

Pherrin, and A. W. Ward, additional Directors. The Super-Silica Corp. owns 400 acres and has a lease on 400 acres more of silica ground. It is equipped with a 60-ton silica plant. American Tripolite Products Co., Inc., is a close corporation with home office at 44 E. 23rd St., New York City, and local office at Goldfield. The company owns 160 acres of silica land N. W. of Cuprite and has erected a plant with a capacity of 3 tons per h. to 325-mesh. J. N. Theo owns a sulphur deposit from which he has shipped sulphur to Honolulu for fertilizing purposes since 1915.

**Bibliography.** MR1908 I 483      MR1913 I 821      MR1917 I-274  
 MR1912 I 792      MR1915 II 112 Potash      MR1918 I 235  
 MR1917 II 113 Potash, 410-1 Sulphur  
 USGS Lida topographic map

Ball 285 59-61.

Ball 308 46, 69-71.

Hill 507 206.

Ransome, F. L., "The Geology and Ore Deposits of Goldfield, Nevada",  
 USGS PP 66 (1909) 109-110.

Weed MH 1182 Cuprite Copper Co., Cuprite Esmeralda Sulphur Co.  
 Cuprite Sulphur Corp.

### DIVIDE (Gold Mountain)

#### Silver, Gold, Lead

**Location.** Six miles S. of Tonopah, the road to Goldfield crosses its highest summit which is on the flank of Gold Mt. and known as the "Divide". The Divide District was named after this summit which is situated at its center. The general altitude of the district is 6,000 ft. Gold Mt. has an elevation of 6,600 ft. and is one of a number of isolated hills, the highest of which is 7,000 ft. The Tonopah District in Nye Co. adjoins the Divide District on the N.

**History.** Runge and Rochelle discovered the gold vein of the Tonopah Divide Mine in 1901 and the Tonopah Gold Mt. M. Co. was organized to work it the following year. Wingfield and Brounger reorganized this company as the Tonopah Divide M. Co. in 1912. In 1917 Brounger struck rich ore in the silver vein while crosscutting for the gold vein, and by 1919 a mining boom was in progress which rivalled the Goldfield rush. Some 350 mining claims covering 40 sq. m. were located over an area of 100 sq. m. having Gold Mt. as its center, but the boom collapsed after a few months. Ore was found upon a few of the properties; while others, which saw no chance of success with their Divide holdings and had money in their treasuries, used their funds to explore more favorable prospects in other districts.

**Production.** The principal production of the district has come from the Tonopah Divide Mine. This mine produced \$282,107.83 in 1919, made similar productions in 1920 and 1921, and in 1922 milled 18,885 tons with a return of \$552,752.95.

**Geology.** The prevailing country rock is the Fraction rhyolite breccia of the Tonopah District, according to Knopf. Siebert lake bed tuffs interstratified with this breccia place its age as Upper Miocene. Some rhyolite flows are also associated with it, and it is intruded by several rhyolite stocks corresponding to the Tonopah Oddie rhyolite, and also by a large mass of Divide andesite. Latite flows of Pliocene age rest unconformably upon the Miocene rocks.

**Ore Deposits.** The principal orebodies are silver-bearing zones of fracturing

and shearing in the Fraction rhyolite breccia. The lode filling consists of slightly mineralized rhyolite breccia containing a small amount of disseminated pyrite and cut by thin stringers of quartz. The silver is present mainly in the form of hornsilver concentrated in rich masses along irregular seams of sericite in the lodes. The rare molybdenum minerals, molybdenite and powellite are found in the ore of the Tonopah Divide Mine. A few narrow gold veins occur in the Oddie rhyolite. The vein filling of these veins consist of brecciated rhyolite cemented by quartz, and an unidentified mineral resembling apatite.

**Tonopah Divide Mine.** The Tonopah Divide M. Co., which owns the principal mine in the district, was incorporated in Nevada in 1912 with a capital stock of 1,250,000 shares of \$1 par value of which 1,014,800 have been issued. The stock is listed on the San Francisco Stock Exchange and the New York Curb. E. B. Brougher is Pres.; W. J. Douglas, V. P.; E. J. Erickson, Sec.-Treas.; with E. W. Blair and C. A. Heller, additional Directors. Wm. Watters is Supt. at Tonopah. The company owns 14 patented claims aggregating 160 acres in the center of the Divide District. The property is developed by a 1,445-ft. shaft and 5 m. of workings and equipped with motor-driven machinery including 2 hoists and 2 compressors.

