DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE  Idm-E NO._____  DMEA NO. 4996

Application
- [x] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [ ] Terminated - Certified
- [ ] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

**Left Side**

- [ ] Royalty Audits
- [ ] Certification of Discovery
- [ ] Closing Letter
- [ ] Cost Audits
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [ ] Contract Amendments
- [ ] Contract with all exhibits and annexes
- [ ] Owner's Consent to Lien and Subordination Agreement
- [x] Application and attachments

**Right Side**

- [x] Project summary (final)
- [ ] Work Completed analysis (final)

All other material filed in chronological order including the following reports if checked:

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Final Field Team Report (Tab)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [x] On-site Exam Report (Tab)
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

**Left Side**

Folders No._____: Reports

- [ ] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

**Right Side**

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Field Team Interim Reports
- [ ] Operator's Monthly Reports with transmittal, narrative and maps.

Folders No._____: Maps (Use pocket folder or envelope)

Folders No._____: Settlement Sheets

Folders No._____: Drill Logs

Folders No._____: Royalty material

17863

Dear Mr. Mittendorf:

On instructions from Mr. Harshman, Mr. Frank Moore is taking one copy of this report to Denver and I will deliver one to the Bureau of Mines office in Salt Lake; therefore, we are including only two copies to you.

S. K. Drolbay

UNITED PARK CITY MINES COMPANY

GENERAL OFFICE

HEBER, UTAH

RECEIVED APR 28 1958

April 24, 1958

Mr. C. O. Mittendorf, Administrator
U. S. Department of the Interior
Defense Minerals Exploration Administration

Dear Mr. Mittendorf:

Enclosed please find four copies of an application for aid in an exploration project filled out on form MF 103, revised.

According to instructions by you and by Mr. Griswald during our conference in Washington on April 22nd, I have streamlined many of the answers as requested on the reverse side of form MF 103 because the Park City District is well-known to all parties concerned and because many publications and reports have been completed over the years and because we have a very complete set of records of the mining property available here at our mine headquarters for use by Governmental agents.

This application is being sent directly to you in order to meet certain dead lines. I will advise Mr. Wilson of the Bureau of Mines in Salt Lake City of this procedure.

I trust this application is complete and that we have given enough information to justify your consideration in granting Governmental assistance. Thanks very much for your patience and consideration.

Sincerely yours,

S. K. Droubay

S. K. Droubay
General Manager

SKD:ncn

P.S. In figuring total costs for project, we schedule 50% of the work to be timbered and the diamond drilling costs to be the same as experienced in drilling 50% of the holes in broken quartzite. Notes on the respective schedules point out that only 11% of the work done so far in this type of ground has been timbered and that contract diamond drilling bids should be less because of the absence of most of the quartzite.

Form MF-103
Revised Feb. 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1035.3
Approval expires June 30, 1958

# APPLICATION FOR AID IN AN EXPLORATION PROJECT

PURSUANT TO DMEA ORDER I, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

**NAME OF APPLICANT** (Full legal name and mailing address as it should appear on contract if one is executed)

United Park City Mines Company
Star Route
Heber, Utah

**APPLICANT NOT TO USE THIS BLOCK**

| | |
|---|---|
| Docket Number | 4996 |
| Date Received | 4/28/58 |
| Government Participation % | 50% |
| Region | III |
| Division Code | 500 |

**BUSINESS ORGANIZATION** (Check one)

- Individual [ ]
- Corporation [X]
- Partnership [ ]
- Other (Specify) [ ]

State in which firm is organized: Delaware

**LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE**

| Name | Address | Title |
|---|---|---|
| John M. Wallace | Salt Lake City, Utah | President |
| Frank A. Wardlaw, Jr. | Salt Lake City, Utah | Vice-President |
| J. Wm. Stoner | Salt Lake City, Utah | Sec.-Treasurer |
| S. K. Droubay | Salt Lake City, Utah | General Manager |

Mineral(s) for which you wish to explore: Lead and Zinc

Estimated Cost of Project: $ 351,973.66 (maximum)

**LOCATION OF PROPERTY**

| Name | County | State |
|---|---|---|
| United Park City Mines Company | Salt Lake<br>Summit<br>Wasatch | Utah |

