALLEY, GROUND

WATER BASIN, ESMERALD COUNTY

NEVADA

Report No. 1233

General

Application 44411 was filed under the name of the Sunshine Mining Company on September 9, 1981, and requested a new appropriation of underground water for mining and milling purposes in support of the Applicant's Sixteen to One mining operation. A water right permit was issued by the State Engineer on January 16, 1984, in the amount of 3.0 cubic feet per second (cfs) with the permittee expected to achieve a beneficial use of the water by February 16, 1989. This deadline was met by the permittee who submitted a Proof of Beneficial Use, which was approved in full for 3.0 cfs with an annual duty not to exceed 576.74 million gallons.[1]

Application 21485 was filed on August 26, 1963 under the name of Mid-Continent Uranium Corp. and also requested a new appropriation of underground water for mining and milling purposes in support of the Applicant's Sixteen to One property. Application 21485 became a permit on December 29, 1964, with a permitted diversion Rate of 4.0 cfs with an annual duty of 181 acre-feet. The point of diversion is described as being within the SW¼ SE¼ of Section 32, T.2S.,R.38E.,M.D.B.&M., more specifically the Ebbley Tunnel. Certificate of Appropriation 7808 was issued under Permit 21485 on March 22, 1972 for 0.25cfs.[2]

On May 9, 2016, the Office of the State Engineer received a Motion to Declare Permit 44411, Certificate of Appropriation 13623, forfeited. Permit 21485. Permit 21485 was not included in this request.[1]

History of the Sixteen to One Mine

This report will focus primarily on Permit 44411, Certificate 13513, since it alone was the subject of the recent forfeiture request, but since Permit 21485, was essentially used for the same manner of use, within the same place of use during the same time period, many of the facts associated with Permit 44411 also pertain to Permit 21485.

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[1] File No. 44411, official records in the Office of the State Engineer.

[2] File No. 21485, official records in the Office of the State Engineer

Permit 44411 was filed to provide mining and milling water for the Sixteen to One mine which is located within the Silver Peak Mountain Range approximately 8 miles southwest of the town of Silver Peak. It resides within a mountainous area which is characterized by jagged peaks and deep narrow canyon and washes. While the mine site resides at an elevation of 7,200 ft, the maximum elevation in this area approaches 9,000 ft.

This portion of the Red Mountain Mining District also contains the Nivloc (Colvin spelled backwards) and the Mohawk Mine which were historic silver and gold producers. With the Nivloc credited with the production of 300,000 tons of silver and gold ore from 1937 to 1943.[3] The Sixteen to One unpatented lode claim was originally located on April 20, 1935 with a minor amount of surface work being done by the locater around that time. This low level of mining activity continued for many years, during which the original claim was maintained. New Park Mining Corp. took out a short term option which was soon after terminated. Additional changes in ownership of Permit 44411 from Sunshine Mining Company to Sunshine Precious Metals to American Reclamation, Inc, and to the current owner of record, Robert Mori, II have been acknowledged by the Office of the State Engineer.

The claims comprising the Sixteen to One were initially staked in 1935. The property experienced little development until 1961, when Callahan Mining Corporation acquired the property under a lease and option. By 1963 the property had been passed on the Mid-Continent Uranium Corporation with Mid-Continent retaining a 1/3 interest and Sunshine Mining Co. the remaining 2/3 interest. A talk by the mine's general manager at the 1966 Rocky Mountain Mineral Conference in Denver Colorado gives insight into the mines modern development. Mr. Ebbley, stated that the Sixteen to One was essentially a new mine; with a new adit driven 1,000 feet to the Silver Peak vein which was previously delineated by surface exposures and drilling. Mr. Ebbley (whose name was given to this tunnel), further states that while the Ebbley Tunnel was advanced, it encountered considerable water, that at the time flowed at approximately 500 gallons per minute.[3] Additional, more precise flow records are found within the file under Permit 21485 where monthly flows beginning in September 1963 (first flow) and continuing to May 1966 are presented. The maximum diversion occurring during May 1964 when a flow rate of 1,850 gpm was noted, similarly, a minimum flow equal to 450 gpm occurred during January, February and May 1966.[2] It must be assumed that during its active mine life, water was collected in some type of sump and artificially discharge from the mine. It is uncertain when ore production ceased at the Sixteen to One, but some insight is offered into that by tracing the path that the original Sixteen to One unpatented mining claim took. As previously found, this claim was located on April 20, 1935, and remained active until its case was closed by the BLM on September 9, 2002. At the time of its closure the claimants were still listed on the BLM's LR2000 website as Mid-Continent Mining and Sunshine Mining.[4]

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[3] Nevada Bureau of Mines and Geology, Mining District Files website, Red Mtn. Mining District, June 20, 2016.