**Other Mines.** There are 9 other active companies in the district:—The **Belcher Ex. Divide M. Co.**, of which A. Walz is Pres. and A. Kelly in charge at Tonopah, owns 9 claims situated 1 m. W. of the Tonopah Divide Mine and developed by shafts 110 ft. and 300 ft. in depth. The **Brougher Divide M. Co.**, of which E. B. Brougher is Pres. and G. Hanson is Supt. at Tonopah, owns 72 acres N. of the Tonopah Divide developed by a 500-ft. shaft and a 296-ft. winze and equipped with electric hoist and compressor. The **Divide Ex. M. Co.**, of which Z. Kendall is Pres. and E. J. Bevis, Supt., owns 20 acres adjoining the Tonopah Divide on the N., developed by shafts of 425 ft. and 200 ft. and equipped with electric hoist and compressor. The **Gold Zone Divide M. Co.**, of which W. Forman, 216 State Bank Bldg., Tonopah, is Pres., and H. R. Bradley, Supt., owns 9 claims adjoining the Tonopah Divide on the S., developed by a 900-ft. shaft and 1½ m. of workings, and equipped with electric hoist and compressor. The **Tonopah Hasbrouck M. Co.**, of which A. A. Busey is Pres.-Mgr. and A. A. Codd, 421 Clay Peters Bldg., Reno, is Sec., owns the old Hasbrouck Mine, 1 m. W. of the Tonopah Divide, developed by shaft and tunnel and equipped with hoist and compressor. The **New Alto Divide M. Co.**, of which J. Mayer is Pres.-Mgr. and B. Gill is Sec.-Treas., owns 4 claims E. of the Tonopah Divide developed by a 400-ft. shaft and equipped with hoist and compressor. The **New Sutherland Divide M. Co.**, of which C. R. Evans, Goldfield, is Pres. and J. B. Kendall, Mgr., owns 7 claims 1½ m. N. of the Tonopah Divide, developed by a 900-ft. incline shaft, and equipped with a 50 hp hoist. The **Tonopah Dividend M. Co.**, of which E. P. Cullinan, 219 State Bank Bldg., Tonopah, is Supt., owns 85 acres adjoining the Tonopah Divide on the N., developed by shafts of 850 ft. and 400 ft., and equipped with electric hoist and compressor. The **Reorg. Belcher Divide M. Co.**, of which N. M. McCormick is Pres. and S. E. Jameson, Supt., owns 4 patented claims ½ m. N. W. of the Tonopah Divide, developed by a 550-ft. shaft and equipped with electric hoist and compressor.

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• M&SP Editorial, "The Geology of the Divide District", 118 (1919) 622.

• Sizer, F. L., "The Divide District", M&SP 118 (1919) 631-3.

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———"Geology of the Tonopah Mining District", USGS PP 42 (1905) 99.

———"Genetic Relations of Western Nevada Ores", T AIME 36 (1906), 381.

→ Weed MH 1127-1378 Describes 215 Divide mining companies. ←

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### DYER

#### Silver, Lead

**Location.** The Dyer District is located E. of Dyer's ranch in the foothills of the W. flank of the Silver Peak Range in W. Esmeralda Co. Coaldale on the T. & G. R. R. is 28 m. N.

**History.** The district was first prospected in 1863 and 1864; again and more intensively from 1884 to 1887 when a little ore was shipped; and once more at the time of the Goldfield boom, some lead-silver ore being shipped in 1912.

**Geology.** The ore deposits occur in Ordovician limestone a short distance from a small body of intrusive granite. They are bedding-plane deposits in irregular zones of crushed and decomposed limestone, according to Spurr, and the ore consists of erratic bunches of quartz containing black copper-silver sulphide, in places oxidized to copper carbonate, iron oxide, and silver chloride.

**Bibliography.** MR1912 I 792 USGS White Mountain topographic map. Hill 507 206.

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———"Ore Deposits of the Silver Peak Quadrangle, Nevada", USS PP 55 (1906) 84-5.

### FISH LAKE MARSH

#### Borax, (Petroleum)

**Location.** Fish Lake Marsh occupies 10,000 acres in the lower part of Fish Lake Valley in W. Esmeralda Co. The marsh has an elevation of 4,825 ft., and drains into Columbus Marsh which is 10 m. N.

**History.** Mott & Piper produced borax from the marsh as early as 1873; the Pacific Borax Co. moved its plant there from Columbus in 1875; and the borate deposits were worked for a number of years thereafter. In 1920, the California Excelsior Oil Co. drilled for oil on the McNett ranch and obtained artesian water. The Merger Oil Co. is now drilling at the mouth of Ice House Canyon and has attained a depth of 1,400 ft.

**Geology.** The marsh contains a number of tracts in which borates occur, mainly in the form of ulexite. Potash is not present in important amounts.