## GENERAL INSTRUCTIONS

Before filling out this application, please read DMEA Order-I, Amended, "Government Aid in Defense Exploration Projects." To assure prompt action, your application must provide all applicable material and information specified on the back of this application form. Avoid unnecessary correspondence and delays by submitting complete and accurate information. *Please submit four copies of this application and all accompanying papers* except as otherwise noted. Place your name and address on each sheet. Each item of information, maps, and reports required as a part of this application is described on the back of this form. Identify each attached statement by the item number to which it applies. If an item does not apply to your application, show the item number on your statement and after it write "not applicable." Maps or sketches should be used to supplement narrative descriptions of the property location and boundaries in item 1, existing mine workings and geology in item 2, and the proposed exploration project in item 4. When this information is not too complex, all of it may be shown on one map or sketch. All documents and other attachments submitted as a part of this application, except those in item 2(g) which you mark to be returned, become the property of the Government and will not be returned to the applicant. Send true copies, *not originals*, of leases, contracts, and other documents which are an essential part of your business records. *File this application with the Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest DMEA Field Office.*

## CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

April 25, 1958
*Dated*

S. K. Droubay
BY *(Signature)*

General Manager
*Title*

A wilfully false statement or certification to any Department or Agency of the United States Government is a criminal offense. U. S. Code, Title 18, Sec. 1001.

## INFORMATION REQUIRED WITH THIS APPLICATION

1. *Applicant's Property Rights:*

*(a)* State the legal description (section, township, and range; metes and bounds; patent number of claims) of the land upon which you wish to explore and all land adjacent to the proposed project area which you own or control. Describe any part of the project land or workings which should not be subject to Government lien for royalty payments. If the land consists of unpatented claims, state the book and page number for each recorded location notice, including amended locations, and the place where recorded (courthouse, recorder's office, county, and state).

*(b)* State all the names by which you know the property.

*(c)* State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise. If you are not the owner, submit with this application one exact copy of the lease, contract, or other document (with address of owner) under which you control the property.

*(d)* Describe all liens, mortgages, or other encumbrances on the property.

2. *Physical Description:*

*(a)* Describe in detail and illustrate with maps or sketches all mining or exploration operations which you know have been or are being conducted upon the lands, including existing mine workings. Describe all production facilities.

*(b)* State your interest, if any, in operations stated in 2*(a)*.

*(c)* State, as far as you know, the past and current production, supporting your statement with copies of settlement sheets, mine records, or published data if available.

*(d)* Describe known ore reserves on the property giving quantities and grades and sampling methods used, supporting your statement with copies of assay certificates and assay maps if available.

*(e)* Describe by narrative and maps or sketches the geologic features of the property, including ore minerals, geologic formations if known, and type of deposit (vein, bedded, etc.).

*(f)* State your reasons for expecting to find ore, and if you have sampled the area you propose to explore, show where the samples were taken, describe sampling methods used, and provide copies of assay certificates.

*(g)* Send with your application at least *two* copies of all geologic or engineering reports, assay maps, or technologic information which you may have, indicating on each whether you require its return to you.

3. *Accessibility of Project:*

*(a)* To aid DMEA representatives who may be required to examine the property, state the name and address of the person who will meet the DMEA representative; give directions for reaching the property; and describe accessibility of the property including the mine workings.

*(b)* Name the shipping and supply points and places where employees reside and state the distances between them and the property.

4. *The Exploration Project:*

*(a)* Describe fully the proposed exploration project giving individual footages and sizes of openings *for each item of work*. Use narrative, maps, plans, and longitudinal and cross sections as necessary. Show the location of the proposed work as related to geologic features such as veins, ore-bearing beds, contacts of rock formations, etc. Show also the relation of the proposed work to any existing mine workings and to *property boundaries* or to the closest identifiable corner.

*(b)* If an access road to the project must be built, show the location on the property map and state the length, type, and construction methods proposed.

*(c)* In the event that an exploration contract with DMEA is executed, how soon will the work start and how many months will be required to complete it? State your anticipated average daily or monthly rate of progress for each type of work.

5. *Experience:*

State your operating experience and background with relation to your ability to carry out this exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of Costs:*

Furnish detailed estimates of the costs *for each item of the work proposed in 4(a)* under the headings listed below with a total for each heading and the estimated total cost of the project. Costs for any work to be performed by an independent contractor should be shown separately under category *(a)* below. Costs for any work that is not to be performed by an independent contractor should be given in detail under categories *(b)* through *(g)*.

