The Doreen group, owned by W. B. Naismith and Lee Henderson of Tonopah, is said to have been first worked in about 1915. It is believed that the $29,473 recorded production shown by Couch came from this property. Apparently very little work has been done here in many years. It has one adit and no improvements.

BELMONT (Philadelphia, Silver Bend, Barcelona, Spanish Belt)

The Belmont mining district, also commonly referred to as the Philadelphia district and in the early days as the Silver Bend, lies on the east side of the Toquima Range at an altitude of about 7,000 feet. The town of Belmont is 46 miles by road northeast of Tonopah; of this distance 19 miles is paved, and the balance is well-maintained dirt road. The Barcelona or Spanish Belt area, situated almost on the crest of the Toquima Range at an altitude of about 9,000 feet and 8 miles air line northwest of Belmont, is usually included in the district. The area in the vicinity of Meadow Canyon is also here included.

Discovery of the district was made near the site of the town of Belmont in 1865.[11] High-grade, surface-enriched silver chloride ores mined here in the early days made the camp very prosperous. In 1867 the Nye County seat was moved from Ione to Belmont where it remained until is was moved to Tonopah shortly after the turn of the century. The old red-brick Nye County courthouse, still standing at Belmont, is one of the principal landmarks of the State.

Production figures indicate that Belmont was fairly active until about 1887. Couch shows the recorded production from the district as $3,793,103 from 58,906 tons. Part of the total production may not have been recorded with the State, as so often happened in the early days of Statehood; Lincoln reports a much higher figure.

A drop in the price of silver, the added cost of pumping from greater depths, and the usual drop in silver content of the primary ores all shared the responsibility of a dormant period from about 1887 to 1916.

In 1915 the Monitor-Belmont Company, after taking over the principal mines and bringing electric power from Manhattan, built a flotation mill to treat the old dumps. During the next year it is reported that the company was treating an average of 120 tons per day in its 10-stamp mill. The mill was shut down in 1917

[11]Emmons, S. F., Report of the Geological Exploration of the Fortieth Parallel, Vol. III, pp. 393-405, 1870.

and this was the last production made from the old Belmont mines. The tonnage and value recovered by this company was appreciable but no report was made to the State. The masonry walls of the mill still stand as a landmark.

The Nevada Wonder Mining Company took an option on the property in 1918. Under the superintendency of Jay A. Carpenter, a period of eight months was spent unwatering and sampling the old workings before the option was relinquished without the mining of any ore.

The Barcelona or Spanish Belt part of the district was responsible for about $200,000 of the total district production and $33,500 of this was made during the period 1920–1922.

Geology. The areal geology may be described as Ordovician shale and limestone intruded by a large mass of granite that extends to the Round Mountain district. The Belmont ore occurrences are briefly but well described,[12] "The geology of the portion of the district owned by the Monitor-Belmont Mining Co. may be briefly described as quartz veins and lenses occurring in slates and limestones at or near their contact with intrusive siliceous granites. The alteration of the intruded rocks to mica schists and jasperoid is noticeable. The metallic minerals occur in the quartz as bunches; no banding has been noticed."

Stetefeldtite,[13] a rather rare argentiferous antomonial sulfide reported to contain silver, antimony, copper, lead, iron, and sulfur is said to be the source of the silver in the Belmont ores. If this combination is a mineral rather than a mixture, and it may be the latter, it would probably be partzite due to the lead content. Dana's System of Mineralogy shows stetefeldtite to contain no lead. Regardless of the primary mineral, the oxidized ores containing the silver chloride were probably of the greatest importance.

Sheared quartz veins containing wolframite are found in several places in the granite south of Belmont. Only minor work has been done on these occurrences and no known tungsten production has been made.

Turquoise is found in the extreme southern part of the district at a camp called Monarch. Shaly limestone here has been highly altered and silicified to a jasper.

In the Barcelona or Spanish Belt area, which is in the northwestern part of the district, molybdenite has been found in and

[12]Hughes, Wilson W., The Belmont Camp, Nevada: Engineering and Mining Journal, Vol. 103, No. 23, p. 1008, June 9, 1917.

[13]Emmons, S. F., Report of the Geological Exploration of the Fortieth Parallel, Vol. III, pp. 393-405, 1870.

near the workings of the old Barcelona silver mine. The molybdenite reportedly occurs in the metamorphics near the granitic intrusives.

In the Meadow Canyon area, in the extreme northern part of the district, a small mercury mine and a gold and silver deposit are found in the metamorphics.