[4] Bureau of Land Management LR2000 website, Mining Claims (Mass) Serial Register Page

Field Observations

This report is not intended and will not present conclusions as to the possible forfeiture of the water right in question, rather it will merely present the information acquired from various sources and a recent field investigation. As a response to the May 9, 2016 request to initiate a forfeiture action for Permit 44411, it was decided by the Nevada Division of Water Resource to send one of its field crews to the Sixteen to One Mine. Accordingly, the field team, after the necessary office preparation, arrived at the site on June 8, 2016.

While the mine is located at an elevation of approximately 7,000+ feet, within a region that is characterized by rugged topography dominated by highly altered rock outcrops, steep cliffs and ravines, access is easily made from the Town of Silver Peak, which lies 10 miles to the east.

The Nivloc Road represents the main access route to the mine. It is well maintained and marked for the majority of its course. After leaving the town, prior to entering Cottonwood Canyon, a modern mineral processing facility is passed, which appears to be largely intact. Several trucks and cars were parked at the mill, and based upon the old signage which read Sunshine Mining; this mill appears to have at one time been used to process ore from the Sixteen to One. Processing water for this mill is provided by a well under Permit 42563, which is currently held by Diversified Machine Technology, Inc.[5]

Figure 2 - Sign outside of processiong facility

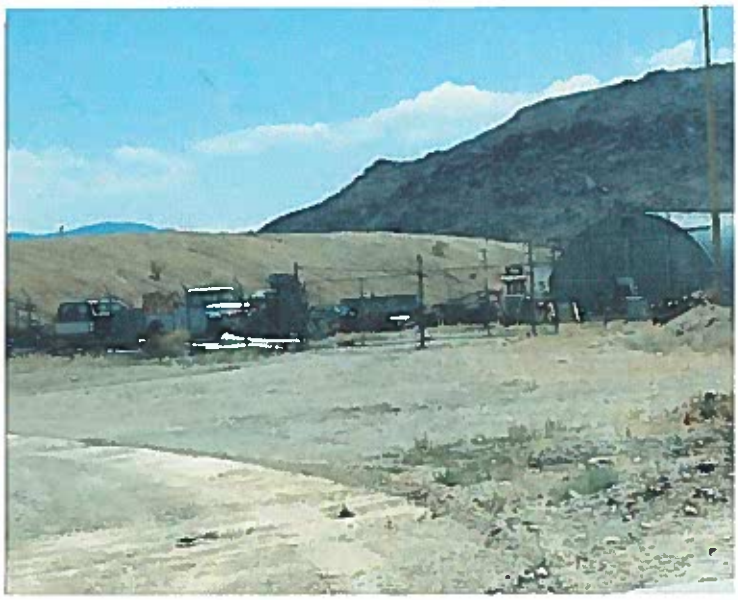

Figure 1 - Processing facility

Continuing west along the road, it begins to gain elevation as it enters the canyon. Eventually, the road splits, with a secondary road leading down to a small lake that appears in the distance. The path the Cottonwood Creek takes to Silver Lake is marked by a line of trees

[5] File No. 42563, official records in the Office of the State Engineer.

and plants, all of which have benefited from a good water year. On the way out, Silver Lake was visited, and numerous lengths and generations of water pipes evidentially once discharged into the lake. The lake was filled to capacity and was flowing out of the spillway in the general direction of the processing plant.

