MONARCH / JEWELL
Sew-

EXCERPT from

SURVEY AND EVALUATION OF THE IDITAROD TRAIL AND CONNECTING TRAILS IN THE CHUGACH NATIONAL FOREST

DRAFT TECHNICAL REPORT

VOLUME 2: NATIONAL REGISTER EVALUATION FORMS

Prepared for
USDA Forest Service
Chugach National Forest
Anchorage, Alaska

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PHASE I EVALUATION FORM
Kurt Schweigert
March, 1991

1. Name of Property: Monarch/Jewell Mining District

2. Location: Section 16, T.11N-R.2E, Seward Meridian.
Anchorage A-6 Quadrangle.

3. Classification:
Ownership: Public-federal
Category of Property: District
Number of Resources within Property:
Contributing: 23 structures
Non-Contributing: 0
Number of Contributing Resources previously listed: 0
Name of related multiple property listing: Gold Mining on the Chugach National Forest, 1895-1940.

6. Function or Use:
Historic Functions: Industry/Extractive Facility
Current Functions: Recreation and Culture/Outdoor Recreation/Hiking Trail, Commemorative Marker.

7. Description:
The Monarch/Jewell mining district is located near the northern end of the Crow Creek drainage, about one mile south of Crow Pass. This district contains features and artifacts associated with lode gold mining in the period 1909 to 1940.

The district contains two loci of milling and mining headquarter activities, four mine adits, extensive evidence of prospecting, and a general scatter of mining related machinery. At least three lode gold mining enterprises are represented in this district; the properties are considered to be a district because the physical remains of the mining operations overlap and are nearly continuous throughout the designated site/district area.

Locus 1 is the headquarters/mill location for the Monarch Mine. This locus contains 14 historic structural features and extensive mining and milling equipment remains. Feature 1 is a rectangular pit containing remains of a stamp mill, a compressor and various other machinery. The pit is banked into a northeast hill slope. A tailings pile of fine ground stone extends about 9 meters to the north-northwest from the northwest corner of the Feature. The tailings pile extends from a cribbed log structure which is about 2 meters square and curbed into the hill slope at

the head of the tailings pile. Feature 1 appears to be in two levels; the upper level contains the stamp mill remains, and the lower area contains the remains of a compressor. The compressor engine and attached reservoir are mounted on poured concrete foundations. The slopes of the Feature have slumped considerably, making definition difficult for dimensions of former structures. This feature was reportedly built in 1931 as a landing/base for a small mill and compressor (U.S.G.S. Bulletin 849 G).

A metal plaque concreted to a large rock to the north of Feature 1 reads:

> Henry Ingle Staser
> Jan. 17, 1891 Feb. 8, 1940 Came to Alaska in 1908 where he was a legislator and U.S. Marshall. He owned and operated this Monarch Gold Mine from 1926 until his death here in 1940.

This rock was used as a central reference point to begin site mapping.

Feature 2 is a square depression immediately south-southeast of Feature 1, along the same slope. Feature 2 is 3.9 meters square and up to 2 meters deep. Cultural materials associated with Feature 2 are a metal water pipe, sheet metal, and machine parts. Feature 3 is a rectangular depression 4.9 meters X 9.6 meters. The western half is up to 2 meters deep; the eastern half is banked into the hill slope up to 1 meter below the estimated natural slope. Feature 3 contains large sawn logs, bed springs, 1.5" diameter iron pipe, stove parts, cart rail, and clear bottle glass. Earth and stone are thrown down slope to the south-southwest from the depression.

Feature 4 is a rectangular depression banked into a south-facing slope. Excavated material was thrown down slope to the south. The Feature contains no visible structural remains, but contains bed springs and frame, a 1 1/2" water pipe, and a cart rail. Feature 5 is intact remains of a cart railroad or tramway apparently leading from the mine to the mill. The rail runs to a tailings pile on the east end, where it turns to the north and runs into a collapsed mine tunnel (Feature #6). Water was observed flowing from the mine mouth for a distance along the remains of the rail line. Feature 6 is the remains of a drift tunnel evident as a slumped trench leading to a partially collapsed adit. The adit has timbers visible and is partially filled

with water. At the southwest end of the trench is a tailings pile.

Feature 7 is two buried pipelines, one about 30 centimeters in diameter and the other about 5 centimeters in diameter. Both pipes run parallel to Feature 6, about 3.5 meters up slope (to the northwest) from Feature 6. The pipelines continue for an unknown distance from the southwest edge of the trail to the northeast, past the mine mouth; above the mine mouth the pipelines are covered with earth and vegetation. Feature 8 is a storage pile of cart rails and ties. Feature 9 is a large cellar of dry laid rubble and stones of various sizes. The depression for the structure is banked into a west-facing hill slope. The rectangular foundation/cellar has a small foundation partition in the southeast corner, and a deeper, stone-lined depression is in the northwest corner. The cellar is partially filled with foundation stones and is up to 2 meters deep. At the approximate center of the foundation/cellar is an upright pole, about 15 centimeters in diameter, banked with large rocks, and containing wire nails.

Feature 10 is a small concentration (approximately 4.5 meters in diameter) of large metal rollers used in the ore milling process. Observed within the concentration were 4 rollers and a mounting assembly in the concentration and one small enameled metal bowl. Down slope to the south of the Feature are two large metal tracks in which the crusher/mixers ran. Feature 11 is a former building pad down slope to the south from Feature 1. The pad is roughly rectangular and has an earthen berm along the south and west down slope sides. The pad contains an 8" diameter pole, a large wooden beam with threaded bolts, a metal mining drill screw, stove parts, sheet metal, and a heavy iron door.

Feature 12 is a depression excavated into the south-facing slope. The depression opens onto the wagon road to the southwest and is about 2 meters deep below the slope level at the north extent. The Feature contains ore stones, a wood beam, and sheet metal. Feature 13 is a series of 4 cellar depressions and/or prospect pits. The depressions are aligned north-south and excavated materials have been thrown up on the west side. The depressions contain round wire nails, buckets, cans, sheet metal, shoe leather, milled lumber, a portion of a 12" diameter post, and an enamel cup. One depression has a partial stone foundation on the north and east sides. Feature 14 is a large rectangular, flat excavation into an east-facing hill

slope. This Feature may be a house pad and does not appear to be a prospect pit. Earth is mounded on all sides of the dugout. Cultural materials associated with this feature include milled lumber and a 20' length of 1/2" copper tubing.

Locus 2 is the archaeological remains of a mining and milling operation, probably associated with Jewell Mine, the adit for which is up slope to the east.

Feature 15 is a rectangular depression banked into a west-facing slope, with a dry-laid stone wall along the eastern edge of the excavation. The feature is about 5.2 meters by 7.1 meters, and a pile of crushed rock extends to the west of the defined feature. The area contains iron pipe, a large pulley braking mechanism, plate steel, and a portion of a pulley apparatus.

Feature 16 is a vague depression about 3.4 meters east of Feature 15. Feature 16 is about 3.0 meters by 3.5 meters, appears to be more deeply excavated than Feature 15, and is partially filled with stone, cans and milled lumber.

Feature 17 is remains of a tram system about 5.5 meters north of Feature 16. An irregular area about 8.2 meters by 5.5 meters contains poured concrete footings, a stone foundation, and large iron bolts extruding from the ground surface. Braided wire cable up slope from the feature extends in the direction of the Jewell Mine adit. The talus slope appears to have encroached on the east edge of this feature.

Feature 18 is 110 degrees, 1.2 meters from the southeast corner of Feature 16. Feature 18 is a building pad levelled into the east-facing slope and built up with rock on the west or up slope side. The building pad is about 7.3 meters by 5.5 meters and contains green and clear bottle glass, milled lumber, a bed frame, can metal, round wire nails, plaster, rubber, and wire. To the immediate west of the feature is remains of an ore car.

Feature 19 is 200 degrees and 40.1 meters southwest of Feature 18. Feature 19 is a large rectangular building pad dug slightly into the west-facing hill slope; stone is pushed up to support the west or down slope side of the pad. The pad is about 16.0 meters by 6.2 meters and contains boot parts, sheet metal, stove parts, round wire nails, metal strapping, milled lumber, round poles, battery cores, and a Velvet tobacco can.

