



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: 08/07/2001

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: H H & L MINE GROUP

ALTERNATE NAMES:

CASS

NEW YEAR NO. 2 AND 3

LA PAZ COUNTY MILS NUMBER: 345

LOCATION: TOWNSHIP 3 S RANGE 23 W SECTION 4 QUARTER NE
LATITUDE: N 33DEG 11MIN 53SEC LONGITUDE: W 114DEG 37MIN 40SEC
TOPO MAP NAME: PICACHO NW - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

MANGANESE

BIBLIOGRAPHY:

KEITH, S.B., 1978, AZBM BULL. 192, P. 181

ADMMR H.H. & L. MINE GROUP FILE

USBM IC 7843

GEOEXPLORERS INTERNTL, VOL 6 (ADMMR GEO FILE)

PARKER, FRANK (ADMMR GEOLOGY FILE)

a. B. M. Bull 192

Trigo Mountains (Cibola) District, Table 4 Cont.

MINING DISTRICT AND MINES	LOCATION T. R. Sec.	MINERAL PRODUCTS	GEOLOGY	TYPE OF OPERATION AND PRODUCTION	REFERENCES
1. ABC mine (Self, Cockrum & McNelly)	2S 22W SE ¹ ₁ Protracted	Mn	Psilomelane in brecciated wall rock in parallel shear veins in Tertiary andesitic volcanics.	Open cut operations, worked in 1948-1950 and in 1954-1955, producing some 400 long tons of about 41% Mn.	Farnham & Stewart, 1958, p. 81 ABM Bull. 180, p. 219 ABM file data
2. Andrus claims (M & A; Tenny, Western Exploration & Development Co.)	2S 22W SE ¹ ₂₀ Protracted	Mn	Psilomelane in bunches and veinlets along a fracture zone in Tertiary andesitic volcanics.	Open cut and pit operations. Some 50 - 100 long tons of sorted 40% Mn ore shipped and 3000 long tons of low grade Mn ore sent for experimental concentration.	Farnham & Stewart, 1958, p. 81 ABM file data
3. Black Diamond mine group (Myrtle; Gibson, Todd & Smith, J. P. Stewart & Associated, Todd & Allen, Western Exploration & Development Co.)	2S 22W E Cen ²⁹ Protracted	Mn, Pb-, Zn-	Pyrolusite and psilomelane, mixed with calcite and brecciated rock, in lenticular shoots along an extensively brecciated shear zone in Tertiary andesite porphyry. Trace amounts of lead and zinc.	Open cut, shaft, and adit operations. Worked from 1953 through 1959, producing some 4600 long tons of plus 40% Mn and 9000 long tons of about 30% Mn.	Mining World, Vol. 19, Dec. 1957, p. 65 Farnham & Stewart, 1958, p. 80-81 ABM file data
4. Black Jack mine (Montoya, Gerlack, J. P. Stewart & Associates, Western Exploration & Development Co.)	2S 23W SW ¹ ₁₃ Protracted	Mn	Manganese oxides in disconnected, lenticular shoots, with calcite and brecciated rock, along a fracture zone in Tertiary andesitic volcanics.	Open cut and shaft operations. Worked from 1954 through 1959, producing some 650 long tons of plus 40% Mn sorted ore.	Farnham & Stewart, 1958, p. 81 ABM file data
5. Cibola No. 1 mine (N. & J. F. Powers)	3S 23W N Cen ²	Mn	Pyrolusite with some manganite and psilomelane, mixed with calcite and quartz, in lenticular shoots, fracture fillings, and narrow seams cementing brecciated wall rock along an extensive and wide, brecciated zone at the fault contact between Mesozoic granitic schist and Tertiary andesitic volcanics.	Incline shaft operations. Worked from 1953 through 1954, producing some 2000 long tons averaging about 30% Mn.	Mining World, Vol. 19, Dec. 1957, p. 65 Farnham & Stewart, 1958, p. 79 ABM file data
6. Cibola No. 3 mine (N. & J. F. Powers, Manganese Mg. & Millg. Co.)	2S 23W S Cen ³⁵ Protracted	Mn	Pyrolusite with manganite and psilomelane, mixed with quartz and calcite, in irregular shoots in a lensing brecciated zone in Tertiary andesitic volcanics.	Adit and shaft operations. Worked from about 1953 through 1958, producing some 500 tons of 30 - 40% Mn ore.	Farnham & Stewart, 1958, p. 79 ABM file data
7. Cibola No. 7 mine (J. F. Powers)	2S 23W SW ¹ ₂₅ Protracted	Mn	Pyrolusite mixed with wall rock breccia and calcite in a steeply dipping fracture zone with disconnected, lenticular, mineralized lenses in Tertiary andesitic volcanics.	Shaft, tunnel, and open cut operations. Worked from 1955 into 1959, producing some 4000 long tons averaging about 30% Mn.	ABM file data