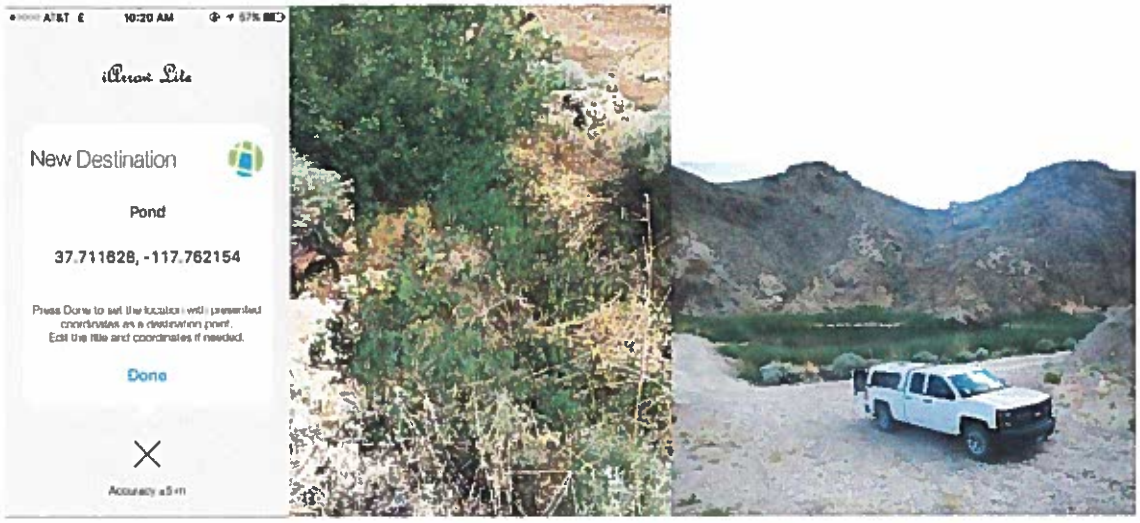

Figure 3 - gps of pipe at East end of Silver lake. Dry pipe at East end of Silver Lake. Picture of Silver Lake from the North looking South

As you approach the mine, the road becomes narrower and is in some places moderately washed out, but it is still passable. Eventually, the first major mine dump for the Sixteen to One is encountered. By continuing up the road an electric substation is passed that is still secured behind a fence. From this point the mine can easily be accessed.

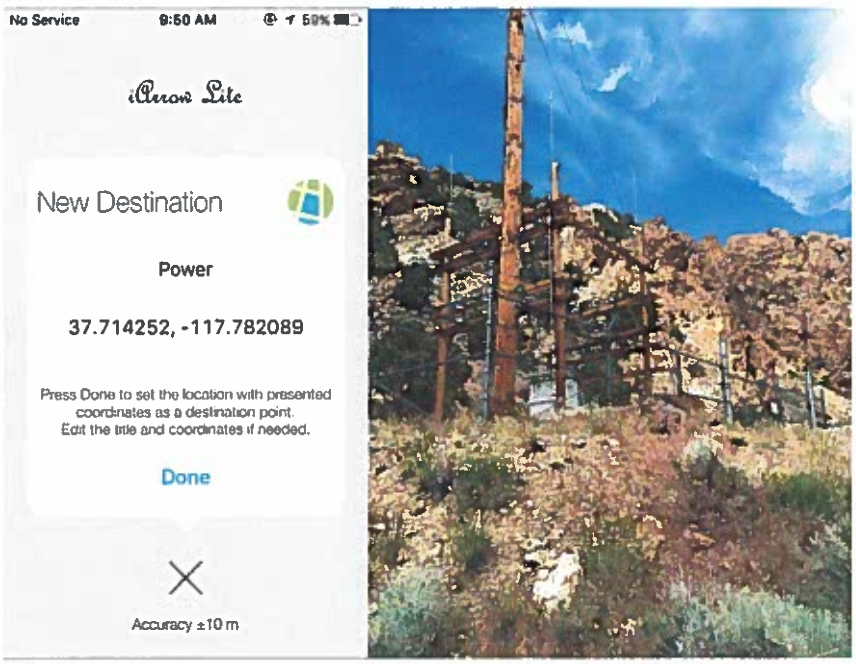

Figure 4 - GPS and Photograph of electric substation

Site Inspection

First impression upon arrival at the site of the Sixteen to One Mine is the complete lack of structures or mining equipment within the property. Two major workings were found that are separated by a short distance. The first one visited was the smaller of the two. At some time in its past, the portal of this horizontal working has collapsed or may have been purposely blasted shut, since this was a common method of sealing off closed mines to prevent unauthorized entry. A small hole in the portal debris, large enough for a person to slip through was found. No mine water emerged from this particular working. A second, much larger portal was encountered, which *may* be the Ebbley Tunnel that was driven during the early 1960's when Mid-Continent Uranium Co., in partnership with Sunshine Mining attempted to indentify and mine additional silver ore.