Outlying Features. Four observed features are not within either of the feature loci. Two mine adits associated with the Monarch Mine are located on the west-facing slope of Jewel Mountain, from 400 to 500 meters northeast of site Locus 1. The mine adits are most distinguished by tailings of orange-brown rock strewn down slope from the adits. The southern adit is nearly obliterated and does not appear to retain exterior structural remains. The northern adit retains ruins of a wood frame ore hopper and perhaps part of the upper end of a cable tram used to transport ore to the Monarch mill site. Braided wire cable, pulley wheels, milled lumber, and other equipment parts are strewn down slope from the adits. The adits do not have substantial landings, and paths to the adits were not observed on the steep rock slope, possibly because the landings and trails have been carried away by snow or rock slides.

A third adit, the Jewell mine on Barnes Mountain, is similar in appearance to the Monarch Mine adits. Structural remains are not evident at the mine mouth, and the tunnel appears to have at least partially collapsed. Heavy cables extend from the mine in the directions of both the Monarch Mine mill site and the supposed Jewell Mine mill site (Locus 2). Milled lumber, iron pipe, metal drums, machine parts, and an extensive can scatter are spread between the adit and the features in Locus 2.

The southernmost outlying feature is a large prospect trench which runs perpendicular and up slope from the current Crow Pass Trail. The trench runs about 100 meters up slope from the current trail, where it intersects with the Iditarod Trail switchback trail described below; the trench then changes direction slightly to the south and becomes much less distinct. Below the switchback road the trench is about 5 meters wide and up to 1 meter deep. Earth and stone are mounded up to 1.5 meters high on each side of the trench. Large rocks remain in the trench, and a rusted one-gallon syrup can was found partially buried in one berm of the trench.

The historic Crow Pass Trail, a part of the Iditarod Trail, passes through this site designation. The historic trail splits within the designated area of the Monarch/Jewell district and rejoins to the north of the designated district area. Perhaps the original foot trail roughly coincides with the current recreational trail and ascends the talus slope at the north end of the designated Monarch/Jewell district. An improved

dogsled trail departs from the current recreational trail near the south end of the designated district, climbs the talus slope in a southeasterly direction, and then switches to the north and gradually climbs the talus slope to the head of the valley. The Crow Pass Trail/Iditarod Trail was designated cultural resource number ANC-144 prior to the current survey, and specific physical and historical information about the trail may be found in the Alaska Historical Resource Survey forms for the trail. This trail is shown on the appended site map for the Monarch/Jewell district, but the trail segments are not redundantly recorded as specific features of the Monarch/Jewell district.

The Monarch Mine mill site was reportedly vandalized and burned in the 1960s (Carberry 1979). Other impacts and erosions include intrusion of recent bottle glass and other litter. The site may also have been slightly impacted by construction of the current Crow Pass Trail. The natural movement of rock on the talus slope on the east perimeter of the site may have obliterated features and buried equipment, and seasonal run-off and vegetation growth may have obliterated or masked some ditches and other excavations.

The District generally retains fair to good integrity as a small, lode gold mining area of the period 1909-1940. Standing structures do not remain, and therefore the district has lost substantial integrity of design, materials, and workmanship from the period of significance. However, the unique setting of the property has not been eroded since the period of significance, and the remaining features and materials are sufficient to convey the feeling of the broad historical theme and the particular operations and circumstances of this district.

8. Statement of Significance:
Significance Level: State/Local
Applicable Criteria: A
Areas of Significance: Industry
Period of Significance: 1909-1940
Significant Dates: 1909
Significant Person:
Architect/Builder:

State significance of property:
The first of the gold-bearing quartz veins that would become the Monarch Mine were discovered by Conrad Hories (or Hores) in 1909 on an open rock face above the Iditarod Trail (Seward Weekly Gateway 9/18/1909. Hories was a veteran prospector from the Sunrise Mining

District, and he may have been associated with Robert Michaelson and other miners of that district in the Crow Creek prospects. Michaelson headed an association of miners who also filed large lode claims at the head of Crow Creek in October, 1909, as a minor stampede occurred there (Seward Weekly Gateway 11/06/1909). In 1910 additional adjacent claims were filed, and active mining was begun. Hories and his partners bonded their claims and mining operation to E.J. Barnes in August, 1910 for a sum variously reported at $30,000, $50,000 and $80,000 (Seward Weekly Gateway 7/30/1910, 8/20/1910, 10/29/1910; Carberry 1979:118; Staser 1933).

The property was thereafter known as the Barnes Property, but it was controlled by the Alaska Gold Exploration and Development Corporation. E.J. Barnes had experience in mining in Nevada and other western states, and he was a brother-in-law of E.W. Johnston, who had made a fortune in gold mining at Nome. E.J. Barnes was joined in the venture by his father, James Barnes of Seattle (Seward Weekly Gateway 9/24/1910, 10/1/1910). In September 1910, the Barneses contracted with two miners to drive a 300 foot tunnel into the mountain during the coming fall and winter, and by the end of October 1910 the tunnel was reported to have been 75 feet long (Seward Weekly Gateway 9/24/1910, 10/29/1910). Development continued through 1911, and in 1912 the U.S. Geological Survey described the work done to the end of 1911.

> The developments on the Stella claim to January 1, 1912, consisted of 560 feet of adit levels, 56 feet of crosscut timbering, 14 feet of drifts, and 52 feet of winzes, together with several open cuts on the different veins. These developments include three adit levels, two of which are on the southernmost vein, one 100 feet vertically above the other. ... The upper of the two tunnels was 267 feet in length, and the lower tunnel, started late in the fall, was only 50 feet long; two winzes, 42 feet and 10 feet in depth, have been sunk on the vein in the upper tunnel. On the northern vein, which is nearly parallel to this one and about 100 feet distant from it, an adit 243 feet in length has been driven (Brooks, et al. 1912:153).

The Geological Survey report in 1912 did not mention milling equipment or other structural improvements to the property, and no other descriptions of early

structural improvements have been found for the property other than a newspaper account that E.J. Barnes planned to erect cabins in August, 1910 (Seward Weekly Gateway 8/20/1910). The Barnses may have promoted the sale of their rights to the property as early as December, 1910, but one source states that the Barneses did not receive title to the claims until March, 1912 (Seward Weekly Gateway 12/3/1910; Carberry 1979:118). By October, 1913, the property was reported to be owned by the Turnagain Arm Mines Company of San Francisco, which was apparently a partnership of Samuel I. Silverman and J. H. Hutchinson. Hutchinson was a former governor of Idaho and had mining interests in several states (Seward Daily Gateway 10/17/1913).

Very little development was reported for the property after 1911, and a U.S. Geological Survey investigation in 1915 found that no mining was being done there (Carberry 1979:118-119). Failure of owners to complete annual work required by law apparently led to the cancellation of the original claims sometime between 1915 and 1926. In 1926 Clyde Brenner relocated these claims and a number of other claims to the south of the former Barnes properties, and in the same year Brenner transferred the claims to the Monarch Mining Company. In 1928 or 1929 the Monarch Mining Company sold the property to Harry Staser for $50,000, under conditions of a 10 year bond, a 10% royalty applicable to purchase price, and that $10,000 in improvements would be made to the property within two years. Staser transferred his rights to the property to the newly-formed Crow Creek Gold Corporation, of which Staser was 51% owner, and he reportedly borrowed the $10,000 to begin work on the mine (Carberry 1979:119; Staser 1933). A mining engineer hired by Staser to assess the property in 1929 reported the following equipment on site:

> Mining equipment on the property consists of a 15 H.P., Z type Fairbanks-Morse gasoline engine, driving a 7" x 6" Sullivan air compressor. There is also are receiver, Jackhammer drill, hose connections, mounting column, and necessary blacksmith tools. Buildings consist of blacksmith shop, cabin, and test mill. The test mill consists of a 300 lb. stamp, small crusher, feeder, amalgamation plate, and gasoline engine. The capacity of this equipment is from 800 lbs to 1200 lbs per 24 hours, and is only suitable for very high grade ores (Thurmond 1929).

Staser largely reconstructed the headquarters and milling site, as he reported in 1933:

> During the past five years 50,000 board feet of lumber has been purchased and freighted to the property, all of which was sawed in a nearby sawmill. With this we have erected new bunk-houses, mess-house, blacksmith shop, powder magazines, out-houses, a new mill building complete with iron roof and ore bunker, and have on hand enough lumber to install transmission, etc., for new mill. In fact, the camp is complete, so far as buildings are concerned (Staser 1933).

In addition to the new buildings, Staser reported new equipment on the site: a second jackhammer, 1500 feet of black pipe, a small gasoline hoist, a second small gasoline engine, a Ford Model A one-ton truck, and a No. 2 Wheeling Jaw Crusher which had never been used.

