CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
1520 West Adams St.
Phoenix, AZ 85007
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

The following file is part of the

Arizona Department of Mines and Mineral Resources Mining Collection

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

PRINTED: 11/19/2001

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: LINDA GROUP

ALTERNATE NAMES:
SONORA
HAACK

YUMA COUNTY MILS NUMBER: 22

LOCATION: TOWNSHIP 4 S RANGE 19 W SECTION 36 QUARTER S2
LATITUDE: N 33DEG 01MIN 52SEC LONGITUDE: W 114DEG 10MIN 21SEC
TOPO MAP NAME: CASTLE DOME MTS - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
LEAD
SILVER
FLUORINE FLUORSPAR
BARIUM

BIBLIOGRAPHY:
KEITH, S.B., 1978, AZBM BULL. 192, P. 121
ADMMR LINDA GROUP FILE
ADMMR RUBY CLAIMS FILE

SONORA MINE
S¼ Cen 36, 4S 19W; N Cen 1 5S 19W

YUMA
CASTLE DOME DIST.

Haack Mine (Sonora Claims) R.F.C. files

Vince Apple (card)

1½-2' Barite-Fluorite Pb

See: Index of Mining Properties in Yuma County, Az.
Bulletin 192 - 1978; Pg. 121
Bureau of Geology and Mining Technology

NEW CHANCE AND LINDA CLAIMS YUMA CO.

GM/WR 2/28/79 - Lyman Wall owned the Linda and New Chance Mine. He has since sold the mine to the O.K.J. Corp., 3780 S. Fourth Avenue, Yuma, Az. 85364, phone: 726-1662. Lyman shipped ore from his property to ASARCO El Paso over the years. He told us that his last shipment was about two years ago. It took him 90 days to get his money, whereas in times past, he would get paid anywhere from ten to thirty days. Lyman said he was only working the dumps and had just started recovering fluorspar. His mill consists of a crusher, jigs and tables. He was trying to build a 10 ton/hr., however, because of lack of capital he never completed the mill. 4/30/79 a.p.

BARLOW'S MILL 10/17/69 YUMA COUNTY

Will mill Black Diamond Ore. It is about 1 mile east of Wall's property or Castle Dome. (FTJ WR 10/17/69)

SONORA MINE

YUMA

Has 4 claims in Castle Dome District near Castle Dome Mine, (1½ miles south). These have a vein, 4 feet in width, which assayed 10% lead and 5 oz. silver. Concentration tests obtained concentrate of 50-60% lead. 5/5/59 LAS Conf. Rep.

Dr. Burdick told of Wall's milling operation; it seems to be rather sporadic at Castle Dome. GW WR 6/5/70

Has 10 T/day gravity concentration mill and 10 unpatented claims in the Castle Dome District. Inquired about the possibilities of getting a Small Business Loan from the Federal government to expand his milling facilities to about 50 T/day. GW Conf. 10/7/70

Went on to Lyman Wall's camp in the Castle Dome district, although Mr. Wall wasn't available, two of his employees said they were revamping and enlarging the mill. GW WR 12/17/71

Mine visit and field interview at the Castle Dome District with owner Lyman Wall, 1182 8th Avenue, Yuma, and assistant Albert Wynn, 2313 Olivia, Yuma. They have erected what they had hoped to be a 100 ton per day mill but the operational capacity had turned out to be about 6 tons per hour. The ore is crushed in an 8 inch jaw crusher to minus ½" and fed to 4 series jigs. The product from the number 1 and 2 jigs is dewatered and shipped while the product from the number 3 and 4 jigs is tabled, dewatered and shipped. They have recently shipped a 20 ton load of concentrate to Asarco in El Paso. The concentrate runs between 30 and 50 oz. Ag per ton, approximately 35% lead and considerable fluorite for which they are penalized. The mill heads run approximately 10% lead and 10 oz. per ton in silver. They have opened three veins and are looking for anyone with mining experience to work two of the veins on a lease basis. They have the required equipment, hoists, drills, cars, etc., on the property. KAP WR 3/28/74

Vic Kral said that nothing except Lyman Wall's little mill could be called activity and it only runs occasionally. GW WR 12/12/75

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine NEW CHANCE AND LINDA CLAIMS Date 2/3/65

District Yuma County Castle Dome District Engineer Lewis A. Smith

Subject: Mine and Mill visit 2/3/65

PROPERTY: 2 sets of 4 claims each. (New Chance 1-4 and Linda, Linda Ext, and Linda 1 and 2) These are about 600 to 800 feet apart so that it was suggested that he acquire another claim that would tie the two claim groups together.