*(a)* Independent contracts. State the cost of any proposed independent contract for the performance of all or any part of the work, expressed in units of work, such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved. Cost estimates should be supported by bids from three contractors if possible. *(Note* – If none of the work is to be contracted, write "none" after this item.)

*(b)* Personal services. For necessary supervision, engineering and geological services, and labor, include an itemized schedule of numbers, classes, rates of wages, salaries or fees, and periods of employment. State whether these technicians and employees are available.

*(c)* Operating materials and supplies. List items of material and supplies with their cost. Include under this heading power, water, and fuel, and units of equipment and tools costing less than $50 each.

*(d)* Operating equipment. List items of operating equipment to be used giving specifications and indicating how each item is to be acquired – i.e., rented, purchased, or provided by the applicant. If it is rented or purchased, state the estimated rental or purchase price. If it is to be furnished by the applicant, give its present fair market value.

*(e)* Initial rehabilitation and repairs. Describe the type and the cost of necessary *initial* rehabilitation or repair of existing buildings, fixtures, installations (exclusive of mine workings), and movable operating equipment now owned by the applicant, which will be used on the exploration project.

*(f)* New buildings, fixtures, installations. Describe each building, fixed improvement, and installation to be purchased, constructed, or installed for the exploration project stating specifications and cost including labor, materials and supervision.

*(g)* Miscellaneous. For the operating equipment listed in 6*(d)*, describe the type and estimate the cost of repairs and maintenance expected during project operations. Do not repeat initial repairs listed in 6*(e)*. Show also the costs of analytical work, accounting, workmen's compensation and employees' liability insurance, payroll taxes, and other required costs that do not fall within the previous categories.

*Note* – No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. *(a)* State whether you are prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation stated in Sec. 7 of DMEA Order–I, Amended.

*(b)* Explain to what extent you propose to furnish your share of the costs by providing money, by use of equipment owned by you, or otherwise.

* * * * *

INT.-DUP. SEC., WASH., D.C. 15539

Form MF-103
Revised Oct. 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR

Budget Bureau No. 42-R1035.3
Approval expires June 30, 1958

DEFENSE MINERALS EXPLORATION ADMINISTRATION

# APPLICATION FOR AID IN AN EXPLORATION PROJECT

PURSUANT TO DMEA ORDER I, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

**NAME OF APPLICANT** (Full legal name and mailing address as it should appear on contract if one is executed)

United Park City Mines Company

Star Route

Heber, Utah

**APPLICANT NOT TO USE THIS BLOCK**

Docket Number

Date Received

Government Participation %

Region

Division Code

**BUSINESS ORGANIZATION** *(Check one)*

| | |
|---|---|
| Individual | |
| Corporation | X |
| Partnership | |
| Other *(Specify)* | |

State in which firm is organized Delaware

**LIST CORPORATE OFFICERS OR PARTNERS HERE, IF APPLICABLE**

| Name | Address | Title |
|---|---|---|
| John M. Wallace | Salt Lake City, Utah | President |
| Frank A. Wardlaw, Jr. | Salt Lake City, Utah | Vice President |
| J. Wm. Stoner | Salt Lake City, Utah | Secretary-Treasurer |
| S. K. Droubay | Salt Lake City, Utah | General Manager |

Mineral(s) for which you wish to explore
Lead and Zinc

Estimated Cost of Project
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April 25, 1958
*Dated*

BY *(Signature)*

General Manager
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*(c)* In the event that an exploration contract with DMEA is executed, how soon will the work start and how many months will be required to complete it? State your anticipated average daily or monthly rate of progress for each type of work.

5. *Experience:*

State your operating experience and background with relation to your ability to carry out this exploration project, and also that of the person or persons who will supervise the operations.

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*(b)* Explain to what extent you propose to furnish your share of the costs by providing money, by use of equipment owned by you, or otherwise.

* * * * *

UNITED PARK CITY MINES COMPANY

APPLICATION FOR DMEA AID

1. Applicant's Property Rights:

(a) Applicant owns approximately 8,516 acres of patented mining claims located as a contiguous group in Salt Lake, Wasatch and Summit Counties, Utah. This group includes the majority of mines that have been identified with the Park City, Utah Mining District during the past 75 years. Property outlined on index map. (See 4:a) (See 1a Government Lein Block)

(b) United Park City Mines Company is comprised of the following divisions: Park Utah, Ontario, Daly, Daly West, Daly Judge and Silver King. These are all former individual mines or groups of mines.