Staser also reported in 1933 that a grade had been completed for a pipeline to supply water under pressure to operate a 50 horsepower Pelton Water Wheel, which would generate power for the operation. Staser announced a sale of treasury stock of the Crow Creek Gold Corporation to raise $15,000 for development, probably primarily for purchase of a mill (Staser 1933). The Anchorage Daily Times (8/3/1933) reported that the new Denver quartz mill was expected to be in operation shortly. In 1937 the Department of Mines of the Territory of Alaska recorded some additional improvements to the property:

> The mill machinery consists of a Wheeling jaw crusher, a 15-ton Denver quartz mill with inside amalgamation, 40-mesh screens, a 5x5-foot amalgam plant, three-quarter size Straub concentrating table. Contained in the same building is an Ingersoll-Rand single compressor, 12x14". Both mill and compressor are run by a 5-foot Pelton wheel with a 153-foot head. 420 feet of pipe line and several hundred feet of flume lead the water to the Pelton, located on the side of the mill building. A 10-H.P. Fairbanks Morse gasoline engine is used for auxiliary power. A small air hoist is used on the tram to the Monarch. Three aerial trams are used, two 1500-foot trams to the Monarch north and south veins, and a new 2500-foot tram to the Jewell Mine. A new tractrotrac, 20-H.P. and a Chevrolet

> truck comprise the transportation equipment. An Ingersoll-Rand steel sharpener is used in the blacksmith shop. A combined mill, power, and blacksmith shop are contained in one structure, and a cook house, bunk house and an ore bin and storage structure -- the latter at the portals of the two mines, comprise the buildings (Department of Mines 1937:4).

Staser's investment in the property paid well in the first year of operation, when $80,000 in gold was extracted. In 1930 the Crow Creek Gold Corporation entered an agreement with the Agostino Gold Mining Company, which was headed by Bruno Agostino, under which Agostino Mining Company obtained mining rights for the price of $150,000, which might be paid with 25% royalties of mine production. The agreement required Agostino to open a lower adit near the mill site, which would intercept the quartz lode below the old Monarch tunnels; winzes would then be driven between the tunnels to effectively mine the ore. The Augustino Mining Company spent two seasons driving a tunnel some 400 feet into the mountain but had to abandon the project because of excessive water in the tunnel. By 1933 Augustino had abandoned the agreement, but Staser could report that he could get all the water he needed for domestic or milling purposes from the Agostino tunnel (Staser 1933; Carberry 1979:119).

The Crow Creek Gold Corporation purchased the Jewell Mine, which was about a quarter mile to the south of the Monarch Mine, in 1934. Staser thereafter operated the Jewell Mine in consort with the Monarch Mine by means of a 2500-foot long tram between the Jewell adit and the mill site. The Jewell Gold Mining Company had attempted to develop the Jewell Mine in 1923, reportedly investing $80,000 in equipment, buildings, and development work. However, an avalanche during the winter of 1923-1924 destroyed most of the buildings and equipment. The compressor used by Staser at the Monarch mill site originally was intended for use at the Jewell Mine mill site (Staser 1990; DeArmond 1962:41)

Despite the promise shown in the first year of Staser's operation, the Monarch Mine would not be a financial success. The mine is reported to have been bankrupt by 1938, but it continued to operate at some level until Harry Staser died in February, 1940 (Staser 1990). Gold mining was virtually suspended by law during World War II because of a need for miners to extract

strategic metals, and following the war the cost of labor and materials rose while the legal value of gold remained at $35.00 per ounce. The property was acquired by Joe Danich of Anchorage in 1946. Danich occupied the property for several years and retained the mining claims until 1972. The Monarch and Jewell mines have not been patented, but the properties are within active mining claims (Department of Mines 1946; Carberry 1979:120).

A number of mining efforts, other than the Barnes/Monarch and Jewell mining operations, are or may be represented in the physical features and artifacts observed in this area. The small stampede to the area of the Hories/Michaelson discoveries undoubtedly resulted in extensive prospecting activities within and around the recorded property in 1909-1911. The Seward Weekly Gateway (8/20/1910) reported, "A mining man named McLain has recently located several veins on the opposite side of the creek from the Hories properties and intends to start development work shortly."

Clyde Brenner, who re-claimed the Monarch Mine in 1926, also held other claims to the immediate south of the Monarch mill site and the Jewell Mine claims. Brenner is reported by one source to have owned the Gunnysack Group and to have installed a three-stamp mill in 1928 (DeArmond 1962:41). A 1937 Department of Mines report described the operation of the Greenback Mining Company, which owned two claims adjoining the Jewell properties and which apparently had a headquarters/mill site less than 1000 feet below the Monarch Mine mill site:

> The owners of these claims are Clyde Brenner, J. Campbell and Stanley McCullam. Besides the owners, two men have been on contract in driving a crosscut tunnel, 330 feet south from the mill along the bank of Crow Creek. This crosscut tunnel is at approximately the same level as the bottom of the incline shaft located at the mill. This tunnel is in 150 feet with most of the distance through glacial moraine only a few feet below the surface. The two parallel veins have not been intercepted. The shaft workings were filled with water and the tunnel on the west side of Crow Creek was not visited. ...
>
> This season no ore was milled and the machinery contained in the mill consists of a 10x12" Blake crusher, three 750-pound stamps,

> Gibson impact amalgamator, half-size Wilfley concentrating table, and a 5-H. P. Fairbanks Morse gas engine furnishes power. A two-stage Ingersoll-Rand portable compressor, run by a Waukesha air cooled gas engine, is used for mining (Department of Mines 1937).

The closing date for the Brenner/Gunnysack/Greenback operation is unknown, but the reported condition of the property in 1937 may indicate that mining had permanently ceased by that date.

The Monarch/Jewell Mine District is recommended to be eligible for nomination to the National Register under Criterion A, for its association with the broad pattern of lode gold mining in Alaska in the period 1909 to 1940. Lode mining and milling commonly occurred as a second phase of gold exploration after placer deposits had been discovered, both in Alaska and in other gold-producing areas of the United States and Canada. The rich placer claims lower on Crow Creek, including the Crow Creek Consolidated Gold Mine (National Register 1978) were discovered in 1895-1898, but the gold-laden ore seams near the head of Crow Creek were not discovered until after the placer mines had been successfully exploited and, ironically, after thousands of would-be gold prospectors had travelled the Crow Pass Trail through the area on their way to placer gold fields in the interior of Alaska.

The district contains features which represent the methods, scale and difficulties of hardrock prospecting and mining in the period between the last major gold rushes in Alaska and the federally enforced cessation of gold mining during World War II. The district also contains machinery and structural features which reflect adaptations to the extreme difficulty of mining in this area, including remains of tramways from mine adits to mill sites and a ledge cut from solid rock to carry a pipeline diverting water to generate power for the Monarch mill.

The district is crossed by the Crow Pass Trail, which was a major winter route for gold seekers and others travelling by dogsled or foot to Alaskan gold strikes in the period 1906-1912. The Crow Pass Trail was a segment of the primary route of the Iditarod Trail from Seward to Nome in the period 1911 to 1918. The very visible presence of the gold rush trail through the district augments and enhances the qualities of feeling and association of the district and its component features.