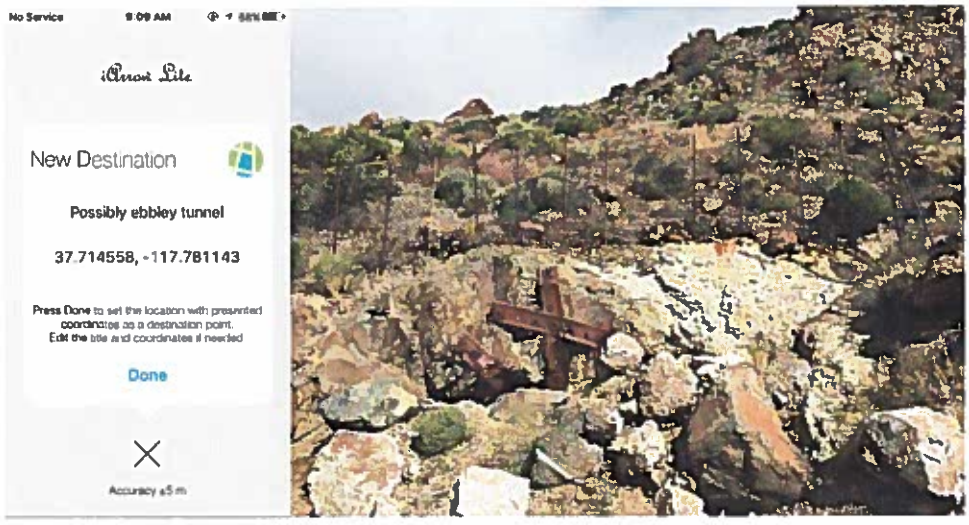

Figure 5 - GPS and photograph of collapsed portal. Note GPS is labeled incorrectly. This is not believed to be Ebbley Tunnel

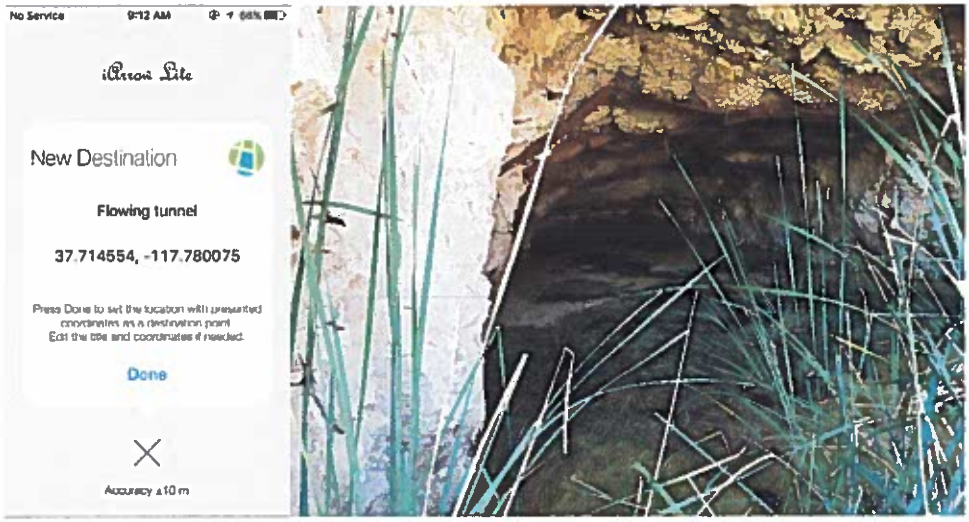

Figure 6 – GPS and Photograph of large tunnel found with flowing water.

It is difficult to judge the size of the portal since it is masked by clusters of trees and brush, making a closer inspection difficult. Judging from the amount of metal bracing bolted to the portal, the ground hosting the mine works may be somewhat unstable with associated risks. It would have been useful to attempt a flow measurement at the portal, however all along its short length the flow is both wide, shallow and dispersed, making an accurate measurement very improbable. It was however clear that the portal had not collapsed or been blasted shut. After the water leaves the portal of the mine, it flows into a shallow pond that resides near the southeast lip of the rock dump. Near this pond is a large tunnel cut through an outcrop, it abruptly ends with a sharp drop to the access road and the Cottonwood Creek channel, which was dry on the surface at the time of the visit.