(c) Owner.

(d) None.

2. Physical Description:

(a) Production and workings of the Park City District have been the subject of publications for many years. The property has produced many millions of tons of ore and contains hundreds of miles of underground workings.

(b) Applicant owns and operates the property.

(c) A crew of approximately 250 men produce some nine thousand tons of ore per month from the property, mainly from the Ontario section. The following production from 1875 through 1957 is recorded as:

| | |
|---|---|
| Tons of Ore Mined | 11,712,953 |

UNITED PARK CITY MINES COMPANY

APPLICATION FOR DMEA AID

1. Applicant's Property Rights

1a. Legal Description of Block Subject to Government Lien:

Beginning at Cor. No. 1, from which the corner common to Sections 29, 30, 31 and 32, T. 2 S., R. 4 E., Salt Lake Meridian, a granite stone 6x10 ins., 14 ins. above ground, marked 5 notches on E edge and 1 notch on S edge, bears S. 21° 43' W 2052.0 ft.; running thence South 3937.0 ft. to Cor. No. 2, thence S. 55° 21' E., 1111.8 ft. to Cor. No. 3, thence S. 41° 19' W., 75.3 ft. to Cor. No. 4, thence S. 55° 55' E., 293.8 ft. to Cor. No. 5, thence S. 49° 45' E., 235.4 ft. to Cor. No. 6, thence S. 51° 32' W 586.8 ft. to Cor. No. 7, thence S 36° 47' E., 612.2 ft. to Cor. No. 8, thence N. 51° 10' E., 1493.5 ft. to Cor. No. 9, thence N. 51° 49' E., 812.1 ft. to Cor. No. 10, thence N. 67° 09' E., 451.0 ft. to Cor. No. 11, thence N. 36° 30' W., 605.1 ft. to Cor. No. 12, thence N. 45° 00' W., 1147.8 ft. to Cor. No. 13, thence N. 50° 22' E., 767.5 ft. to Cor. No. 14, thence N. 67° 41' E., 20.2 ft. to Cor. No. 15, thence N. 50° 00' W., 190.1 ft. to Cor. No. 16, thence N. 47° 05' E., 798.5 ft. to Cor. No. 17, thence S. 86° 30' E., 267.4 ft. to Cor. No. 18, thence S. 47° 30' W., 100.0 ft. to Cor. No. 19, thence S. 86° 45' E., 278.0 ft. to Cor. No. 20, thence N. 47° 05' E., 488.7 ft. to Cor. No. 21, thence N. 37° 15' W., 199.0 ft. to Cor. No. 22, thence N. 00° 23' E., 1331.4 ft. to Cor. No. 23, thence West 4007.0 ft. to Cor. No.1, and place of beginning; including an area of 364.739 acres. (Cors. Nos. 2 to 22 inclusive are on the southerly boundary of the United Park City Mines Company property.)

| | |
|---|---|
| Ounces of Gold Produced | 449,937 |
| Ounces of Silver Produced | 194,776,483 |
| Pounds of Lead Produced | 2,274,164,108 |
| Pounds of Zinc Produced | 913,837,201 |
| Pounds of Copper Produced | 60,263,282 |

(d) Ore reserves on January 1, 1958, is recorded as 153,325 tons at 7.8% lead, 10.2% zinc, 7.3 ounces silver and .03 ounces gold. Calculations are based on standard modern mining company procedure and copies of this report, together with the maps used as supporting evidence, are on file at the Company offices.

(e) Ore bodies are found as veins and bedded replacements in a thick series of limestones, quartzites and shales. The District is fully described in many publications, the most noted of which is Boutwell's professional paper #77 published in 1912. Extensive geological work since 1912 has resulted in a comprehensive set of geological and engineering maps on scales from one thousand feet to the inch, to twenty feet to the inch. These are all available for study and inspection at mining headquarters in Park City.

(f) The results of years of mining and the recording of geological data has developed patterns along which ore bodies are generally formed. The plan under consideration is to explore a series of fissures along lower horizons and below large ore bodies that these same fissures made above. This same pattern was followed in the case of the Ontario mine and resulted in locating many thousands of tons of commercial ore.