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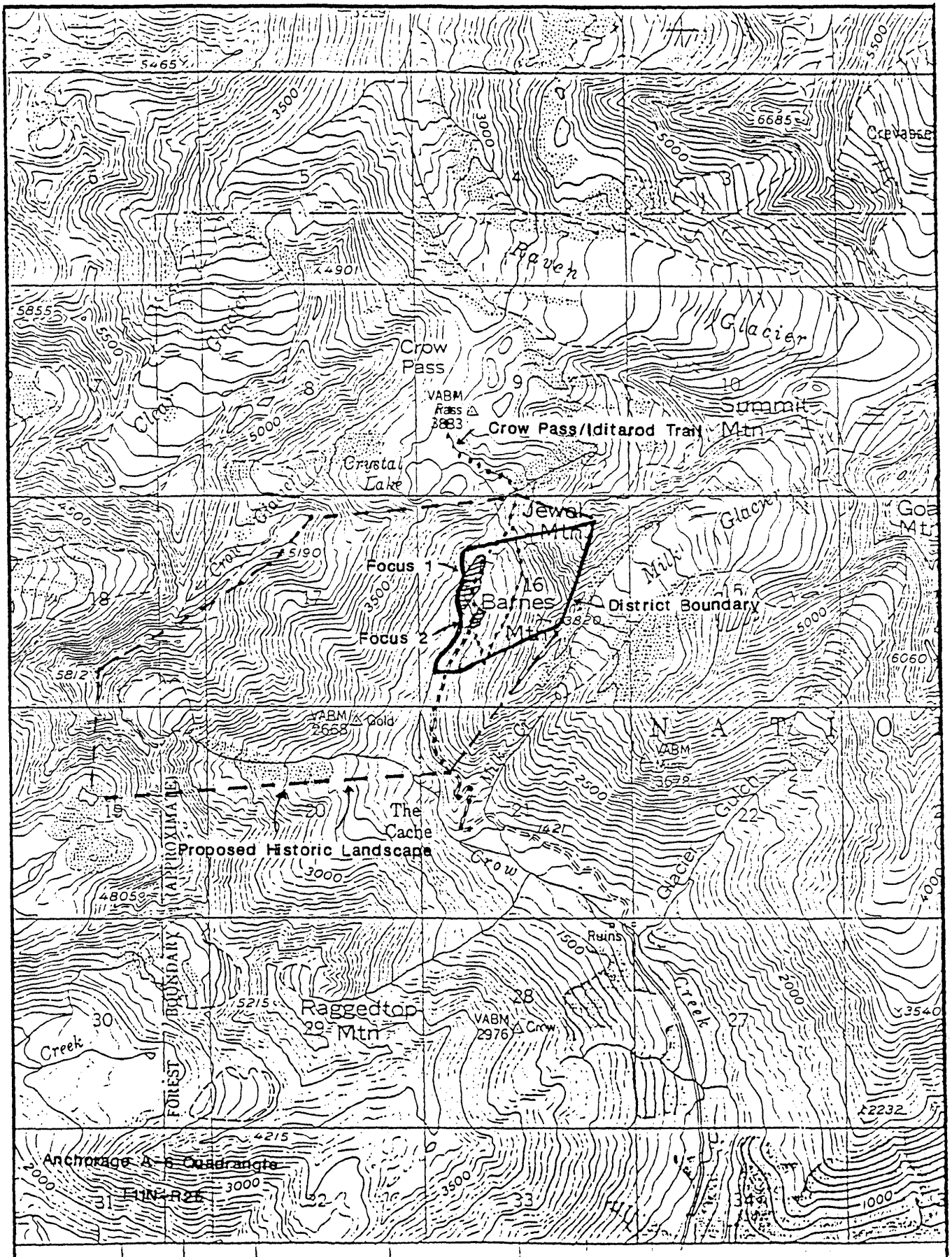
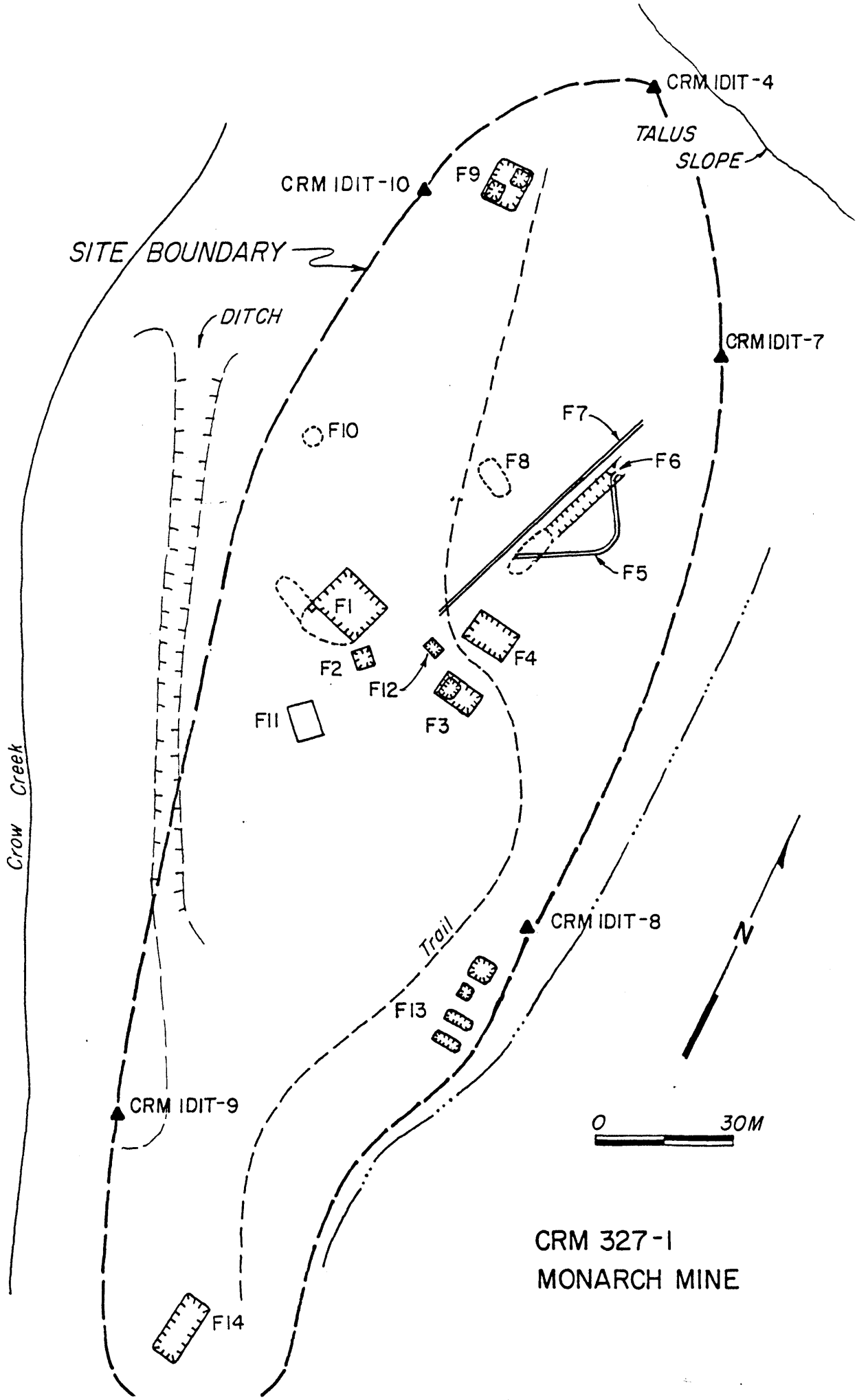
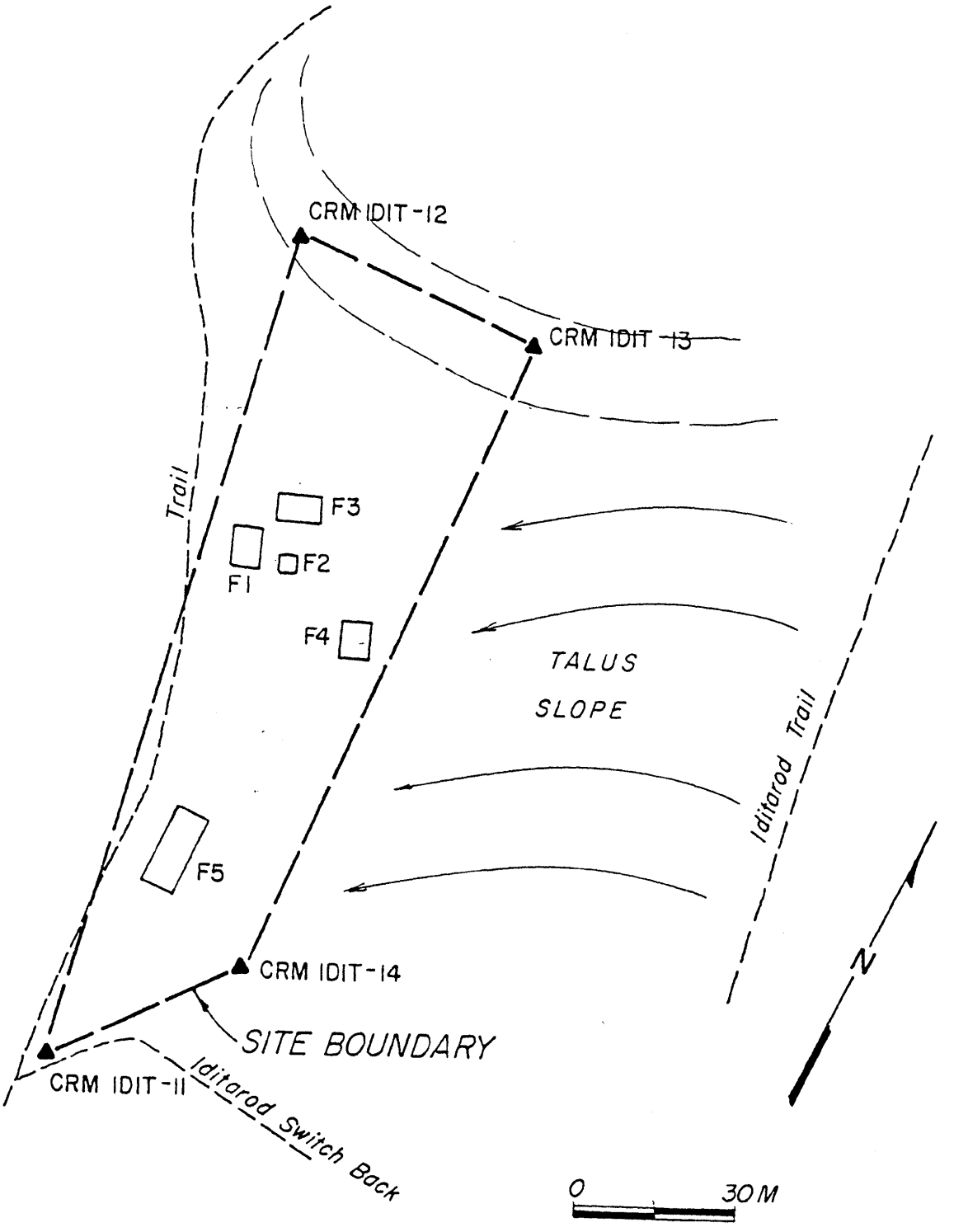