LOCATION: ½ mile from Flora Temple (SW).
The Flora Temple is approx at S 2-3, T5S, R19W. (the New Chance appears to be in Sec. 4).

OWNER: Lyman Wall, Box 17, Winterhaven, California.

WORK: The Linda Group has 200-foot shaft, and some shallow pits and cuts. According to Lyman Wall the shaft is open but needs some timbering at the collar and for a couple of short intervals below this. According to him the shaft reportedly has ore all the way down. The ore in places runs well. A 10-ft vein sample in a lense is said to have run 30 percent lead and 14 oz. silver.

GEOLOGY: At least three nearly parallel veins lie in rotten quartz diorite porphyry, (or quartz prophyry) trending nearly N-S but their north portions are tending to converge. Accurate dips could not be determined, although the "West" vein dips E and the "middle" vein dips W. The E and Middle veins are about 30 feet apart and the Middle and West veins are 15-20 feet apart. They appear to be crossing the NE-SW dike system at about 45-60 degrees. Most of the claims are covered by variable thicknesses of gravels. The New Chance Vein appeared to strike N 10-20 deg W and dipped 60-70 deg. W.

The ore appears to consist of galena, cerussite and some anglesite and discloizite (blackcoats) (?). Iron oxides mixed with lead oxide generally border the veins. The quartz porphyry and the diorite porphyry show sericitization and considerable limonite derived from pyrite. The micas and ferro-magnesian silicate(probably hornblende or augite) are well broken down near to the veins. Silification, in places is strong. The "pyrite" limonite did not appear to be present in the lead veins. The silver is apparently cerargerite and embolite in the oxidized ore and argentite with the galena. The discloizite (?) is sparse. Wall and a helper were screening and sorting the dump at the New Chance mine. At the New Chance an open stope, 50-60 feet long, 2-10 feet wide and of variable depth, is said to have yielded good ore.

MILL: The mill consists of a bin, a small Denver Type Jig, rolls and a small Wilfley type table. The table produces a rich concentrate and a middling that is rerun. The screening from the New Chance dump run 8-14 percent lead and a few ounces of silver. Two small lots of concentrates were recently shipped to El Paso, but no settlement had yet been made on them. Wall felt that they should run 40 percent or more lead and 10-14 ounces silver to the ton. It was suggested that table riffles be raised about 1/8-inch over a length of 2 feet so as to prevent the loss of silver and some lead which appeared to float over the present ones.

LINDA CLAIMS

CASTLE DOME DIST.
YUMA COUNTY

Visit and Conference with Lyman Wall, owner 6/2/65

Wall has reopened an old inclined shaft and deepened it to 60 feet. The shaft starts at 80 degrees W and flattens to nearly 45 degrees at the bottom. It lies on the contact between a dark schist and a diorite porphyry dike. The ore lies along the contact and is generally in the schist, but also may occur in the diorite. The strike of the contact appears to be about N 20-25 degrees W. The schist is in a band, 75-100 feet wide, and is bounded on the east by another diorite (?) porphyry dike. This contact is brecciated and also appears to be mineralized. The schist between the two dikes is severely altered and sheared parallel to the dikes. South about 150 feet of the shaft a rhyolite (?) porphyry dike appears to obliquely cross the zone. Detritus cover prevented the determination of the rhyolite porphyry's relationship but it is probably pre-mineral. The pay portion of the west contact zone is about 4 feet wide at the bottom of the shaft and this contains large kernels, pockets and veinlets of relatively high grade galena that is partly altered to cerussite and anglesite. The largest solid lead pocket is reported to have been about 3 feet in diameter. The schist east of the 4-foot zone appears to contain mill-grade ore (6 to 12 percent lead), but the extent of this is not known. Within the schist zone there are 4 other narrow mineralized zones or "veins" ranging from a few inches up to 2 feet in width. On the surface these 5 "veins", or zones that show a tendency to converge to the N-NW. North of the shaft 30-40 feet the zone is crossed by a transverse fault of unknown extent. It does not appear to have offset the zone, appreciably, but much more work will be required on the area in order to tell if it has much significance. The ore on the W contact seems to be widening in depth. Shallow workings north of the fault indicate that the contact continues for over 300 feet in that direction. These pits did not show noteable ore, although the rocks were severely altered, apparently equal in degree to that around the inclined shaft. The main mineralized zone at the shaft did not show much lead mineralization at the surface,either. Sporadic quartz (barren) crops out within the zone. Some of the inclined shaft dumps have been milled and yielded a concentrate that ran about 46-50 percent lead and 23-25 ounces silver to the ton. According to Wall this ore treats well. Four 9-10 ton lots of ore and concentrates have been shipped to El Paso and, on the average, assayed about 50 percent lead and 25-28 ounces silver to the ton.