- Weed MH 1213 Gold Mt. M. & M. Co. 1215 Goldsmith Divide M. Co.  
 1225 Hornsilver American Co., Hornsilver Apex M. Co.,  
 Hornsilver May Co., Hornsilver New Orleans M. Co.,  
 Hornsilver Red Top M. Co.  
 1243 Lucky Boy Divide M. Co.  
 1298 Orleans Hornsilver M. Co.  
 1314 Reorg. Rosetta Divide M. Co.  
 1333 Silver Mines Corp. 1342 Southwestern Ms. Co.

### KLONDYKE (Southern Klondyke)

Silver, Lead, Gold, Copper, Turquoise

**Location.** The Klondike District lies in the Southern Klondyke Hills in E. Esmeralda Co. on the Nye Co. border. It adjoins the Divide District on the S. E. and is sometimes considered a section of that district. The Klondyke District is 14 m. S. of Tonopah which is on the T. & G. R. R. and a few miles E. of Klondyke, a station on the same railroad. The altitude of the camp is about 5,500 ft. and the hills rise but a few hundred feet above it.

**History.** The district was discovered by Court and Bell in 1899. While on his way to this camp in 1900, Jim Butler discovered Tonopah.

**Production.** Some \$50,000 was produced from one property in the district up to 1905, and the district has made annual productions since. From 1908 to 1921 it produced 11,236 tons of ore containing \$36,467 in gold, 277,466 ozs. silver, 3,472 lbs. copper, and 217,147 lbs. lead, valued in all at \$263,700 according to Mineral Resources of the U. S. Geol. Survey.

**Ore.** The country rocks of the Klondyke District are Cambrian sediments which have been intruded by granite that is probably of Cretaceous age and are capped in places by Tertiary volcanic rocks. According to Spurr, the Bell and Court vein cuts at a small angle across the sedimentary rocks and is parallel to a granite dike. Silver, chiefly in the form of chloride, predominates, with minor values in gold. The vein filling is mainly quartz containing small amounts of a copper-antimony-silver compound resembling stetefeldtite, galena, and pyrite; together with their oxidation products. Other minerals present in small amounts are siderite, calcite, hematite, and wad. Pyrite-bearing quartz veins of irregular character occur at the granite-limestone contact, particularly in the granite; and the rhyolite-limestone contact is also characterized by erratic quartz veins.

**Turquoise.** The Smith turquoise mine is in the Cambrian sediments  $\frac{1}{2}$  m. S. of Klondyke. The turquoise occurs in seams and veinlets filling joints and fractures in black slaty jasperoid near overlying rhyolite. Black matrix turquoise was shipped by the California Gem Co. from this deposit in 1909.

**Mines.** The Original Klondyke Divide M. Co. owns the mine which has made the largest production in the camp. It is incorporated in Nevada with a capital stock of 1,500,000 shares of 10 cents par, value of which 650,000 shares remain in the treasury. The property consists of 12 claims developed by 25 tunnels and shafts no one which reaches a depth in excess of 200 ft. H. McNamara, Tonopah, is Pres., E. Marks is V. P. and H. E. Dugan is Sec. The Knox Divide M. Co., of which C. E. Knox, Tonopah, is Pres., controls 4 claims belonging to the Golden State Divide M. Co. adjoining the Original Klondyke, besides owning the Knox Group of 5 claims in the Divide District. The Klondyke property has made a considerable production and is developed by a 130-ft. shaft.

## MINING DISTRICTS

Bibliography.	MR1905	268	MR1910 I	523	MR1917 I	276
	MR1906	294	MR1912 I	804	MR1918 I	238
	MR1908 I	483	MR1913 I	832	MR1919 I	393
	MR1909 I	405	MR1914 I	696	MR1920 I	323
	II 786-7	Turquoise	MR1915 I	643	MR1921 I	383
			MR1916 I	487		
	USGS Lida topographic map.					

Ball 285 58.

Ball 308 28, 32, 33, 44-9, 77-81.

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—"Genetic Relations of Western Nevada Ores", T AIME 36 (1906), 400.

Weed MH 1183 Desert Klondyke M. Co. 1208 Golden State Divide M. Co.  
 1214 Gold Ridge Divide M. Co. 1236 Keystone Divide M. Co.  
 1237 Klondyke-Portland Ms. Co.  
 Klondyke Standard Divide M. Co.  
 1237-8 Knox Divide M. Co. 1243 Lucky Boy Divide M. Co.  
 1249 Marinette M. & M. Co. 1335 Silver State Divide M. Co.  
 1297 Original Klondyke Divide M. Co.