(g) Geological and engineering reports and maps are available at Company offices in Park City and Keetley, Utah. See maps under 4:a of this application.

3. Accessibility of Project:

(a) Project accessible from geological office in Park City. Phone, Park City 215, Mr. H. V. Stewart or Mr. Marvin Barnes, geologists. Phone Park City 19W for Mr. G. W. DeLaMare, general mine superintendent; phone Park City 19M for Mr. S. K. Droubay, general manager.

(b) Park City, Utah and Keetley, Utah. Both have truck and rail stations.

4. The Exploration Project:

(a) The project includes three thousand feet of crosscutting and twenty-five hundred feet of drifting, together with five thousand feet of diamond drilling from six drilling stations. This work is outlined in the attached report and was explained to Government officials in Washington on April 22, 1958.

(b) None.

(c) Will be able to start immediately after contract is signed. Will take approximately twenty-four months to complete. Advance should average nine feet per day and two hundred twenty-five feet per month.

5. Experience:

S. K. Droubay, general manager. A graduate mining engineer with thirty years practical experience: miner seven years; engineer-geologist five years; chief engineer-geologist three years; mine superintendent three years; mine manager nine years; general manager of mining operations three years.

G. W. DeLaMare, general mine superintendent. A graduate mining engineer with twenty years practical experience: miner five years; mine

engineer two years; underground bossing two years; assistant mine superintendent two and a half years; general mine superintendent two years; self employed at mine leasing six years.

A staff of experienced geologists and engineers will direct and supervise the project.

GENERAL FILE COPY
DMEA
RECEIVED APR 28 1950

UNITED PARK CITY MINES COMPANY

GRAND SUMMARY

SCHEDULES I, II, III, and IV

| | |
|---|---|
| 6. (a) Independent contracts | $54,315.00 |
| 6. (b) Personal services | 156,202.53 |
| 6. (c) Operating materials and supplies | 118,413.89 |
| 6. (d) Operating equipment | 3,417.46 |
| 6. (e) No initial rehabilitation or repairs | |
| 6. (f) No new buildings, etc. | |
| 6. (g) Miscellaneous | 19,624.78 |
| | $351,973.66 |

UNITED PARK CITY MINES COMPANY

SCHEDULE I - UNTIMBERED CROSSCUTTING

Exploration Project on Daly West 2100 Level South of the Daly West Shaft

| | |
|---|---|
| Crosscutting 6'x9' with 12" x 24" Ditch | 2,500 Feet (untimbered) |
| Stub Crosscuts | 250 Feet (untimbered) |
| Total | 2,750 Feet per Shift |
| Advance: | 5 Feet per Shift<br>10 Feet per Day |
| Time Needed to Complete Project: | 275 working days<br>11 calendar Months |

Summary

| | | | Total Cost | Cost per Foot |
|---|---|---|---|---|
| 6. | (a) | No independent contracts | | |
| 6. | (b) | Personal services | 68,290.71 | 24.833 |
| 6. | (c) | Operating materials and supplies | 48,488.02 | 17.632 |
| 6. | (d) | Operating Equipment | 1,625.80 | .591 |
| 6. | (e) | No initial rehabilitations or repairs | | |
| 6. | (f) | No new buildings, etc. | | |
| 6. | (g) | Miscellaneous | 8,640.23 | 3.142 |
| | | Total | $ 127,044.76 | |
| | | Cost per foot of advance for 2,~~500~~ 750 feet | | $ 46.198 |

UNITED PARK CITY MINES COMPANY

SCHEDULE I



RECAPITULATION OF ESTIMATED EXPENSE

6. (b) Personal Services:

| Labor | No. of Men per Day | Shifts Worked | Wage Rate Including Bonus | | |
|---|---|---|---|---|---|
| Miners | 6 | 1,650 | 24.02 | 39,633.00 | |
| Hoistman (Daly West) | 1 | 275 | 16.02 | 4,405.50 | |
| Station Tender | 1 | 275 | 15.54 | 4,273.50 | |
| Top Carman & Dumpman | 1 | 275 | 15.06 | 4,141.50 | |
| Mechanic & Electrician | 1/4 | 68.75 | 16.50 | 1,134.38 | |
| Timber Framer | 1/8 | 34.375 | 15.54 | 534.19 | |
| Total Basic Labor Cost | | | | 54,122.07 | |
| Time & one-half for 6-day week | | | 8.3-1/3% | 4,510.17 | |
| Vacation | | | 3.6% | 1,948.39 | |
| Holiday Pay | | | 1.8% | 974.20 | |
| Premium Pay | | | 1.7% | 920.08 | |
| Total Labor Cost | | | | | 62,474.91 |