Wall is preparing to drift along the 4-foot ore zone. However, due to the severely broken ground along the contact, this work would require timber.

MEMO LAS 6/2/65

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine LINDA CLAIMS Date October 4, 1967

District CASTLE DOME DISTRICT, YUMA COUNTY Engineer Robt. F. Playter

Subject: CONVERSATION WITH LYMAN WALL, Winterhaven, California.

When Mr. Wall did not appear at the Yuma A.S.M.O.A. Meeting, October 4, 1967, I telephoned him at his home. He says he is still operating his small mill on the Linda Claims, employing four men (when he can get them), but having a struggle. In spite of the difficulties, he intends to persevere.

Active: Nov 1967 - 4 men Active April 1968 - 4 men

Called Mr. Wall who mines the Linda occasionally. He wants 4 flotation cells.
FTJ WR 10/10/69

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine LINDA CLAIMS Date 2/8/67

District YUMA COUNTY CASTLE DOME DISTRICT Engineer Lewis A. Smith

Subject: VISIT and Conference with Lyman Wall, owner and Olin Taylor, Oscar Bierbnun and Walter C. Kelley 2/8/67

5 pepple are working at present, at the Linda and New Chance Claims. Wall has 2 men and himself; Taylor and Bierbnum are contract working a large dump, and Wall custom treats the ore. The dumps are screened through 1-inch mesh and the coarse material sorted. The principal mineral is cerussite with some anglesite and relict kernels of galena. The apparent gangue rock is partly diorite fragments with barite and fluorite pillars in the old stopes nearby also verify this. The fines are then milled by gravity jig and tables. The heads range from 5-12 percent lead but usually average nearer to 10 percent, with a few ounces of silver. Concentrates (last four 15-ton shipments) averaged about 50 percent lead and about 14 ozs silver to the ton (10-20 oz range). The silver generally seems to favor the cerussite rather than the galena. (This suggests that the silver may be cerargyerite (horn) which is relatively insoluble). Local lenses contain a little copper, zinc and gold, but the lead-silver appears to be later. Wall has at times, recently, milled ore on a commercial basis of 50-50 on the net smelter returns. Wall reported that he planned to install a trommel (1-inch openings) (4 feet long, $2\frac{1}{2}$ feet diameter) that is calculated to break up and free considerable fine lead-bearing material from the gangue. This now adheres to gangue particles. Fluorite is not now being saved on a commercial basis, although some of the coarser material is cobbled out for mineral dealers. Most of the later is fairly good crystalline material. Wall investigated the possibility of floating the fluorite, but found that the offered prices did not permit a profitable operation. The water situation is always tough too.

Astor Mine Visit 4/1967 5 man

Conference with young L. Wall (Lyman Wall, Sr. was in Phoenix 6/6/67.

Wall Jr. said that his father is in the process of relining the crusher and placing new cloth covers on his table. It was found that the water from a well between here and the Yuma Test Station area contained a reagent that apparently dissolved silver and this had considerably decreased recovery of silver in the concentrates, consequently no recent shipments have been made, although considerable acceptable dump ore is available. The "reagent" did not appear to affect the lead in any way. An attempt is being made to determine the character of this reagent. Meanwhile, water from another source will be tried to see if the trouble lies in the ore or in the water.

MEMO LAS 6/6/67

FILED

JUL 25 1966

LINDA MINE & MILL

YUMA COUNTY
CASTLE DOME DIST.

Visit and Conference with Lyman Wall, owner and operator 6/8/66.