## LIDA (Tule Canyon, Alida Valley)

## Silver, Lead, Gold, Copper

**Location.** The Lida District is at Lida in the Silver Peak Range in S. Esmeralda Co. Goldfield on the T. & G. R. R. and T. & T. R. R. is 30 m. N. E. The elevation of Lida is 6,100 ft. The district was formerly known as the Alida Valley District; and its S. section in Tule Canyon is sometimes called the Tule Canyon District. The Lida District adjoins the Railroad Springs District on the S., the Palmetto District on the E., and the Sylvania District on the N. E.

**History.** The district was discovered in 1871 by Scott and Black. Hiskey & Walker erected an 8-stamp mill there in 1873 and a second mill of 5-stamps was built in the district later. Interest revived in recent years and small annual productions have been made. The Ingalls Mine is now being worked under lease and bond.

**Production.** In 1871, 2½ tons of ore were shipped to Columbus and netted \$622 in silver and gold. In 1872 and 1873, the mill treated 657 tons recovering \$152,646 in bullion. From 1908 to 1921, the camp produced 7,096 tons of ore containing \$13,633 in gold, 114,094 ozs. silver, 79,602 lbs. copper, and 406,129 lbs. lead, valued in all at \$147,191, according to Mineral Resources of the U. S. Geol. Survey.

**Geology.** The country rock consists of Cambrian limestones and shales, according to Ball, which have been intruded by granite-porphry and by dikes of diorite porphyry. The ore deposits are partly quartz veins in the Cambrian limestone, and partly impregnations of the country rock; and the oxidized ores are largely replacements of the limestone. The sulphides present are galena, sphalerite, pyrite, and chalcopryrite.

Bibliography.	B1867	419	MR1906	294	MR1915 I	633
	R1871	183	MR1907 I	354	MR1916 I	479
	R1872	174, 175	MR1908 I	483	MR1917 I	276

Inc. 1919, in Nevada.

Property: about 90 acres N. W. of North Divide and  $2\frac{3}{4}$  miles N. W. of Gold mountain. Joint shaft being sunk with the Nevada Divide, down 75' in July, 1919. A prospect showing favorable looking shear zones. 1925

**ANCHOR DIVIDE MINING CO.**

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NEVADA

Address: Tonopah, Nev.

Officers: J. G. Crumley, pres.; R. W. Piercy treas., with George Wingfield and H. C. Brougher, directors.

Inc. 1919, in Nevada. Cap. \$150,000 shares, 10c par.

Property: 4 claims and a fraction adjoining the Rosetta, Black Hawk, Portland, and Hercules, in the southern section of the field; patented; application has been filed.

Development: by shaft, 50' deep in July, 1919. Equipment: 30-h. p. hoist  $9\frac{1}{2} \times 12$ " compressor, etc. Operated in 1920.

**ANDES SILVER MINING CO.**

NEVADA

Office: 261 Mills Bldg., San Francisco, Cal.; and Virginia City, Nev.

Officers: R. L. Rader, pres.; H. H. Noble, v. p.; Geo. P. Thurston, sec.; Well Fargo National Bank, treas.; Roy T. Kimball, and B. F. Nourse directors; Frank Higginson, supt.

Inc. Dec. 18, 1873, in California. Cap. authorized and outstanding, \$100,000; shares \$1 par; assessable. Assessment No. 92 levied in 1921 Registration Security Co., San Francisco, registrar. Annual meeting, 4th Wednesday in January. Stock is listed on San Francisco Exchange.

Property: 2 claims, patented, 22 acres, in the Virginia district, Virginia City, Storey county. Idle in 1920.

**ANTELOPE GROUP**

NEVADA

Held by Louis W. Trankle, Yerington, Nev. Includes 23 unpatented claims, 430 acres in the Buckskin Range, Douglas county, 16 miles from Yerington.

Geology: the ore-bearing formation is a monzonite belt 4,200' wide extending N. 7° W., dip 47° to east for  $4\frac{1}{2}$  miles, with diorite on the west and andesite on the east. This monzonite is highly altered showing strong kaolinization and sericitization to depth of 150 feet, deepest working. Surface shows scanty copper carbonates throughout length and breadth, with small streaks of copper sulphide ore near footwall side. Water encountered in lower workings shows strong copper content.

**ANTELOPE SPRING MINING CO.**

NEVADA

Officers: Wm. H. Fitch, pres.; Gust Holm, v. p.; John W. Geiger, sec. and mgr., Frisco, Utah; Allen C. Eakin treas.; preceding officers, Edith B. Brounzell, Fred Hubbard and E. R. Reitsch, directors.

Inc. April 11, 1906 in Utah. Cap. \$300,000; shares \$1 par; assessable; 200,000 issued; 8 assessments levied, amounting to 13c per share.