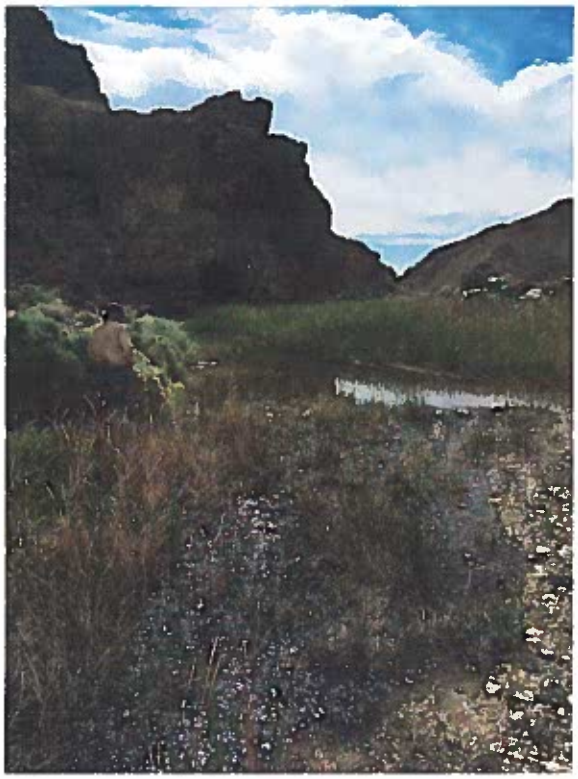

Figure 7 – shallow pond that resides near the southeast lip of the rock dump

Figure 8 – Photograph of large tunnel cut through an outcrop

While an active inflow into the pond is present, the discharge is much more difficult to find. A very limited flow of maybe several gallons per minute has cut though the bank of the pond and now flows a short distance down the rock dump. Before long it literally disappears into a jumble of ore and waste rock. A second flow of water that may be assumed to come from the mine workings was found flowing through a buried large diameter horizontal metal pipe. A

vertical access pipe creates a "T" with this pipe, with a nearby industrial pump/valve connection lying on its side, suggesting that water may have been once pumped from this source. But again there was no practical way to measure this flow with the equipment at hand. It was determined however that the flow was shallow.