Properties. Director Jay A. Carpenter, who in 1918–1919 was in charge of pumping out and examing the workings of the Highbridge and Belmont shafts, has furnished the following information.

The Nelson Brothers had conducted a very profitable assay office in Goldfield and, enthused by their uncle's stories of the rich mines of the flooded Belmont district, organized the Monitor Belmont Company. They planned to mill the large dumps and from the profits to pump out the mines.[14] Both the low values in the dump ores and the low extraction by flotation of the oxized minerals resulted in no profit for the unwatering of the mines.

The Nevada Wonder Mining Company, impressed by past production records and by the strong quartz veins and the surface cuts, then took over the property under option. Hoisting and bailing equipment was installed at the Highbridge shaft and at the Belmont shaft about 1,600 feet southerly, with the water standing at about 50 feet from the surface. There were no maps of the underground workings, but hearsay accounts were to the effect that the Highbridge and Belmont were connected on the 300-foot level and that the 500-foot level of the Belmont had furnished a large tonnage of ore.

Fortunately, Mr. Carpenter was told of the old Belmont newspapers on file at the county courthouse and, from the progress reports of the mines contained therein, he drew up a crude but valuable map. This map disclosed the most important facts that the Belmont had drifted toward the Highbridge on the 500-foot level, not the 300-foot level, and at 60 feet from the line had raised all the way to the surface ores, and that the drift from the 300-foot level of the Highbridge had connected with this Belmont raise just below the old reportedly large body of refractory sulphide ore. The Highbridge shaft was sunk to 360 feet and the Belmont to below the 600-foot level. The reported weekly tonnage of ore was usually low in amount but high in value.

The papers contained much of human interest from "necktie party" hangings to the presumed suicide of the Indian maid Maggie by jumping down into the flooded Highbridge shaft.

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[14]The Belmont Camp, Nevada, E.M.J. June 9, 1917.

By the use of bailers on both shafts the removal of 300 gallons per minute lowered the water steadily. Many hundreds of feet of old drifts were cleared out or crawled through, and old stopes explored. Both cut and grab samples were generally low in value. The stopes were fully gobbed with white vein quartz of low value, but the old cowhides indicated that the high-grade ore next to the hanging wall had been mined separately and carried to the ore passes. This checked with the old newspaper reports of but a few cars a day of high-value ore. The 300-foot Highbridge and the 400-foot Belmont levels did not give sufficient encouragement for further unwatering.

The most exciting day was that of breaking down the heavily-hinged, chained, and padlocked gate on the 300-foot level of the Highbridge, and sampling the rich-looking sulphide ore in the Belmont raise, heavy with pyrite and sphalerite. The most depressing day followed when the assays showed but traces of silver. An amusing day was when a shaftman in the Highbridge brought up a skull from a wall plate that was immediately identified by Indian friends as Maggie's skull!

There was apparently no connection between the Belmont and the El Dorado shafts to the south as the water was lowered but little in the El Dorado. This was a disappointment as the El Dorado inclined shaft indicated the most consistent stoping above water level, and the newspaper reports indicated good ore on the 400-foot level of the vertical shaft at the time the surface plant was destroyed by fire.

At about the same time as the Nevada Wonder operation, Donald C. Cameron erected a cyanide leaching plant for the treatment of tailings. However, he found to treat only 3,000 tons of old-time tailing. Since the mines had a sworn production of over 50,000 tons, it is possible that much of the richer ore mined during the early days was hauled to Austin for treatment.

Mr. Cameron also successfully treated 19,000 tons of the Monitor Belmont flotation tailings, having an average content of 4.1 ounces of silver per ton. A 70 percent recovery was made indicating a high silver chloride content that had not been recovered by flotation.

The ruins of the Combination mill, with its high brick stack standing along side the county road to Monitor Valley, is a most impressive sight. Couch shows a recorded production of $38,012 from 421 tons made in 1873 by the Combination mine and $795,-891 from 13,365 tons recorded from the Highbridge mine during 1866–1887. It is believed that the Combination ore came from the

Highbridge workings. J. D. Hague,[15] in describing the Belmont mines, reports that the Combination mill produced $160,000 of bullion in the first half of 1868 but stood idle most of the later part of the year. He adds that the mill was built at a cost of $225,000.

The Highbridge patented claim, from which it seems the Combination mill production was made, lies at the north end of the Belmont mines, southwest of the mill ruins. This and two other adjoining patented claims are owned by Ben and John Zunino of Elko. The Highbridge shaft is at the south end of the claim.