Property: 17 claims, partly patented, 15 miles from Humboldt House, Pershing county, developed by 3 crosscut tunnels, each reaching the 2 principal oreshoots. Ore carries lead, silver, copper, zinc and a little gold. The oreshoots occur on a limestone-shale contact, one shoot carrying zinc sulphide, the other, 20% lead ore containing gold and copper.

Equipment: includes 75-ton concentrating and flotation mill.

Property idle owing to lack of funds.

**ANTIMONY KING MINE**

NEVADA

Owned and operated by J. M. Pine, Austin, Nev.

Property: 8 miles S. of Austin, in Cottonwood canyon, Battle Mountain district, has been worked intermittently since 1871, and by present owner since 1912.

Ore: antimony, occurs in true fissure vein, filled with white and dark quartz, associated with stibnite and traceable for 900' on the surface. Country rock is a fine-grained silicious limestone, bluish-gray in color, with a little disseminated pyrite. Geology fully described, U. S. G. S. Bull, 594, pp. 75-76

Development: by 250' tunnel and 150' shaft, reported to have opened

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Property: about 90 acres N. W. of North Divide and  $2\frac{3}{4}$  miles N. W. of Gold mountain. Joint shaft being sunk with the Nevada Divide, down 75' in July, 1919. A prospect showing favorable looking shear zones.

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Development: by shaft, 50' deep in July, 1919. Equipment: 30-h. hoist  $9\frac{1}{2} \times 12$ " compressor, etc. Operated in 1920.

#### ANDES SILVER MINING CO.

Office: 261 Mills Bldg., San Francisco, Cal.; and Virginia City, Nev.

Officers: R. L. Rader, pres.; H. H. Noble, v. p.; Geo. P. Thurston sec.; Well Fargo National Bank, treas.; Roy T. Kimball, and B. F. Nourse directors; Frank Higginson, supt.

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#### ANTELOPE SPRING MINING CO.

Officers: Wm. H. Fitch, pres.; Gust Holm, v. p.; John W. Geiger, sec. and mgr., Frisco, Utah; Allen C. Eakin treas.; preceding officers, Edith B. Brounzel, Fred Hubbard and E. R. Reitsch, directors.

Inc. April 11, 1906, in Utah. Cap. \$300,000; shares \$1 par; assessable 200,000 issued; 8 assessments levied, amounting to 13c per share.

Property: 17 claims, partly patented, 15 miles from Humboldt House, Pershing county, developed by 3 crosscut tunnels, each reaching the 2 principal oreshoots. Ore carries lead, silver, copper, zinc and a little gold. The oreshoots occur on a limestone-shale contact, one shoot carrying zinc sulphide, the other, 20% lead ore containing gold and copper.

Equipment: includes 75-ton concentrating and flotation mill.

Property idle owing to lack of funds.

#### ANTIMONY KING MINE

Owned and operated by J. M. Pine, Austin, Nev.

Property: 8 miles S. of Austin, in Cottonwood canyon, Battle Mountain district, has been worked intermittently since 1871, and by present owner since 1912.

Ore: antimony, occurs in true fissure vein, filled with white and dark quartz, associated with stibnite and traceable for 900' on the surface. Country rock is a fine-grained silicious limestone, bluish-gray in color, with a little disseminated pyrite. Geology fully described, U. S. G. S. Bull. 594, pp. 75-76

Development: by 250' tunnel and 150' shaft, reported to have opened

Hercules Divide Mining Co.

NEVADA

NEVADA

NEVADA

NEVADA

NEVADA

Inc. 1919, in Nevada.

Property: about 90 acres N. W. of North Divide and  $2\frac{3}{4}$  miles N. W. of Gold mountain. Joint shaft being sunk with the Nevada Divide, down 75' in July, 1919. A prospect showing favorable looking shear zones.

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NEVADA

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Property: 4 claims and a fraction adjoining the Rosetta, Black Hawk, Portland, and Hercules, in the southern section of the field; patented application has been filed.

Development: by shaft, 50' deep in July, 1919. Equipment: 30-h. p. hoist  $9\frac{1}{2} \times 12$ " compressor, etc. Operated in 1920.

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#### ANTELOPE SPRING MINING CO.

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Equipment: includes 75-ton concentrating and flotation mill.

Property idle owing to lack of funds.

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Development: by 250' tunnel and 150' shaft, reported to have opened



**HERCULES DIVIDE MINING CO. NEVADA**

Office: E. J. Erickson, res. agt., Tonopah, Nev. J. W. Hutchinson, manager.

Officers: J. G. Crumley, pres.; A. E. Kane, v. p.; E. J. Erickson, sec.-treas., with George Wingfield and H. C. Brougher, directors.

Inc. April 10, 1919, in Nevada. Cap. \$150,000; shares 10c par; 750,000 in treasury. Listed on San Francisco Stock Exchange.