MONARCH/JEWELL MINE DISTRICT



CRM 327-1
MONARCH MINE



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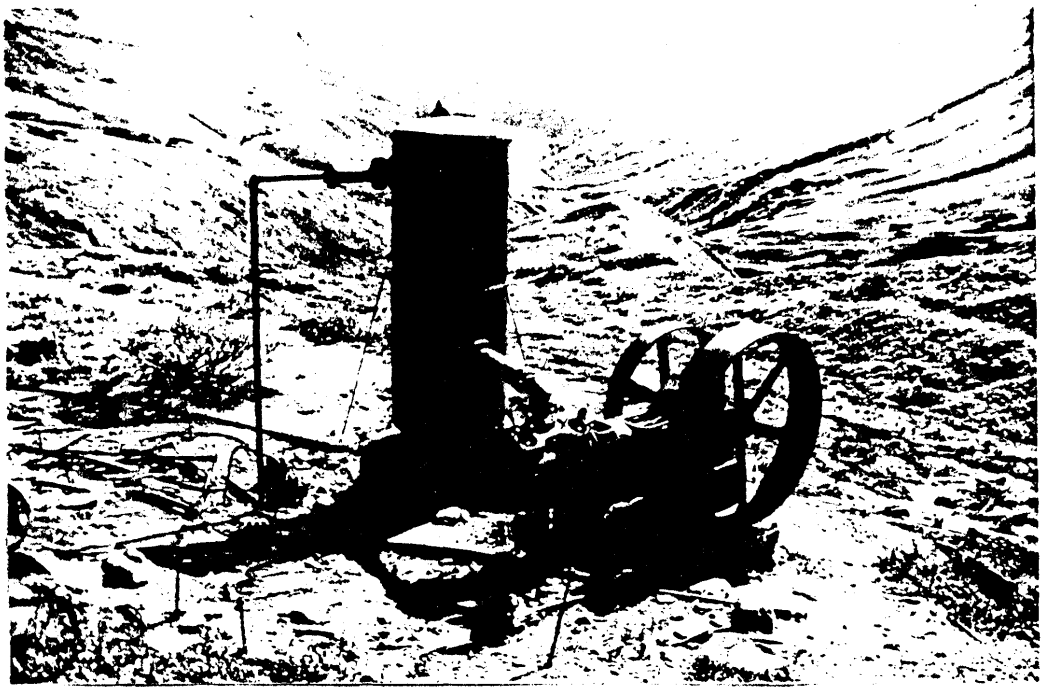
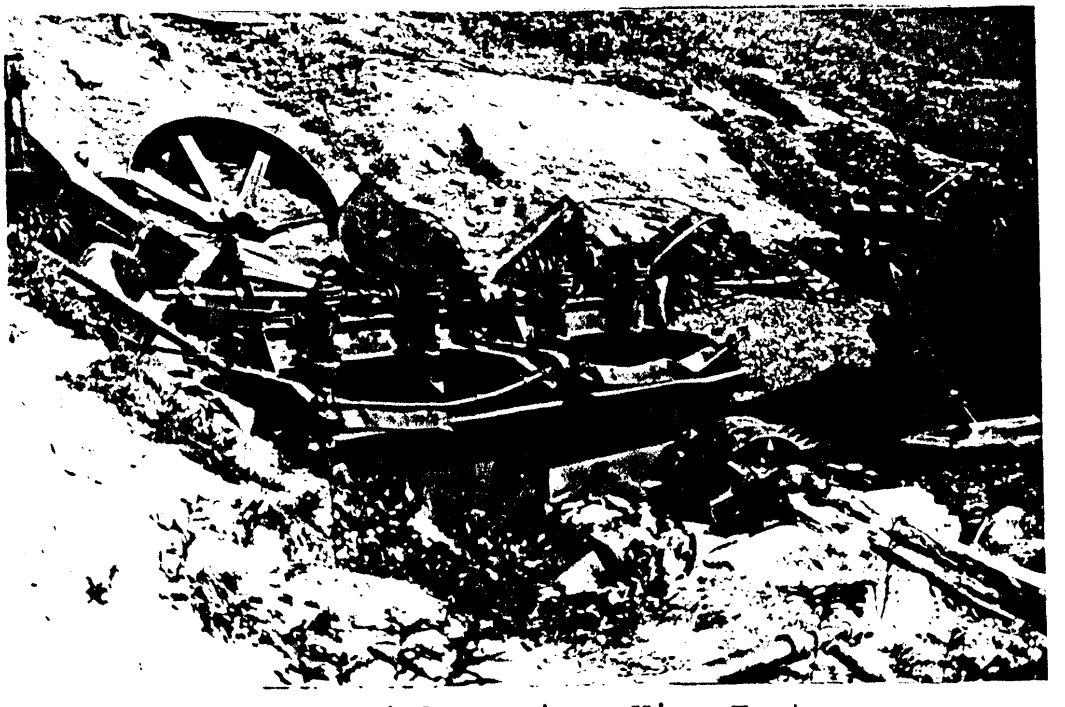
MINE