The Transylvania claims, two patents adjoined by two later patented outlying claims, lie south of the Highbridge and are owned by Charles D. Keough of Tonopah. The Belmont shaft is on this ground and the masonry ruins of the Monitor-Belmont mill are adjacent and northeast of the mine workings. Couch shows a recorded production of $348,245 from 7,831 tons during 1867–1887 by the Belmont mine, and $733,852 from 9,366 tons during 1866–1875 by the Transylvania mine. This production was undoubtedly taken from the same workings now known as the Belmont shaft. Mr. Carpenter's information disclosed that much ore taken out of the Belmont shaft came from the oxidized ore near the upper Highbridge workings.

The Eldorado South, which Mr. Carpenter mentions as having favorable reports in addition to showing continuous stopes, is in the southern part of the main Belmont area. The Eldorado South and two patented claims to the northwest, the Independence and Monitor, are owned by Arthur N. Carter of Lund. The combined recorded production from these claims, as shown by Couch, is slightly over one million dollars from about 10,000 tons. Two-thirds of this came from the Monitor during 1871–1875.

The Arizona patented claim, also known as the Canfield mine, adjoins the Monitor on the north and has a production recorded as $493,779 from 6,036 tons during 1868–1874. This claim now belongs to Nye County.

It is to be noted that recorded production of ore from underground at Belmont ceased 60 years ago, and the production from the short revival of the camp 30 years later was from mine dumps and tailings.

The Barcelona, or Spanish Belt silver mine, believed owned by Tom Nicely of Tonopah, lies about 8 miles northwest of the town of Belmont. The mine is said[16] to have been discovered in about

[15] King, Clarence, 40th Parallel Survey, Vol. III, pp. 401-3, 1870.
[16] Hunt, S. Frank, Mining Geology Outlined, pp. 1-5, 1936.

1870 by one of several Mexican Prospecting parties outfitted by Emanuel San Pedro. This man did much work in the early days of Grantsville and Ellsworth in the northwestern part of the county and may have been responsible for the early work in the San Antone district.

Couch shows a total recorded Barcelona production of $198,952 from 7,854 tons, of which amount $165,456 from 4,843 tons was produced during 1875–1889. The balance was mined by the Consolidated Spanish Belt Silver Mining Company during 1920–1922. This company installed a 50-ton flotation mill in 1921 which operated about a year.

The presence of molybdenite in the area has added interest to the mine in recent years and some work was done on these exposures in 1942–1943 by J. C. Perkins of Tonopah. Trenching of a disseminated occurrence in hornfels near an alaskite intrusive found the material to contain 0.39 to 3.0 percent molybdenum.

The principal working is a long adit reported to be 2,000 feet or more in length. Molybdenite is also said to occur in this adit.

The Van Ness mercury mine, believed owned by John Connolly of Tonopah, is well described by Bailey and Phoenix. The property lies at an elevation of 8,600 feet, about 6 miles northwest of the town of Belmont. Since its discovery by Jack Humphrey in 1928 it has produced 728 flasks of mercury. Most of the production was made by Raymond Van Ness in a 30-ton Cottrell furnace in 1930–1931. Since 1931, during the period of high mercury prices, lessees produced 25 flasks annually from retorts. The rotary furnace is believed to be on the property. The principal workings are two glory holes tapped with a haulage adit, and a 135-foot inclined shaft with stopes. A 900-foot adit driven to explore the ore at depth has produced little.

The War Eagle group, owned by W. A. Flower of Tonopah, lies 1½ miles above Flower's camp in Antone Canyon which is 12 miles by road north of the town of Belmont. Gold and silver values associated with lead and copper minerals are reported found here in metamorphosed shale and limestone. The workings consist of a 500-foot crosscut adit, a 75-foot adit and several shallow shafts. The longer adit is said to require another 200 feet to reach the vein.

The Fiorite group of mercury claims, owned by W. A. Flower and W. F. Logan, is situated near Flower's camp in Antone Canyon. Bailey and Phoenix describe the property and report that about 50 flasks of mercury have been produced since its discovery

by Mrs. Flower in 1908. Small quantities of good-grade ore have been sorted from the workings in a 30-foot rib of silicified sediments. The property is equipped with a two-pipe, oil-fired retort.

Several groups of placer claims have been located in both Meadow Canyon and its branch Antone Canyon. Nine holes sunk 1 to 20 feet to bedrock are said to have panned about $0.30 in gold per cubic yard on bedrock.