Property: 4 claims, 60 acres, between the Anchor and Argonne and S. of the Rosetta. Patent was applied for in 1921.

Development: shaft down 280' in December, 1919, and silicified breccia worth \$20 per ton reported cut. Has 30 h. p. hoist, compressor and other machinery.

**HIDER NEVADA MINING CO. NEVADA**

Address: Fred Redmond, Elks Club, Salt Lake City.

Officers: Fred Redmond, pres.; J. J. Morris, sec.-treas., with Mrs. A. F. Pitt, E. O. Lee and T. E. Fitzgerald, directors.

Cap. 1,000,000 shares, 347,980 issued.

Property: about 23 miles south of Battle Mountain, Lander county, said to show several veins carrying copper ore.

Development: by two 125' inclines and a tunnel.

Management shipped some ore from the dumps in 1917.

**HIGH DIVIDE ANNEX MINING CO. NEVADA**

Fully described in Volume XIV. Property taken over, Spring of 1919, by Chas. E. Knox and name of company changed to Knox Divide Mng. Co. (q. v.)

**HIGH DIVIDE EXTENSION CO. NEVADA**

Address: 1131 Hearst Bldg., San Francisco, Calif., or Tonopah, Nev.

Officers: W. C. Pitt, pres.; Grant Y. Alexander, v. p.; J. R. Whitmire, sec.-treas., with George Woodland and F. T. Martens, directors.

Inc. March 10, 1919, in Nevada. Cap. \$150,000; 10c par; assessable; 800,000 issued. Listed on San Francisco Stock Exchange.

Property: 6 claims, N. of the High Divide.

Development: by 150' shaft sunk in early days. Fully equipped.

**HIGH DIVIDE MINING CO. NEVADA**

Address: E. J. Erickson, res. agt., Tonopah, Nev.

Officers: H. C. Brougher, pres.; Wm. F. Watters and W. J. Douglass, v. ps.; E. J. Erickson, sec.-treas., with Roger Dougherty, directors.

Inc. April 13, 1918, in Nevada. Cap. \$150,000; 10c par; 1,250,007 outstanding. Listed on San Francisco Stock Exchange. Annual meeting, first Monday in May. \$50,406 in treasury July 1, 1919.

Property: over 200 acres, 1,300' N. E. of the Tonopah Divide.

Development: by shaft, 230' deep at last accounts.

Equipment: electric hoist and 2-drill compressor.

**HILLTOP GROUP NEVADA**

Formerly operated by Kimberly Cons. Mines Co., of record as having milled and shipped a small tonnage of gold-silver-copper ore, 1915-19.

Property: 18 claims, patented, 360 acres, at Hilltop, Lander county, shows gold, silver, copper and lead ore in quartz veins. The vein runs N.-S., dips W., and is said to have been proven for 5,000' in length. A crosscut driven on the 350' level reported to have cut a 12' vein assaying \$9.48 per ton. Developed by 5,000' tunnel and several shafts.

Equipment: included compressor, 1/2 mile tram and 25-h. p. gasoline engine, 50-ton mill and cyanide plant.

Property sold at sheriff's sale, March 15, 1920.

**HILLTOP MILLING & REDUCTION CO. NEVADA**

Hilltop, Lander county, Nev. Officers and directors: Frank LeBar, pres.; Chas. E. Beach, v. p.; E. Ross Carver, sec.-treas. and mgr.

Inc. in Nevada. Cap. \$50,000; shares \$10 par; all outstanding. An-

**Equipment:** includes electric power, compressor with 100-h.p. motor, 50-h.p. electric hoist for inside work, and Hubbard gasoline hoist. There is also a useless 10-stamp mill.

**Company** is connecting tunnel with old McCormack workings, contemplating sinking Hubbard shaft to the tunnel level and is preparing to erect an 100-ton gravity-flotation concentrator. Reported mid-1924 that 2 important orebodies have been opened.

**HAYSTACK MINES CO., INC.**

NEVADA

**Address:** Winnemucca, Nev.

**Officers:** Pete Egoscue, pres.; E. L. Reber, v. p.; C. T. Smith, sec. B. J. Loinaz, treas., with Y. Arrascade; and Jose Ugariza, directors.

**Inc.:** June 1914. **Cap.** \$1,000,000; none issued. **Annual meeting,** first Tuesday in January.

**Property:** 5 claims in Haystack district, Pershing county, 35 miles S. of Winnemucca and 7 miles S. of Jungo on the Western Pacific R. R. Ore carries free-milling gold in fissure veins in granite and quartzite, said to average \$22 per ton.