Wall has been operating steadily since the last visit 4 months ago. He has developed a mineralized zone in the Linda very close to ore immediately under the area we projected 8 months ago as quite prospectable. The surface indications are not too good but the structure is, and there are spots of residual galena, cerussite and anglesite at widely scattered intervals within the area, At 60 to 80 feet below the surface over a width of 8 feet, Wall is developing a stope. Here the principal ore mineral is cerussite with fairly prevalent kidneys or nodules of rounded galena some of which reach up to 1 foot in maximum dimension and will weigh as much as 125-150 pounds. This galena and white cerussite are in a gangue of fluorite, with a little barite and calcite. The mineralized zone is along the contact between the schist and a dike which looks like quartz-diorite porphyry. Farther to the east a rhyolite-like dike sporadically outcrops. Farther north in an old open cut a spot of good oxidized ore was found under an old dump, while sorting the dump. This is said to assay approximately 15-18 percent lead. The sorting of old dumps continues. Some of this dump material consists of several alternating layers of ore and waste, 6 inches to a foot thick. The waste material is screened to save the fines which are good. The ore layers are sorted to remove coarse waste or fluorspar (which is commercial if in clean pieces of over $\frac{1}{2}$-inch in diameter). The various materials are then blended in a head bin that holds about 50 tons. Wall says that he does well in the mill with lead recovery, but he does not think he recovers sufficient silver value, because the silver is in the form of very finely divided "horn" and he only crushes to 8-10 mesh for concentration by jig and tables. Water for concentration is hauled in a 5000 gallon tank from a well 3 miles away. This is stored in a cistern near the mill. About 40-50 percent of the metallurgical water is recovered. The Linda underground ore, after the larger galena and cerussite are sorted out, will concentrate 5:1 so that the concentrate runs 35-50 percent lead with several ounces of silver. The dump material concentrates on a 3-4:1 ratio and the concentrate runs 30 percent lead.
The concentrate and sorted ore are combined and trucked to El Paso (15 tons per load). Wall said the gross smelter returns for May; on 30 tons of material, were $3,000 or roughly $100 per ton. So far in June he has a half load that runs 45 percent lead. His tests indicate that material he loses does not have sufficient value to warrent much expenditure for additional recovery.

MEMO LAS 5/8/66

Visit to Mine and Mill 10/5/66

No one was at the mine but fresh tracks were fairly common around the place. It was learned from the gate watchman at the missel section (Yuma Test Station) the work was going on the week before. The road from Yuma Test Station ($5\frac{1}{2}$ miles) was really rought because of a gully washer over the week end. The mill tailings dump had been enlarged considerably.

LAS MEMO 10/5/66

It was reported that Jose Maria, Cooper Bierbau and Olsen Taylor were working with Tom Wall, near the end of December at the Linda Mine, Castle Dome District, Yuma Co. Wall is mostly working old dumps.

LAS WR 1/20/67

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine LINDA CLAIMS Date 10/6/65

District Castle Dome Dist., Yuma County Engineer Lewis A. Smith

Subject: Visit and Conference with Mrs. Larry Keiling and Harry R. Hand, Dome Center.

No one was at the mine but the tailings at the mill were wet and Mrs Keiling said Wall had worked there during the past week end. Wall works on a canal repair job during the week and probably will be back for regular mining. Attempts to contact Wall failed. However, the tailings dump at the mill indicated that considerable ore had been treated since the June visit, and this ore closely resembles that now stored in the Linda Shaft bin. This ore contains considerable cerussite, anglesite and some discloizite. Some lenses of galena occur in the vein, according to Wall. Hand reported that Larry Keiling said that he had done some work for Wall during the last couple of months and that he and Wright planned to start again shortly at the Ruby I.