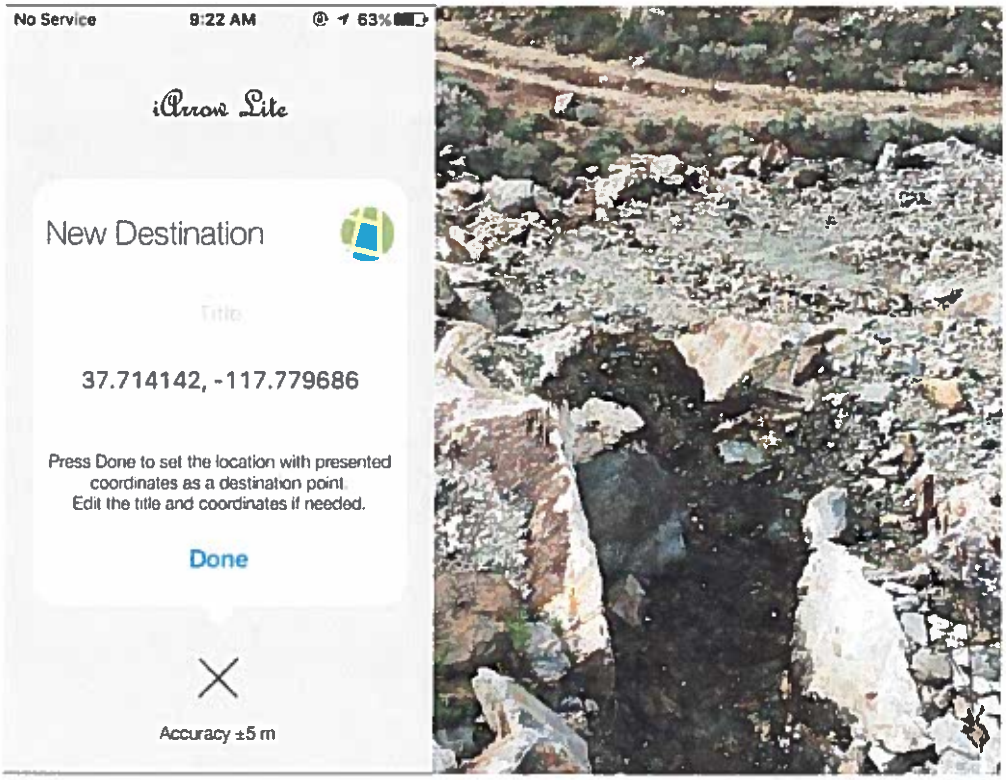

Figure 9 - Water that flows down and disappears into a rock dump

Figure 10 - horizontal pipe with water near the flowing tunnel

Figure 11 - Hose and valve connection near pipes with water in them

There can be no question that at some point in its mine life, a large diversion of water occurred at the Sixteen to One. Most of this water must have been mechanically removed from the mine, from a sump or the lower levels. While it is not present near the portal, except for the "T" pipe, a large diameter pipe would be required to convey the mine water to the channel of Cottonwood Creek and eventually the old milling complex. Near the foot of the dump, close to the canyon road, a length of large diameter metal pipe is found on the surface. It is disjointed and no longer capable of transporting water, but this may be the remnants of the pipeline from the Sixteen to One, if it is, it has reached a state of advanced decay. It is unknown if an additional buried pipe may be present.

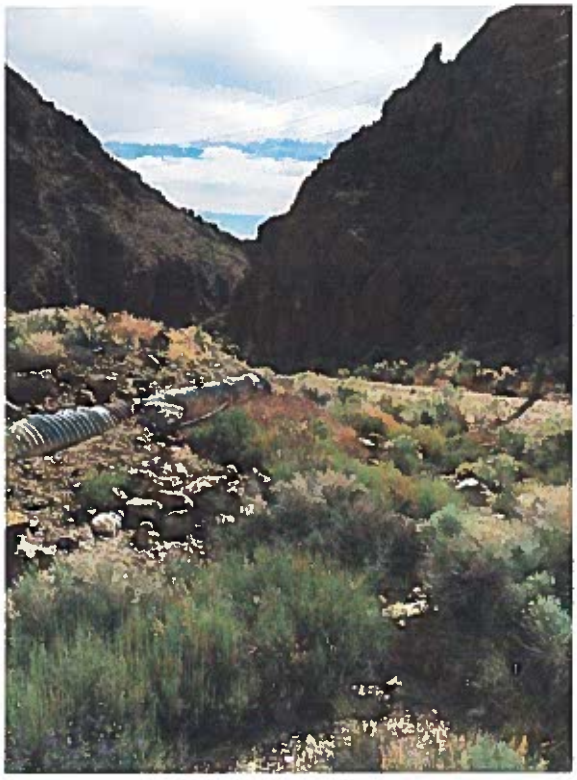

Figure 12 - Large diameter pipe near the foot of the rock dump

An attempt was also made to visit the point of diversion described by Permit 21485, Certificate 7808. The location of the point of diversion as described in the supporting map appears to be incorrect. Being located on the flank of a nearby hill, and not at the Ebbley Tunnel as it is described within the associated permit file. To verify that this point of diversion was misplotted, the hill side area was walked, and it soon became apparent that this location was wrong. The examination did find remnants of pipes, ditches and perhaps an old rock dam.

Figure 13 - Pipe found near the point of diversion described by Permit 21485

A Brief Review of the Sixteen to One Lode Unpatented Claim

If the BLM Surface Land Management 1:100 000 map is viewed it may be seen that there appear to be no patented lode claims at the Sixteen to One. A visit to the BLM's LR2000 website allows the status and ownership of the lode mining claims that were located within the NW¼ NE¼ of Section 5, T. 3S.,R.38E.,M.D.B.&M. Among those listed is the Sixteen to One claim, which was located on April 20, 1935. LR2000 identifies the claimants as Mid Continent Mining and Sunshine Mines Co. Most of the remaining claims seem to have been located during 1979 (Sixteen to One #1 through #13). The BLM's records show that the Sixteen to One mining file/case was closed on 09/01/2002, as were the additional Mid Continent Mining and Sunshine Mines Co. claims in the years 1991, 2000 and 2001.[4] It would appear, that based upon the LR2000 information that the original permittee allowed its Section 5 mining claims to lapse years ago.

Respectfully Submitted,

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Concurring;

Jake Echeverria

Well Supervisor

July 11, 2016