The Titanium placer group, located by W. A. Flowers, lies near the junction of Antone Canyon and Meadow Canyon. A concentrate of the material from here is said to have contained 12.3 percent titanium oxide.

The Senator mercury mine, described by Bailey and Phoenix, is owned by George J. Barry of Los Angeles and lies at the head of the north fork of Mariposa Canyon on the west slope of the Toquima Range. It is reached by 3 miles of pack trail from the end of the Shoshone Canyon road east of Round Mountain. About 100 flasks of mercury have been produced from here since the discovery of the property in about 1925. The mercury is said to occur as cinnabar and metacinnabar in veins in granite. The workings consist of several adits, the longest of which is 90 feet.

The Monarch camp, of unknown ownership, lies about 15 miles by road south of Belmont. The claims appear to have been located for copper and turquoise, as some poor-grade gem material is found in a deep trench. In the area, apparently once located for copper, a ferruginous chert and jasper shows some faint copper stains. Two buildings here in liveable condition appear to have been used in the last 10 years.

Old wolframite workings are found about 5 miles southwest of the town of Belmont. The tungsten mineral is found in quartz veins that show considerable shearing. The workings are minor, consisting of shallow shafts and cuts.

The "pebble quarry," identified by several dumps on the north side of the Belmont-Manhattan road, lies about midway between the two towns. H. G. Ferguson[17] describes this old property.

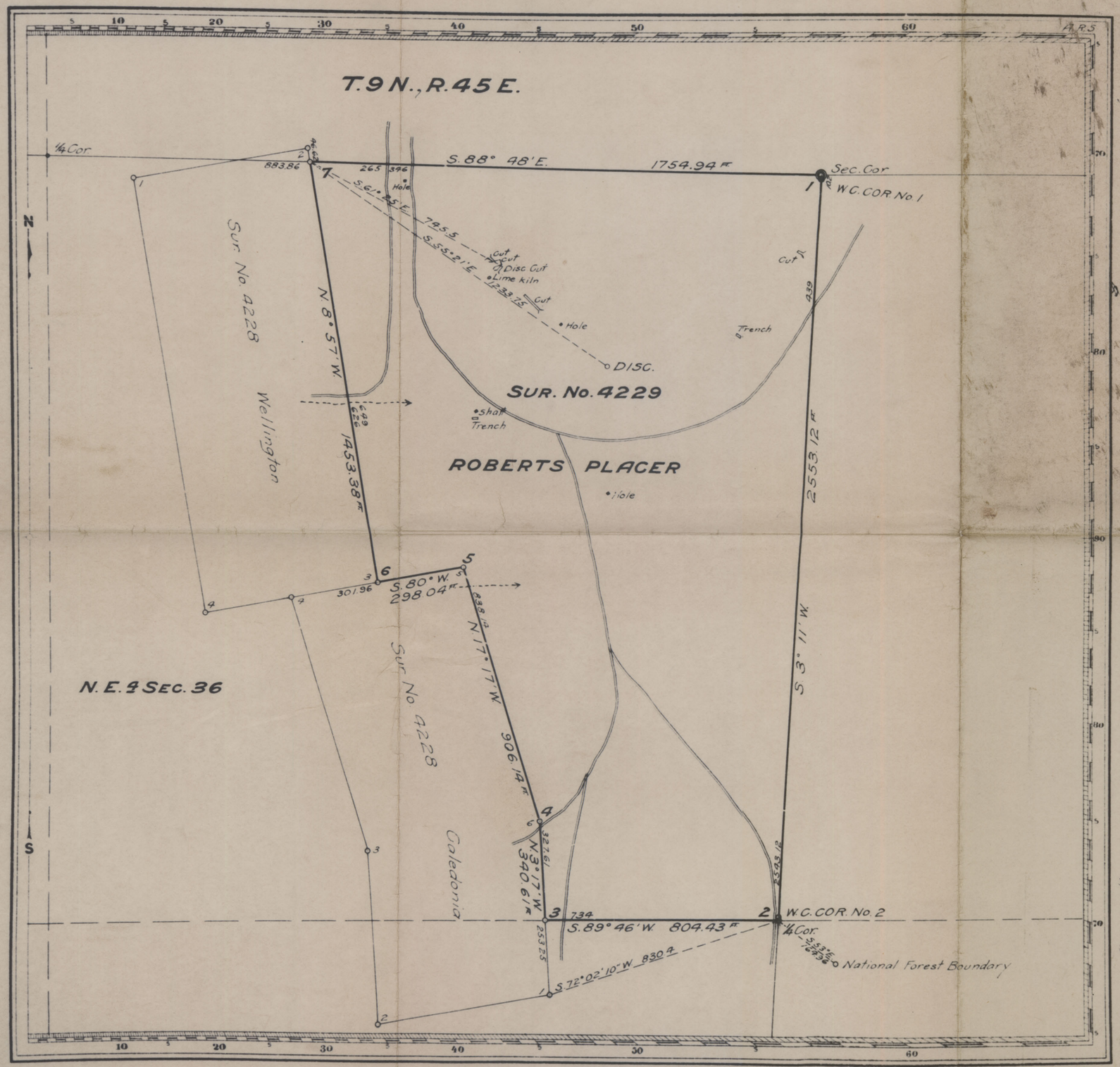
> A deposit of silicified tuff occurs on the east side of the Toquima Range, close to the Belmont Road, about 8 miles from Manhattan. This rock is quarried and after rough grinding in a tube mill shipped to Manhattan, Tonopah, and Goldfield for use in tube mills. The quarry is known