| Supervision: | No. of Men per Day | Shifts Worked | Monthly Wage Rate | | |
|---|---|---|---|---|---|
| Shift Boss | 1/2 | 137.5 | 505.00 | 2,777.50 | |
| Foreman | 1/8 | 34.375 | 570.00 | 783.75 | |
| Mine Superintendent | 1/16 | 17.1875 | 975.00 | 670.31 | |
| Total Supervision Cost | | | | | 4,231.56 |

Geological and Engineering Services:

| | | | | | |
|---|---|---|---|---|---|
| Various | 1/4 | 68.75 | 530.00 | | 1,584.24 |

The following are employed by our Company and will perform services at various times:

| | | |
|---|---|---|
| 1 - Chief Engineer - Geologist | 700.00 | per Mo. |
| 2 - Geologists | 595.00 | " " |
| 1 - Engineer | 595.00 | " " |
| 1 - " | 555.00 | " " |
| 1 - Sampler | 441.00 | " " |
| 1 - Draftswoman | 225.00 | " " |

Total Personal Services 68,290.71

UNITED PARK CITY MINES COMPANY

SCHEDULE I



RECAPITULATION OF ESTIMATED EXPENSE

6. (c) Operating Materials and Supplies:

Lumber and Timber:

None

Explosives:

| | | | | | |
|---|---|---|---|---|---|
| 83 | Loading Sticks | .59 | Each | 48.97 | |
| 39,270 | Ft. Annunciator Wire | 5.10 | M' | 200.28 | |
| 39,270 | Lbs. Gel. Extra 40% Explosive | 22.08 | Cwt. | 8,670.82 | |
| 9,818 | Electric Blasting Caps | .28 | Each | 2,749.04 | |
| | Total Explosives | | | | 11,669.11 |

Track:

| | | | | | |
|---|---|---|---|---|---|
| 2,750 | Ft. Track including 30# Rail, Ties, and Accessories | 2.50 | Ft. | | 6,875.00 |

Pipe:

| | | | | | |
|---|---|---|---|---|---|
| 2,750 | Ft. 3" Pipe | 80.00 | C' | 2,200.00 | |
| 2,750 | Ft. 1" Pipe | 20.60 | C' | 566.50 | |
| 275 | 3" Couplings | 2.06 | Each | 566.50 | |
| 275 | 1" Couplings | .21 | Each | 57.75 | |
| | Misc. Valves & Fittings | | | 550.00 | |
| | Total Pipe | | | | 3,940.75 |

Other Supplies:

| | | | | | |
|---|---|---|---|---|---|
| 264 | Pcs. 7' 10" Coromant Steel | 20.32 | Each | 5,364.48 | |
| 550 | Ft. 3/8" Air Hose (for Water) | .488 | Ft. | 268.40 | |
| 770 | Ft. 1" Air Hose | .833 | Ft. | 641.41 | |
| 41 | Rock Bolts | 1.56 | Each | 63.96 | |
| 28 | Sets Rubber Clothing | 14.58 | Each | 408.24 | |
| 8 | Scaling Bars | 3.05 | Each | 24.40 | |
| 22 | 14" Ridged Wrenches | 3.14 | Each | 69.08 | |
| | Parts & Lubrication for Compressor | | | 38.50 | |
| 28 | Round Point Shovels | 3.98 | Each | 111.44 | |
| 17 | Picks | 3.00 | Each | 51.00 | |
| 17 | Axes | 5.25 | Each | 89.25 | |
| 220 | Gallons Rock Drill Oil | .70 | Gal. | 154.00 | |
| 40 | Gallons Motor Oil | .87 | Gal. | 34.80 | |
| 40 | Lbs Grease | .18 | Lb. | 7.20 | |
| 2,750 | Ft. Double Trolley Line W/Hangers | 1.70 | Ft. | 4,675.00 | |
| | Maintenance for Trolley Line | | Lot | 154.00 | |
| | | | | | 12,155.16 |
| | Total Carried forward to next page | | | | 34,640.02 |