Monarch/Jewell Mine District

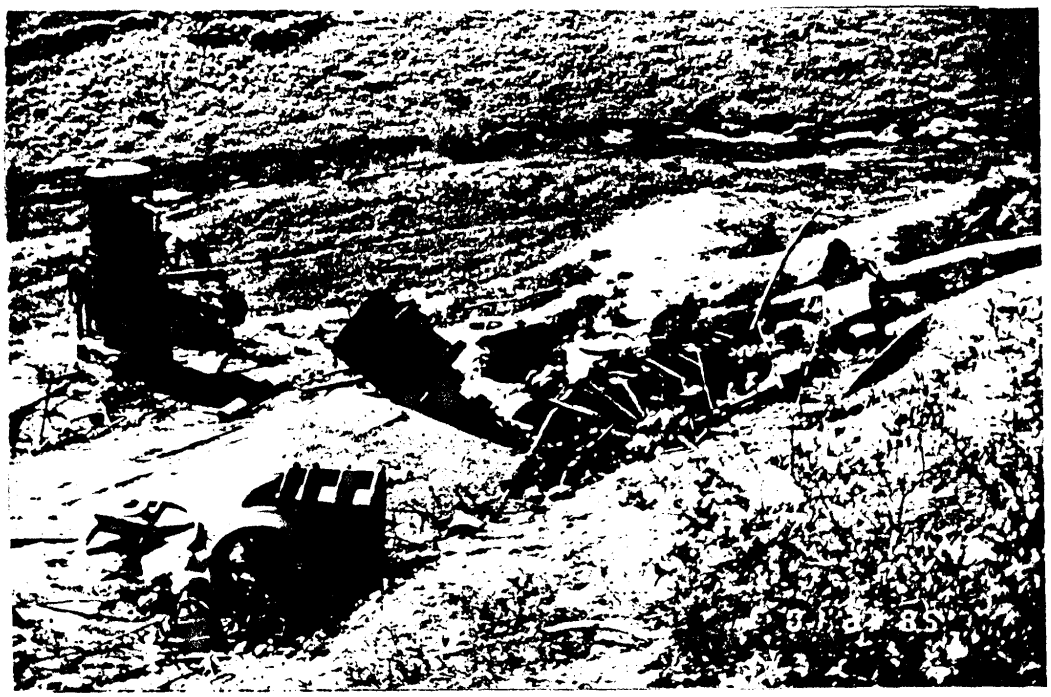


Feature 1, Compressor Remains, View South

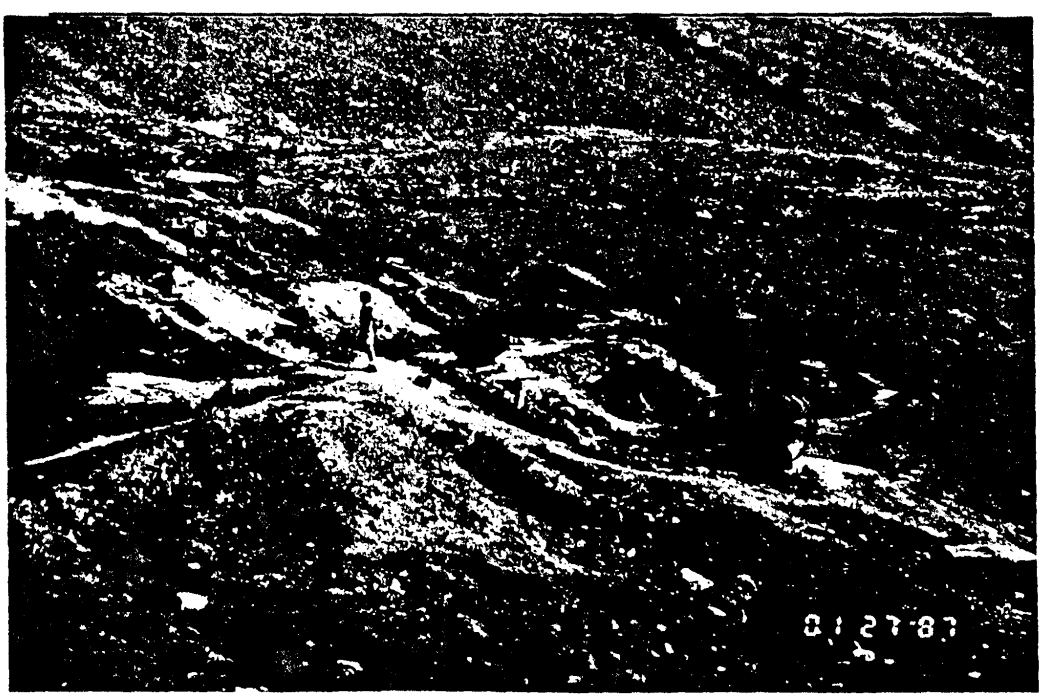


Feature 1, Mill Remains, View East

Monarch/Jewell Mine District



Feature 1, Mill Equipment, View to SE



Feature 1, View to East

Monarch/Jewell Mine District

Feature 2, Building Depression, View to SE

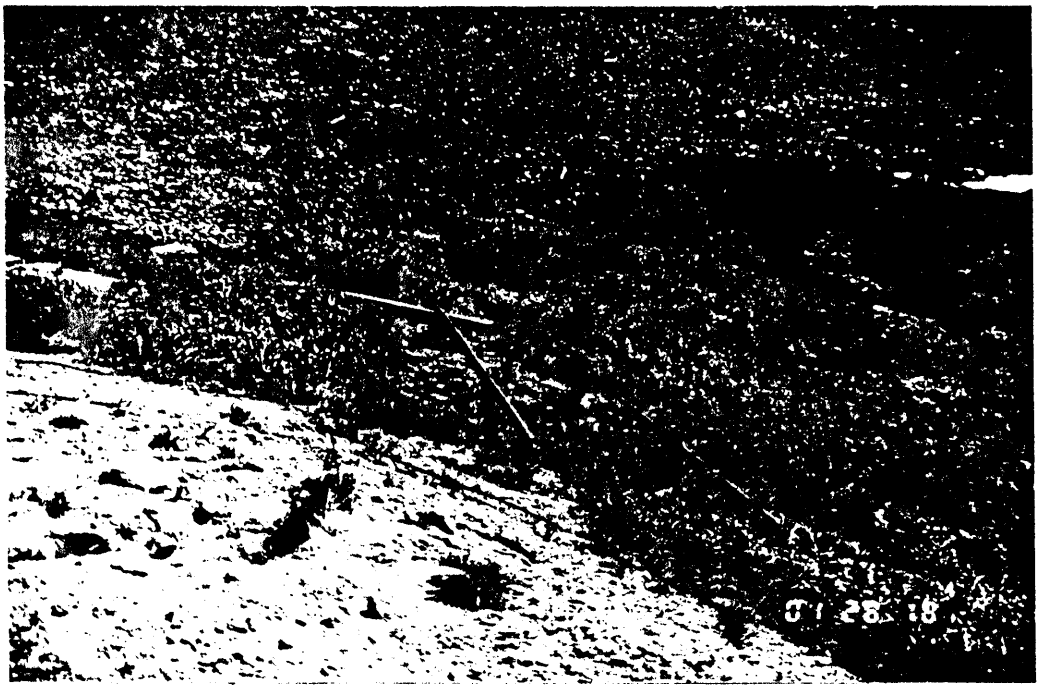
Feature 3, Building Depression, View to East