LINDA CLAIMS

CASTLE DOME DIST.
YUMA COUNTY

Visit and Conference with Lyman Wall, owner 6/2/65

Wall has reopened an old inclined shaft and deepened it to 60 feet. The shaft starts at 80 degrees W and flattens to nearly 45 degrees at the bottom. It lies on the contact between a dark schist and a diorite porphyry dike. The ore lies along the contact and is generally in the schist, but also may occur in the diorite. The strike of the contact appears to be about N 20-25 degrees W. The schist is in a band, 75-100 feet wide, and is bounded on the east by another diorite (?) porphyry dike. This contact is brecciated and also appears to be mineralized. The schist between the two dikes is severely altered and sheared parallel to the dikes. South about 150 feet of the shaft a rhyolite (?) porphyry dike appears to obliquely cross the zone. Detritus cover prevented the determination of the rhyolite porphyry's relationship but it is probably pre-mineral. The pay portion of the west contact zone is about 4 feet wide at the bottom of the shaft and this contains large kernels, pockets and veinlets of relatively high grade galena that is partly altered to cerussite and anglesite. The largest solid lead pocket is reported to have been about 3 feet in diameter. The schist east of the 4-foot zone appears to contain mill-grade ore (6 to 12 percent lead), but the extent of this is not known. Within the schist zone there are 4 other narrow mineralized zones or "veins" ranging from a few inches up to 2 feet in width. On the surface these 5 "veins", or zones that show a tendency to converge to the N-NW. North of the shaft 30-40 feet the zone is crossed by a transverse fault of unknown extent. It does not appear to have offset the zone, appreciably, but much more work will be required on the area in order to tell if it has much significance. The ore on the W contact seems to be widening in depth. Shallow workings north of the fault indicate that the contact continues for over 300 feet in that direction. These pits did not show noteable ore, although the rocks were severely altered, apparently equal in degree to that around the inclined shaft. The main mineralized zone at the shaft did not show much lead mineralization at the surface,either. Sporadic quartz (barren) crops out within the zone. Some of the inclined shaft dumps have been milled and yielded a concentrate that ran about 46-50 percent lead and 23-25 ounces silver to the ton. According to Wall this ore treats well. Four 9-10 ton lots of ore and concentrates have been shipped to El Paso and, on the average, assayed about 50 percent lead and 25-28 ounces silver to the ton.

Wall is preparing to drift along the 4-foot ore zone. However, due to the severely broken ground along the contact, this work would require timber.

MEMO LAS 6/2/65

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine NEW CHANCE AND LINDA CLAIMS Date 2/3/65

District Yuma County Castle Dome District Engineer Lewis A. Smith

Subject: Mine and Mill visit 2/3/65

PROPERTY: 2 sets of 4 claims each. (New Chance 1-4 and Linda, Linda Ext, and Linda 1 and 2) These are about 600 to 800 feet apart so that it was suggested that he acquire another claim that would tie the two claim groups together.

LOCATION: ½ mile from Flora Temple (SW). /
The Flora Temple is approx at S 2-3, T5S, R19W. (the New Chance appears to be in Sec. 4).

OWNER: Lyman Wall, Box 17, Winterhaven, California.

WORK: The Linda Group has 200-foot shaft, and some shallow pits and cuts. According to Lyman Wall the shaft is open but needs some timbering at the collar and for a couple of short intervals below this. According to him the shaft reportedly has ore all the way down. The ore in places runs well. A 10-ft vein sample in a lense is said to have run 30 percent lead and 14 oz. silver.

GEOLOGY: At least three nearly parallel veins lie in rotten quartz diorite porphyry, (or quartz prophyry) trending nearly N-S but their north portions are tending to converge. Accurate dips could not be determined, although the "West" vein dips E and the "middle" vein dips W. The E and Middle veins are about 30 feet apart and the Middle and West veins are 15-20 feet apart. They appear to be crossing the NE-SW dike system at about 45-60 degrees. Most of the claims are covered by variable thicknesses of gravels. The New Chance Vein appeared to strike N 10-20 deg W and dipped 60-70 deg. W.

The ore appears to consist of galena, cerussite and some anglesite and discloizite (blackcoats) (?). Iron oxides mixed with lead oxide generally border the veins. The quartz porphyry and the diorite porphyry show sericitization and considerable limonite derived from pyrite. The micas and ferro-magnesian silicate(probably hornblende or augite) are well broken down near to the veins. Silification, in places is strong. The "pyrite" limonite did not appear to be present in the lead veins. The silver is apparently cerargeite and embolite in the oxidized ore and argentite with the galena. The discloizite (?) is sparse. Wall and a helper were screening and sorting the dump at the New Chance mine. At the New Chance an open stope, 50-60 feet long, 2-10 feet wide and of variable depth, is said to have yielded good ore.

MILL: The mill consists of a bin, a small Denver Type Jig, rolls and a small Wilfley Type table. The table produces a rich concentrate and a middling that is rerun. The screening from the New Chance dump run 8-14 percent lead and a few ounces of silver. Two small lots of concentrates were recently shipped to El Paso, but no settlement had yet been made on them. Wall felt that they should run 40 percent ore more lead and 10-14 ounces silver to the ton. It was suggested that table riffles be raised about 1/8-inch over a length of 2 feet so as to prevent the loss of silver and some lead which appeared to float over the present ones.