UNITED PARK CITY MINES COMPANY

SCHEDULE I



RECAPITULATION OF ESTIMATED EXPENSE

| | | | | | |
|---|---|---|---|---|---|
| Total Brought forward from last page | | | | | 34,640.02 |
| | Replacement Parts for Drill | | | 220.00 | |
| | " " " Muckers | | | 550.00 | |
| 2,750 | Ft. 18" Ventilation Pipe | 2.30 | Ft. | 6,325.00 | |
| 3 | Tees 18" | 4.00 | Each | 12.00 | |
| 3 | 90 Ells | 3.00 | Each | 9.00 | |
| | Miscellaneous | | | 550.00 | 7,666.00 |
| Electric Power: | | | | | |
| 11 | Months Compressor | 80.00 | Per Mo. | 880.00 | |
| 11 | Months Lights Etc. | 12.00 | " | 132.00 | |
| 11 | Months Daly West Hoist | 225.00 | " | 2,475.00 | |
| 11 | Months 15-HP Fan | 75.00 | " | 825.00 | |
| 11 | Months 75-HP MG Set | 170.00 | " | 1,870.00 | |
| | Total Electric Power | | | | 6,182.00 |
| | Total Operating Materials and Supplies | | | | 48,488.02 |

6. (d) Operating Equipment:

Equipment to be Rented:

| | | | | | |
|---|---|---|---|---|---|
| 10 | Battery Lamps for 11 Mo. 1.28 per Mo. | | | | 140.80 |

Equipment to be Purchased:

None

Equipment Furnished by Operator:

| | | | | | |
|---|---|---|---|---|---|
| 1 | Eimco 12-B Loader | 11 Mo. | 35.00 | per Mo. | 385.00 |
| 2 | S-58 Airleg Drills | " | 25.00 | " | 550.00 |
| 1 | Grinder for Drill Steel | " | 7.00 | " | 77.00 |
| 1 | Impact Wrench | " | 5.50 | " | 60.50 |
| 1 | 4-Ton Trolley Locomotive | 11 Mo. | 25.00 | " | 275.00 |
| 1 | 15-HP Coppus Fan | 11 Mo. | 12.50 | " | 137.50 |
| | Total Equipment Furnished by Operator | | | | 1,485.00 |
| | Total Operating Equipment | | | | 1,625.80 |

UNITED PARK CITY MINES COMPANY

SCHEDULE I



RECAPITULATION OF ESTIMATED EXPENSE

6. (g) Miscellaneous:

| Accounting | No. of Men Per Day | Shifts Worked | Monthly Wage Rate | | |
|---|---|---|---|---|---|
| Various | 3/8 | 103.125 | 460.00 | | 2,062.50 |

We have various rated clerks ranging from 600.00 to 360.00 per month.

Workmans Compensation:

| | | |
|---|---|---|
| 3.6% of 70,353.21 | | 2,532.72 |

Payroll Taxes:

| | | | |
|---|---|---|---|
| F.I.C.A. | 2.25% of 70,353.21 | 1,582.95 | |
| Unemployment Tax | 1.3 % of " | 914.59 | |
| Total Payroll Taxes | | | 2,497.54 |

Welfare Insurance:

| | |
|---|---|
| 2.2% of 70,353.21 | 1,547.47 |
| Total Miscellaneous | 8,640.23 |

UNITED PARK CITY MINES COMPANY

SCHEDULE II - TIMBERED DRIFTING AND CROSSCUTTING

Exploration Project on Daly West 2100 Level South of Daly West Shaft.

| | |
|---|---|
| Drifting 8' x 9' with 12" x 24" Ditch | 2,500 Feet (Timbered) |
| Stub Crosscuts | 250 " " |
| Total | 2,750 " " |

| | |
|---|---|
| Advance: | 4 Feet per Shift<br>8 Feet per Day |
| Time Needed to complete Project | 343.75 Working days<br>13.75 Calendar Months |

Summary

| | | | Total Cost | Cost per Foot |
|---|---|---|---|---|
| 6. | (a) | No independent contracts | | |
| 6. | (b) | Personal Service | 82,696.89 | 30.07 |
| 6. | (c) | Operating Materials and Supplies | 64,559.93 | 23.48 |
| 6. | (d) | Operating Equipment | 1,688.51 | .61 |
| 6. | (e) | No initial rehabilitation or repairs | | |
| 6. | (f) | No new buildings, etc. | | |
| 6. | (g) | Miscellaneous | 10,338.16 | 3.76 |
| | | | 159,283.49 | 57.92 |

Note: Out of 2,438 feet of drifting and crosscutting completed south easterly from the Daly West shaft only 270 feet required timber. This work was done in the same formations expected in the project. (see plate 1-4:a) In accordance with past precedent, 50% of the planned drifting and crosscutting has been computed as needing timber.