8. Cibola No. 8 mine (N. & J. F. Powers)	2S 23W SW ¹ ₂₅ Protracted	Mn	Pyrolusite with calcite, other carbonates, and wall rock breccia in discontinuous, lenticular shoots along a strong fracture zone cutting Tertiary andesitic volcanics.	Shaft and open stope operations. Worked from 1953 to 1956, producing some 3000 long tons of 25 - 30% Mn ore.	Farnham & Stewart, 1958, p. 79-80 ABM file data
9. Fools Folly mine (Snipers, Smith, Jarroll, and Richardson) (Not shown on district map)	1N 21W W Cen ¹ E Cen ²	Mn	Pyrolusite mixed with brecciated wall rock in shoots along a fracture zone in Tertiary andesitic volcanics.	Shaft, adit, and open cut operations. Worked as early as 1930 and later in 1954-1955, producing some 300 long tons averaging about 20% Mn.	Farnham & Stewart, 1958, p. 82
10. Grand Central mine (Mexican operators, Hardt)	1S 23W Cen ³⁶ Protracted	Au, Ag-	Spotty, high-grade gold with minor silver, with banded quartz, iron oxides, ferruginous calcite, pyrite crystals and bunches, in cavities and fracture fillings along a fault zone cutting Mesozoic schist, intruded by granite porphyry dikes. Other similar deposits 1 to 2 miles to south (Jupiter, Boardway).	Shaft and open cut operations. Worked sporadically in early to late 1890's and again in 1930's. Total estimated and reported production from all the deposits would be some 52 tons of ore averaging better than 1 oz. Au/T and minor silver.	Wilson, 1933, p. 72; 1934 (rev. 1967), p. 148 ABM file data
11. H. H. and L. mine group (Cass, New Year Nos. 2 & 3; Hess, Hess & Lilly, Kirk & Lea)	3S 23W NW ¹ ₃ NE ¹ ₄	Mn	Psilomelane and pyrolusite in irregular, disconnected masses and veinlets in brecciated and silicified Tertiary andesitic volcanics along fault zones.	Open pit operations. Worked in 1953 and 1954, producing some few hundred long tons of 20-40% Mn ore.	Farnham & Stewart, 1958, p. 80 Parker, 1966 ABM file data
12. Peggy B mine (Brown)	3S 23W NE ¹ ₃	Mn	Pyrolusite, mixed with calcite and brecciated wall rock, in lenticular shoots along a fracture vein in Tertiary andesitic volcanics.	Shaft operation. Worked in 1954-1955, producing some 100 long tons of 20-30% Mn ore.	Farnham & Stewart, 1958, p. 80 Parker, 1966
13. Trigo gold placers (Various operators)	2S 23W 1 & 2	Au	Spotty gold placer deposits in stream beds draining from small gold quartz veins in Mesozoic schist.	Dry placer operations on small scale, and intermittently, from as early as 1860's into 1940's. Possibly as much as some 323 ounces of gold were recovered containing a few ounces of silver.	Wilson, 1961, p. 25 Johnson, 1972, p. 75-76 ABM file data
14. Triple H mine group (Rosie, J. P.; Bishop, Brown, Western Exploration & Development Co.)	2S 23W SE ¹ ₃₉ SW ₃₅	Mn	Manganese oxides, with calcite and brecciated wall rock, in irregular bunches and lenses along strong fracture zones in Tertiary andesitic volcanics.	Open cut and adit operations. Worked intermittently from 1954 through 1959, producing some 2000 long tons of low grade Mn ore for concentration.	Farnham & Stewart, 1958, p. 80 ABM file data
XXIX. Yuma District (Yuma area)	8S-9S 23W ---	Au, Ag, Fe	Gold-bearing quartz veins and stringers along fault and fractures in Mesozoic or Laramide granitic gneiss.	One mine operation as noted below.	Wilson, 1933, p. 221 ABM file data
1. Jude mine group (Silverfields; Hedgepeth, Timmons & Gutchmaker, Burton, Fay Mg. Co.) Figure 2	8S 23W N Cen ³⁴	Au, Ag, Fe	Gold-bearing, iron-stained quartz, with local pyrite and pockets of limonite, in stringers and veins along fractures and faults in Mesozoic or Laramide gneiss.	Shaft and open cut operations. Worked originally in early 1900's and later in 1939-1940, and 1947, producing some 450 tons of ore averaging about 0.3 oz. Au T with minor Ag.	