[17]Ferguson, H. G., Geology and Ore Deposits of the Manhattan District, Nevada: U. S. Geol. Survey Bull. 723, p. 79, 1924.

as the Maris "pebble mine." The country rock consists of some of the finer-grained members of the Bald Mountain lake beds. They are here tilted at low angles to the north and are cut by irregular dikes of Maris rhyolite. The silicification of the shaly lake beds appears to be largely confined to certain favorable beds, which have been more or less brecciated. In thin sections of the best grade of material the minutely brecciated structure can be seen, the little fragments lying at all angles and almost completely replaced by minutely crystalline quartz in a matrix of finely banded quartz and chalcedony. This brecciation aids in giving the requisite toughness to the material, for unbrecciated tuff, even though silicified, tends to split along the bedding planes.

On a cost basis, this material has been found to compete satisfactorily with the Danish pebbles ordinarily used, but owing to the isolated position of the deposit the high cost of transportation prevents its widespread use in other districts.

(4-675)



4229

204303

HSP
Claim Located September 6
Amended May 6, 1914.
Mineral Survey No. 4229
~~Lot No~~
Carson City Land District.

PLAT

OF THE CLAIM OF

Norman E. Smith, Chas A. Post, E.T. Smith, R.W. Kemp, Lillian Kemp, Gertrude Smith, H.S. Clue Hs & Ethel Mead

KNOWN AS THE

ROBERTS PLACER

IN Philadelphia MINING DISTRICT.
Nye COUNTY. Nevada
~~Containing an area of~~ ~~Acres~~
Scale of 300 Feet to the inch.
Variation 17°30' E.
SURVEYED July 1-2, 1914 BY
Charles E. McCarthy U.S. Mineral Surveyor.

The Original Field Notes of the Survey of the Mining Claim of Norman E. Smith, Chas A. Post, E.T. Smith, R.W. Kemp, Lillian Kemp, known as the Gertrude Smith, H.S. Clue and Ethel Mead Roberts Placer

from which this plat has been made under my direction, have been examined and approved, and are on file in this Office; and I hereby certify that they furnish such an accurate description of said Mining Claim as will, if incorporated into a patent, serve fully to identify the premises, and that such reference is made therein to natural objects or permanent monuments as will perpetuate and tie the locus thereof.

I further certify that Five Hundred Dollars worth of labor has been expended or improvements made upon said Mining Claim by claimants —— or their grantors, and that said improvements consist of 3 cuts, 2 holes and 1 trench; Value $535.00.

that the location of said improvements is correctly shown upon this plat, and that no portion of said labor or improvements has been included in the estimate of expenditures upon any other claim.

And I further certify that this is a correct plat of said Mining Claim made in conformity with said original field notes of the survey thereof, and the same is hereby approved.