Monarch/Jewell Mine District

Feature 4, Dugout Building Pad, View to NE

Feature 5, Intact Cart Track, View to West

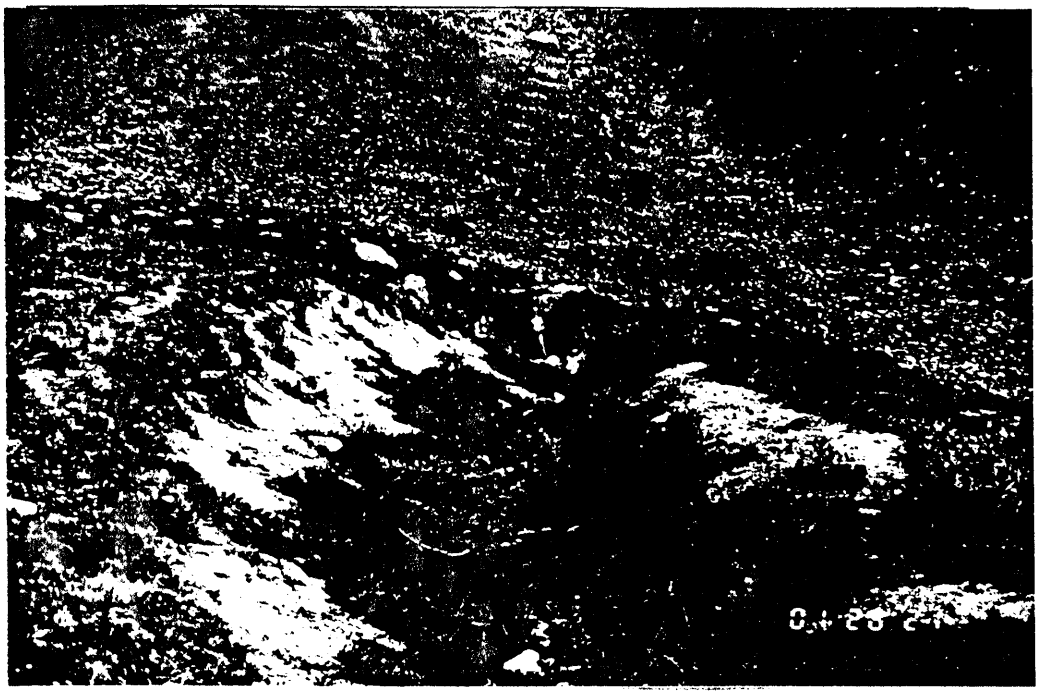
Monarch/Jewell Mine District



Cart Rails Lying Across West End of Rail Grade, View to East

Cartrail Entrance to Adit, View to North

Monarch/Jewell Mine District



Trench and Adit, View NE

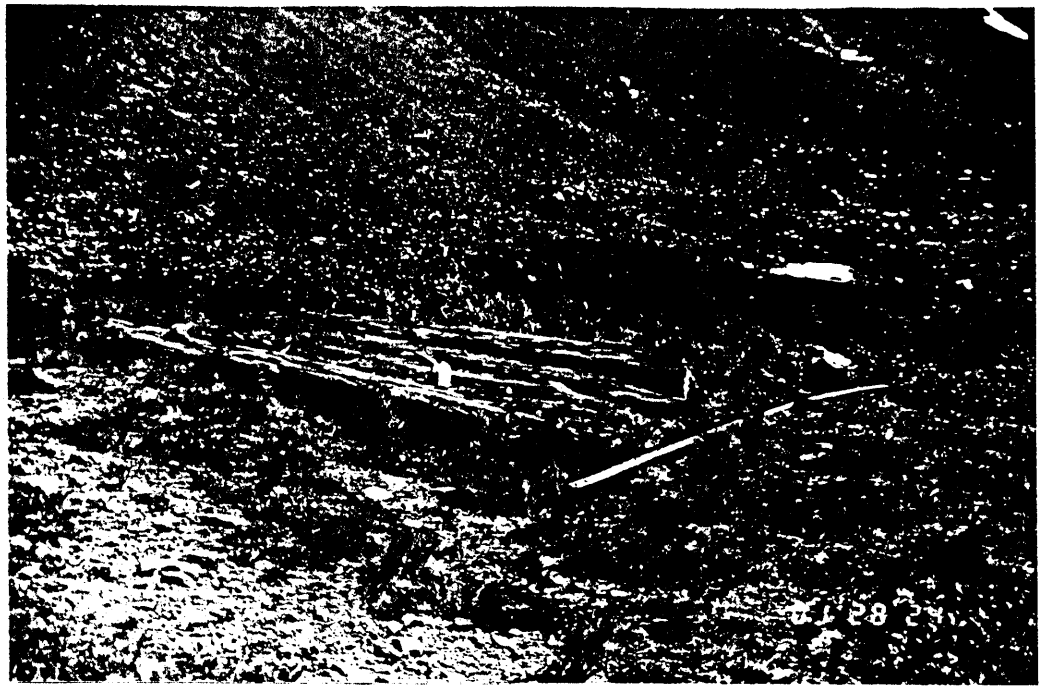
Feature 6, Mine Adit, View to NE

Monarch/Jewell Mine District

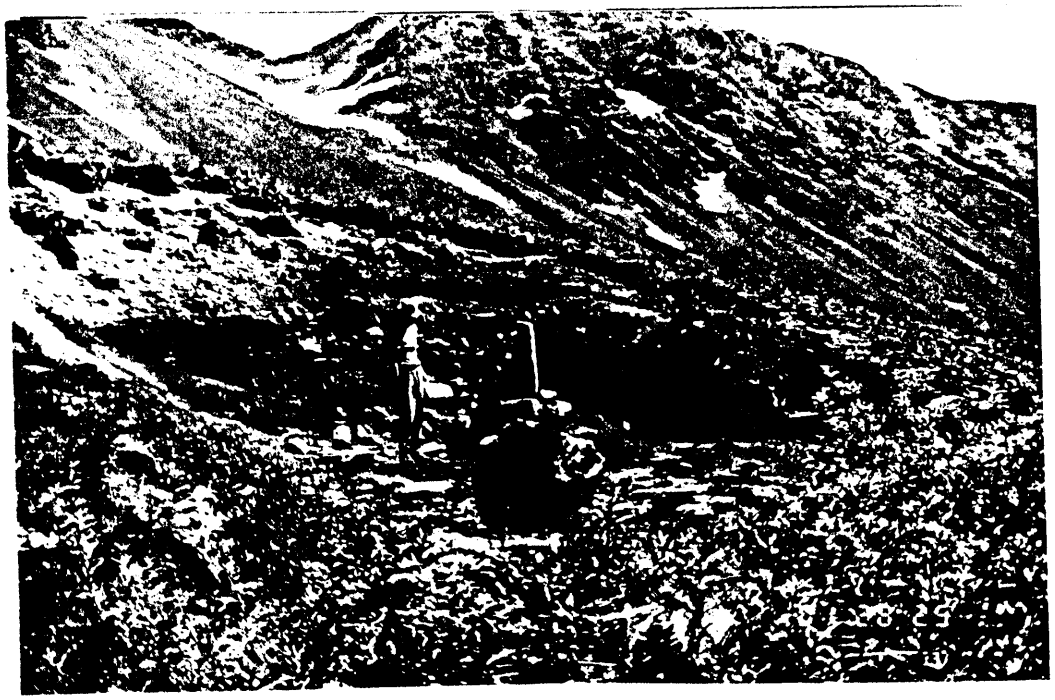
Staser Memorial , View to SW

Feature 7, Buried Pipelines, View to SW

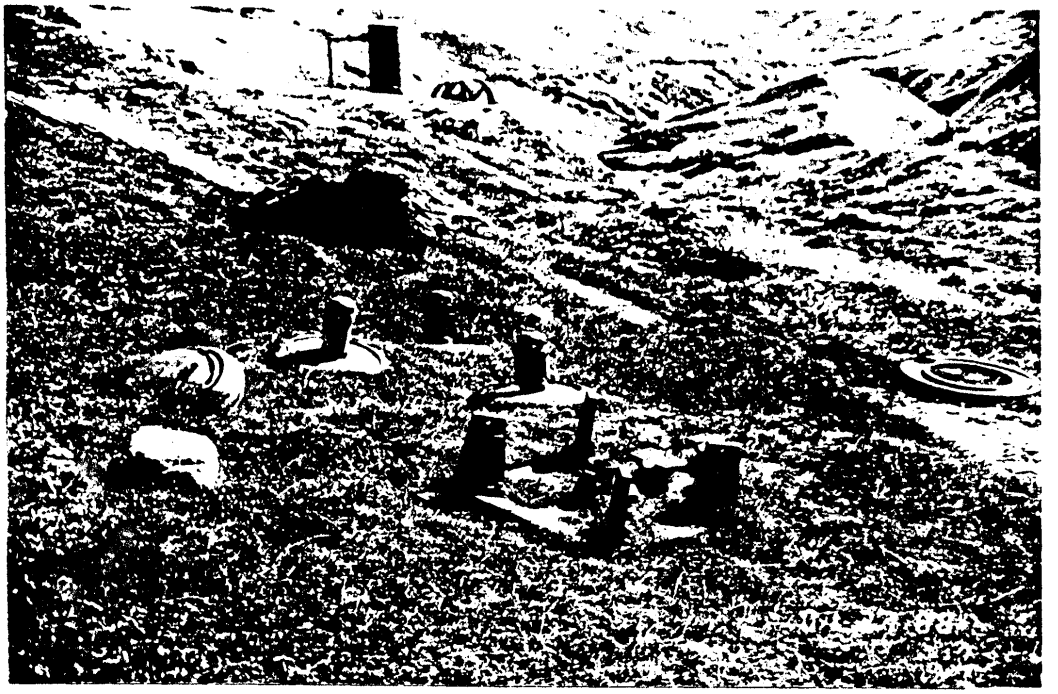
Monarch/Jewell Mine District



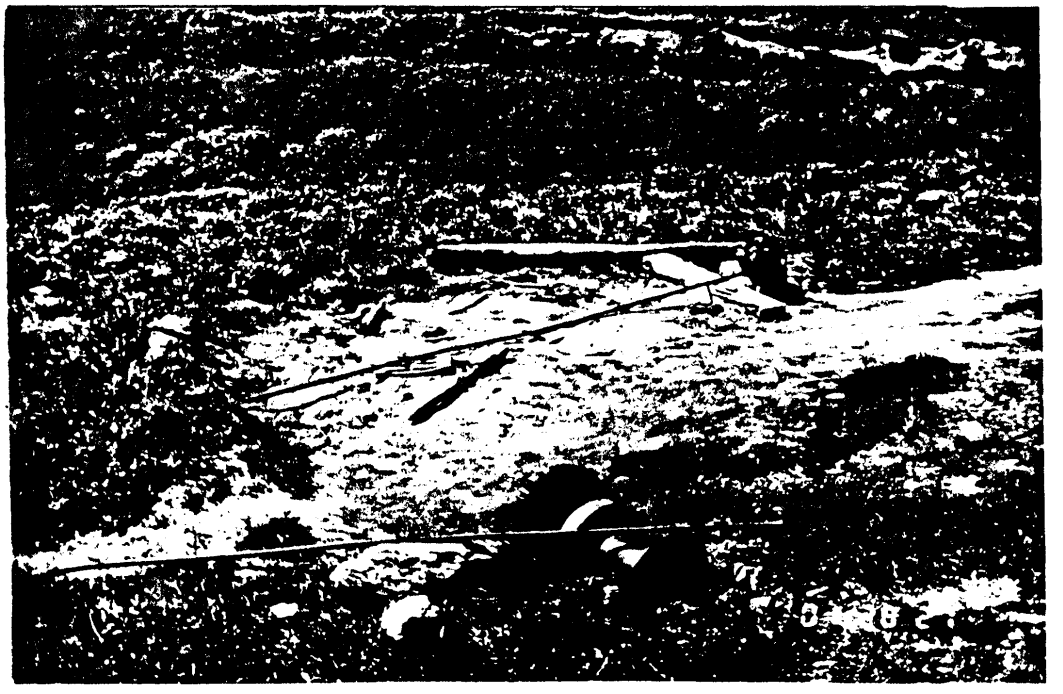
Feature 8, Rail and Timber Cache, View to East