**Development:** by 3 shafts, deepest 100'. **Machinery** installed in 1917.

**HECLA DIVIDE MINING CO.**

NEVADA

**Address:** H. C. Pratt, sec., 30 Broad St., New York. **Company's** present operations are confined to its New Mexico holdings and the Nevada property at Divide, near Tonopah, is idle. The company is described in the New Mexico section of this volume.

**HELEN FRACTION DIVIDE MINING CO.**

NEVADA

Owens a group of claims in the Divide district, Esmeralda county.

**HENNESSY DIVIDE MINING CO.**

NEVADA

Practically defunct; described in Vol. XV.

**HERCULES DIVIDE MINING CO.**

NEVADA

**Address:** J. G. Crumley, Tonopah, Nev.

**Officers:** J. G. Crumley, pres.; A. E. Kane, v. p.; with George Wingfield and H. C. Brougher, directors. J. W. Hutchinson, mgr.

**Inc.** April 10, 1919 in Nevada. **Cap.** \$150,000; 10c. par; 750,000 in treasury. Listed on San Francisco Stock Exchange.

**Property:** 4 claims, 60 acres, in Divide district, Esmeralda county, S. of Reorg. Rosetta. Patent was applied for in 1921.

**Development:** by 280' shaft, and silicified breccia worth \$20 per ton reported cut. Has 30 h. p. hoist, compressor, and other machinery.

**HIDDEN TREASURE MINING CO.**

NEVADA

**Address:** H. P. Zumwalt, Fallon, Nev., who has also an interest in Gold Basin Cons. Mng. Co. **Inc.** 1924 in Nev. **Property:** Miller and Hunt claims in Fairview district, Churchill county, 45 miles SE of Fallon. Ore is gold bearing. **Developing** by shaft, 100' deep in July 1924.

**HIDER NEVADA MINING CO.**

NEVADA

**Address:** Fred Redmond, Elks Club, Salt Lake City.

**Officers:** Fred Redmond, pres.; J. J. Morris, sec.-treas.; with Mrs. A. F. Pitt, E. O. Lee and T. E. Fitzgerald, directors.

**Cap.** 1,000,000 shares; 347,980 issued.

**Property:** about 23 miles south of Battle Mountain, Lander county, said to show several veins carrying copper ore.

**Development:** by two 125' inclines and a tunnel. Inactive.

**HIGH DIVIDE ANNEX MINING CO.**

NEVADA

Fully described in Volume XIV. **Property** taken over in 1919, by Chas. E. Knox and name of company changed to Knox Divide Mng. Co. (q. v.)

**HIGH DIVIDE EXTENSION CO.**

NEVADA

**Address:** F. T. Martens, 1131 Hearst Bldg., San Francisco, Calif., or Tonopah, Nev.

**Officers:** W. C. Pitt, pres.; Grant Y. Alexander, v. p.; J. R. Whitmire, sec.-treas., with George Woodland and F. T. Martens, directors.

also Klondike

**DIVIDE. Ag, Au, Pb.**

(Gold Mountain)

Seven miles south of Tonopah, T. &amp; G. R. R.

Tertiary volcanics.

Veins.

Ball, S. H., A geologic reconnaissance in southwestern Nevada and eastern California: U. S. Geol. Survey Bull. 308: 82, 1907.

Carpenter, J. A., The Divide district: Eng. &amp; Min. Jour. 107: 859-861, 1919.

Ferguson, H. G., The mining districts of Nevada: Econ. Geol. 24 (2): 115, 1929.

Glanella, V. P., Nevada's common minerals: Univ. Nev. Bull. 35 (6), Geol. and Min. ser. (36): 56 (cerargyrite), 80 (powellite), 1941.

Hill, J. M., The mining districts of the western United States: U. S. Geol. Survey Bull. 507: 207, 1912.

Knopf, Adolph, The Divide silver district, Nevada: U. S. Geol. Survey Bull. 715: 147-170, 1921.

Lincoln, F. C., The Divide mining district, its history, its geology, its mines: Nev. Newsletter 11: No. 20, 14-17, 44, 1919.

Mining districts and mineral resources of Nevada: 64-66, Nev. Newsletter Pub. Co., Reno, Nevada: 1923.

Nolan, T. B., Mineral resources of the region around Boulder Dam: U. S. Geol. Survey Bull. 871: 57 (silver, gold), 1936.

Sizer, F. L., The Divide district: Min. &amp; Sci. Press 118: 631-3, 1919.

Spurr, J. E., Ore deposits of Tonopah and neighboring districts, Nevada: U. S. Geol. Survey Bull. 213: 87, 1908.

Geology of the Tonopah mining district: U. S. Geol. Survey Prof. Paper 42: 99, 1905.