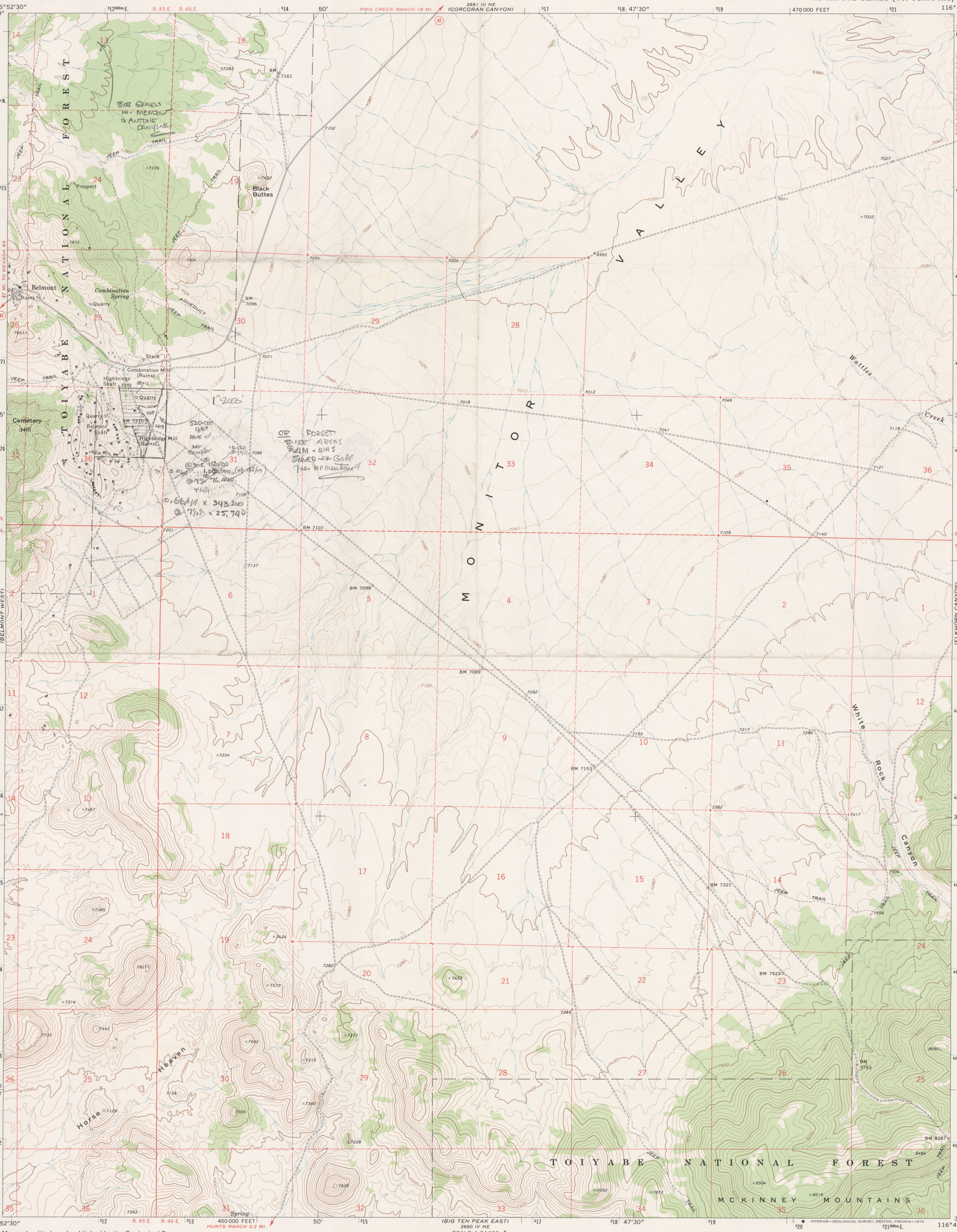
U.S. Surveyor Generals Office. John B. Sullivan
Reno, Nevada U.S. Surveyor General for
October 17, 1914 Nevada

0530 0045

0530 0045

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BELMONT EAST QUADRANGLE
NEVADA—NYE CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)



Mapped, edited, and published by the Geological Survey

Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs taken 1970. Field checked 1971

Projection and 10,000-foot grid ticks: Nevada coordinate system, central zone (transverse Mercator)
1000-meter Universal Transverse Mercator grid ticks, zone 11, shown in blue. 1927 North American datum

Certain land lines are omitted because of insufficient data

UTM GRID AND 1971 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

GN 0°07' 2 MILS; MN 16½° 293 MILS

SCALE 1:24 000

1 MILE; 7000 FEET; 1 KILOMETER

CONTOUR INTERVAL 40 FEET
DOTTED LINES REPRESENT 10-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

NEVADA
QUADRANGLE LOCATION

ROAD CLASSIFICATION

Primary highway, hard surface

Light-duty road, hard or improved surface

Secondary highway, hard surface

Unimproved road

Interstate Route — U. S. Route — State Route

BELMONT EAST, NEV.
N3830—W11645/7.5
1971

AMS 2661 III SE—SERIES V896

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