280

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Kirk & Lee Date May 27 1954
District Silver District - Yuma County Engineer Mark Gemmill
Subject: Preliminary examination

Ownership: Kirk and Lee, Bell, California - owners and operators

Location: 4 miles in a southeasterly direction from Cibola Lake

Geology: Volcanic country with a narrow streak of manganese ore along probably a fault plane. This has a north and south trend and is almost vertical.

Development: The vein has been opened with an open cut along the vein for about 200 ft. A shaft is being sunk about in the center of this which is down about 20 ft.

Production: Small shipments of ore have been made to the Wenden depot, running 40% plus. Probably 50 tons have been shipped.

Equipment: Gas Compressor

Comment: The vein appears to be quite persistent but very narrow. There is no width greater than a foot showing anywhere on the surface. The operators plan to sink to see if there will be any improvement in depth. 4 men are employed.

IC 7843, p. 80

See 20 July 1954 30

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Cass Mine

Date May 26, 1954

District Silver - Yuma County

Engineer Mark Gemmill

Subject: Preliminary Examination

OWNERSHIP

Kirk and Lee, Bell, Calif. owners. Lessees - H. H. & L Co. Blythe, Cal.

LOCATION

About 4 miles in an easterly direction from Cibola Lake

GEOLOGY

Volcanic country with an irregular brecciated zone mineralized with manganese

PRODUCTION

15 TONS OF SORTED ORE HAS BEEN SHIPPED TO THE Wenden depot, running 30% plus. About 300 to 400 tons of ore is piled which was too low grade to ship.

COMMENT

The property is shut down at present with no information as to whether or not any further work is planned. The ore mined was taken from a surface exposure and there is nothing to indicate its extent. It might be an isolated bunch.

KIRK AND LEE (OWNERS)
Bell, California

May 26, 1954

MINE: Cass Mine, Silver Dist., Yuma County - About 4 mi. E from Cibola Lake

LESSEES: H. H. & L. CO., Blythe, California

May 27, 1954

MINE: Kirk & Lee, Silver Dist., Yuma County - 4 Mi. in SE direction from Cibola Lake. Kirk & Lee Operators.

reference :

IC 7843 pg 80

NUMBER	FILE	CONT	CONT1	PRINAME					
345	F	0	N	HH & L MINE GROUP					
ALTNAME1				ALTNAME2					
CASS				NEW YEAR NO. 2 AND 3					
ALTNAME3				ALTNAME4					
ALTNAME5				ALTNAME6					
CURSTAT		MNAME			NLATDEG		NLATMIN		
PAST PRODUCER		PICACHO NW - 7.5 MIN			33		11		
NLATSEC	WLONGDEG	WLONGMIN	WLONGSEC	TOWN	RANGE	SECTION	QUARTER	COM1	
53	114	37	40	3 S	23 W	4	NE	MN	
MOD1	COM2	MODI2	COM3	MODI3	COM4	MODI4			
COM5	MODI5	COM6	MODI6	COM7	MODI7				
BIB1									
KEITH, S.B., 1978, AZBM BULL. 192, P. 181									
BIB2									
ADMMR H.H. & L. MINE GROUP FILE									
BIB3									
USBM IC 7843									
BIB4									
GEOEXPLORERS INTERNL. VOL 6 (ADMMR GEO FILE)									