Genetic relations of western Nevada ores: A. I. M. E. Trans. 36: 381, 1906.

Young, G. J., Divide silver-gold district of Nevada: Eng. &amp; Min. Jour. 109: 62-6, 1920.

Anonymous, The geology of the Divide district: Min. &amp; Sci. Press Editorial: 118, 622, 1919.

**DYER. Au, Ag, Pb.**

Twenty-eight miles south of Coaldale, T. &amp; G. R. R.

Paleozoic sediments cut by granite.

Veins.

Hill, J. M., The mining districts of the western United States: U. S. Geol. Survey Bull. 507: 206, 1912.

Lincoln, F. C., Mining districts and mineral resources of Nevada: 66, Nev. Newsletter Pub. Co., Reno, Nevada: 1923.

Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624: 194, 1917.

Spurr, J. E., Ore deposits of Silver Peak quadrangle, Nevada: U. S. Geol. Survey Bull. 225: 115, 1904.

Ore deposits of the Silver Peak quadrangle, Nevada: U. S. Geol. Survey Prof. Paper 55: 84-5, 1906.

**FESLER (See PALMETTO)****FISH LAKE MARSH (See FISH LAKE VALLEY)**

**KLONDYKE. Au, Ag, Pb, Cu, Turquoise.**  
(Southern Klondyke)

- Fourteen miles south of Tonopah, T. & G. R. R.  
Cambrian sediments cut by granite and overlain by Tertiary volcanics.  
Veins, placers.
- Ball, S. H., Notes on the ore deposits of southwestern Nevada and eastern California: U. S. Geol. Survey Bull. 285: 53-73, 1906.
- A geologic reconnaissance in southwestern Nevada and eastern California: U. S. Geol. Survey Bull. 308: 28, 32, 33, 44-9, 77-81, 1907.
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- Gianella, V. P., Nevada's common minerals: Univ. Nev. Bull. 35 (6), Geol. and Min. ser. (36): 71 (siderite), 1941.
- Hill, J. M., The mining districts of the western United States: U. S. Geol. Survey Bull. 507: 210, 1912.
- Lincoln, F. C., Mining districts and mineral resources of Nevada: 75-76, Nev. Newsletter Pub. Co., Reno, Nevada: 1923.
- Nolan, T. B., Mineral resources of the region around Boulder Dam: U. S. Geol. Survey Bull. 871: 59 (gold), 1936.
- Schrader, F. C., Stone, R. W., and Sanford, Samuel, Useful minerals of the United States: U. S. Geol. Survey Bull. 624: 192, 194, 199, 1917.
- Smith, A. M., and Vanderburg, W. O., Placer mining in Nevada: Univ. Nev. Bull. 26 (8): 48, 1932.
- Spurr, J. E., Ore deposits of Tonopah and neighboring districts, Nevada: U. S. Geol. Survey Bull. 213: 86-7, 1903.
- The Southern Klondyke district, Esmeralda County, Nevada: Econ. Geol. 1: 369-383, 1906.
- Genetic relations of western Nevada ores: A. I. M. E. Trans. 36: 400, 1906.
- Vanderburg, W. O., Placer mining in Nevada: Univ. Nev. Bull. 30 (4): 79, 1936.

**LIDA. Au, Ag, Pb, Cu.**  
(Alida Valley, Tule Canyon)

- Thirty miles southwest of Goldfield, T. & G. R. R.  
Cambrian sediments cut by quartz monzonite and capped by Tertiary volcanics.  
Veins and impregnations, placers.
- Ball, S. H., Notes on the ore deposits of southwestern Nevada and eastern California: U. S. Geol. Survey Bull. 285: 61-2, 1906.
- A geologic reconnaissance in southwestern Nevada and eastern California: U. S. Geol. Survey Bull. 308: 25, 31, 45, 55-65, 1907.
- Browne, J. R., and Taylor, J. W., Reports upon the mineral resources of the United States: (for 1806), 419, Govt. Printing Office, Washington: 1807.
- Hill, J. M., The mining districts of the western United States: U. S. Geol. Survey Bull. 507: 207-8, 1912.
- Lincoln, F. C., Mining districts and mineral resources of Nevada: 76-77, Nev. Newsletter Pub. Co., Reno, Nevada: 1923.
- Nolan, T. B., Mineral resources of the region around Boulder Dam: U. S. Geol. Survey Bull. 871: 59 (gold), 1936.
- Raymond, R. W., Statistics of mines and mining in the states and territories west of the Rocky Mountains: (for 1871), 183, Govt. Printing Office, Washington: 1872.
- Mining industry of the states and territories of the Rocky Mountains: (for 1872), 174, 175, Govt. Printing Office, Washington: 1873.