Feature 9, Foundation/Basement, View to East



Feature 10, Mill Rollers, View to SE



Feature 11, Building Pad and Machinery, View to West

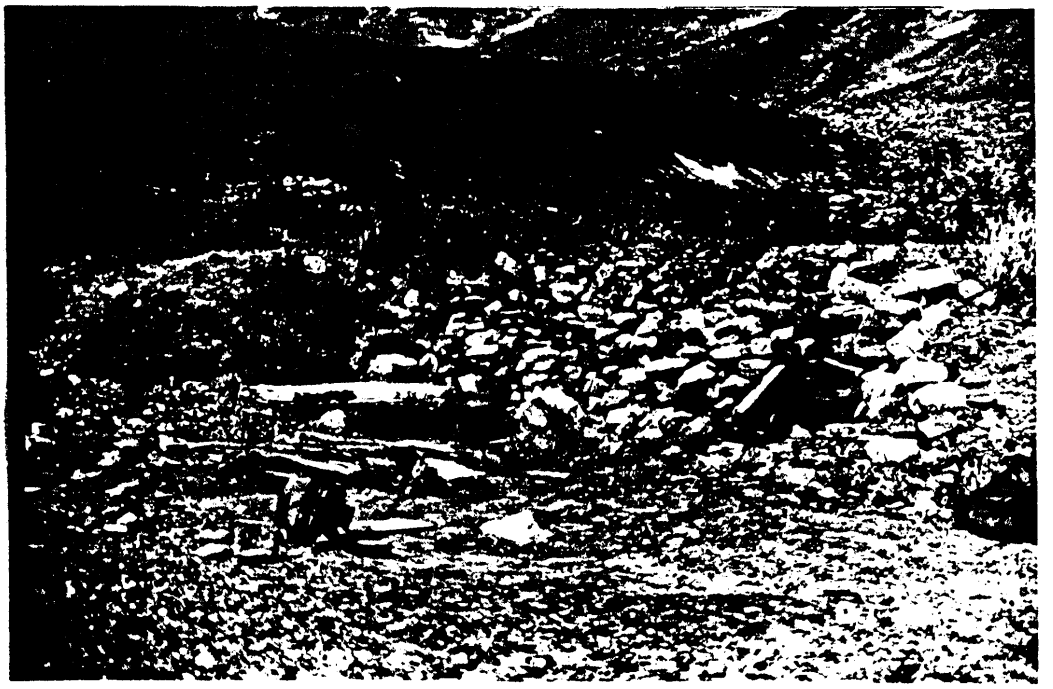
Monarch/Jewell Mine District

Feature 12, Building Depression, Viw to NW

Feature 13, Four Building Depressions, View to SE

Monarch/Jewell Mine District

Feature 14, Building Pad Depression, View to South



Feature 15, Building Pad, View to NE

Monarch/Jewell Mine District

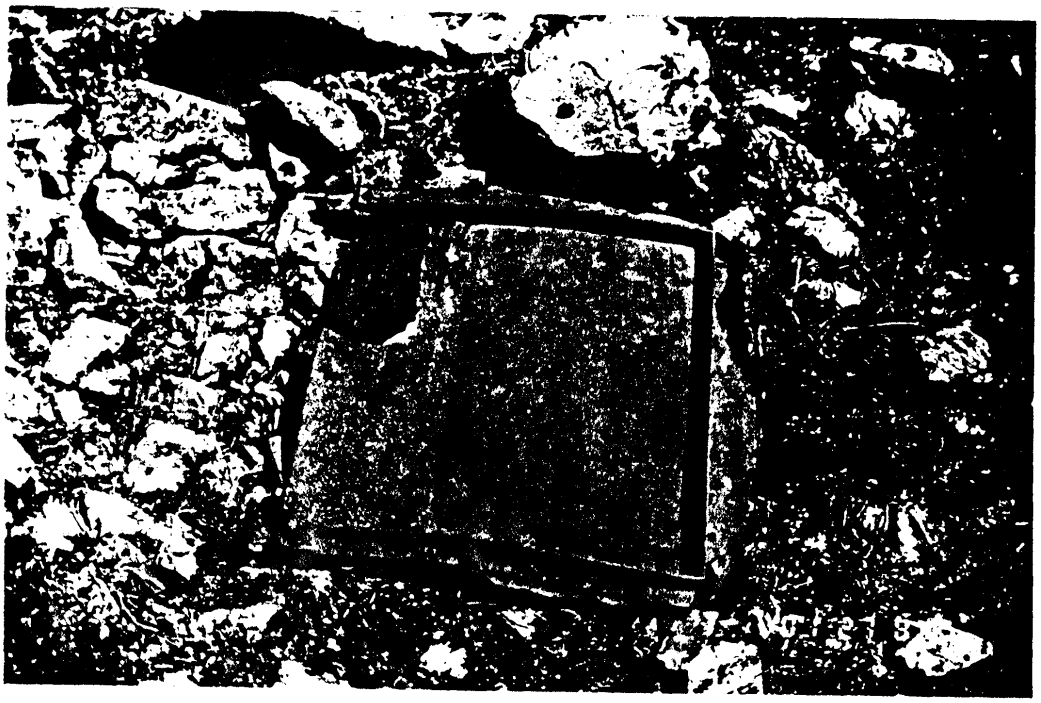
Feature 16, Depression, View to NW

Feature 17, Tram System, View to NE

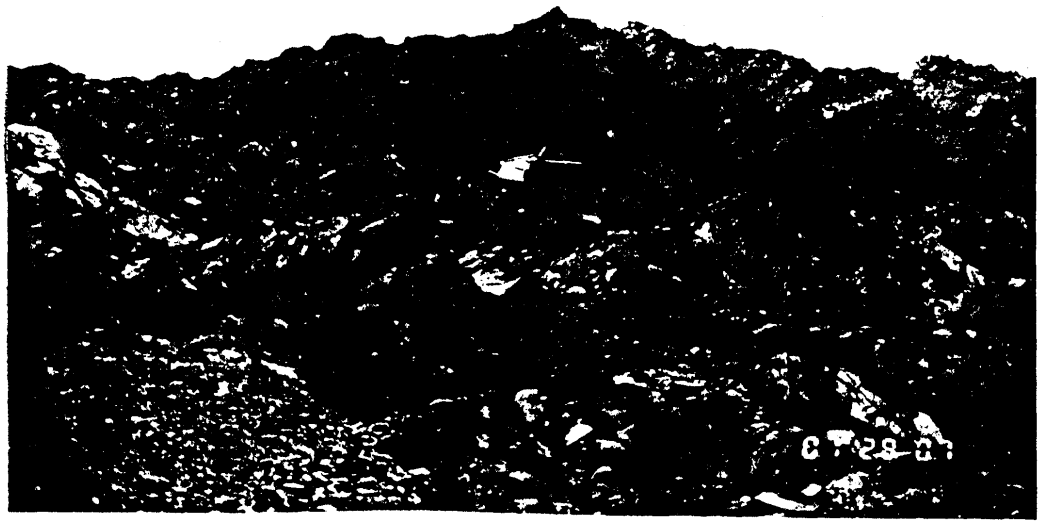
Feature 18, Building Pad, View to NW

Feature 19, Building Pad, View to NE

Monarch/Jewell MIne District



Iron Dump Gate Near Feature 19, View to South



Ore Hopper/Chute at Upper Monarch Mine Adit, View East

Monarch/Jewell Mine District

Mine Machinery on Rockslide Below Monarch Mine Adit, View S

Tramway Cables on Rockslide Below Monarch Mine, View to SSE

Monarch/Jewell Mine District

Prospect Trench at South End of District, View to WNW