UNITED PARK CITY MINES COMPANY

SCHEDULE II



RECAPITULATION OF ESTIMATED EXPENSE

6. (b) Personal Services:

| Labor: | No. of Men per Day | Shifts Worked | Wage Rate Including Bonus | Total Basic Cost | |
|---|---|---|---|---|---|
| Miners | 6 | 2,062.5 | 22.90 | $47,231.25 | |
| Hoistman (Daly West) | 1 | 343.75 | 16.02 | 5,506.88 | |
| Station Tender | 1 | 343.75 | 15.54 | 5,341.88 | |
| Top Carman & Dumpman | 1 | 343.75 | 15.06 | 5,176.88 | |
| Mechanic & Electrician | 1/4 | 85.9375 | 16.50 | 1,417.97 | |
| Timber Framer | 1/8 | 42.96875 | 15.54 | 667.73 | |
| Total Basic Labor Cost | | | | 65,342.59 | |
| Time and one-half for 6-day week | | | 8.3-1/3% | 5,445.22 | |
| Vacation | | | 3.6% | 2,352.33 | |
| Holiday Pay | | | 1.8% | 1,176.17 | |
| Premium Pay | | | 1.7% | 1,110.82 | |
| Total Labor Cost | | | | | 75,427.13 |

| Supervision: | No. of Men per Day | Shifts Worked | Monthly Wage Rate | Total Basic Cost | |
|---|---|---|---|---|---|
| Shift Boss | 1/2 | 171.875 | 505.00 | 3,471.88 | |
| Foreman | 1/8 | 42.96875 | 570.00 | 979.69 | |
| Mine Superintendent | 1/16 | 21.484375 | 975.00 | 837.89 | |
| Total Supervision Cost | | | | | 5,289.46 |

Geological and Engineering Services:

| | | | | | |
|---|---|---|---|---|---|
| Various (Same personnel as mentioned in Schedule I) | 1/4 | 85.9375 | 530.00 | | 1,980.30 |
| Total Personal Services | | | | | 82,696.89 |

6. (c) Operating Materials and Supplies:

Lumber & Timber:

| | | | | | |
|---|---|---|---|---|---|
| 204,894 | Bd. Ft. Red Pine | 70.00 | M'BM | 14,342.58 | |
| 4,400 | Wedges | 3.25 | C | 143.00 | |
| 115 | Lbs. 40-d Nails | 12.00 | Cwt. | 13.80 | |
| 230 | Lbs. 60-d Nails | 11.75 | Cwt. | 27.03 | |
| Total Lumber & Timber | | | | | 14,526.41 |
| Total Operating Materials and Supplies carried forward to Page 2 | | | | | 14,526.41 |

UNITED PARK CITY MINES COMPANY

SCHEDULE II



| | |
|---|---|
| Total Operating Materials and Supplies brought forward from Page 1 | 14,526.41 |
| **Explosives:** | |
| Same as Schedule I | 11,669.11 |
| **Track:** | |
| Same as Schedule I | 6,875.00 |
| **Pipe:** | |
| Same as Schedule I | 3,940.75 |
| **Other Supplies:** | |
| Same as Schedule I | 19,821.16 |

**Electric Power:**

| | | | |
|---|---|---|---|
| 13.75 Months Compressor | 80.00 | per Mo. | 1,100.00 |
| 13.75 Months Lights, Etc. | 12.00 | per Mo. | 165.00 |
| 13.75 Months Daly West Hoist | 225.00 | per Mo. | 3,093.75 |
| 13.75 Months 15 HP Fan | 75.00 | per Mo. | 1,031.25 |
| 13.75 Months 75 HP Fan | 170.00 | per Mo. | 2,337.50 |

| | |
|---|---|
| Total Electric Power | 7,727.50 |
| Total Operating Materials and Supplies | 64,559.93 |

6. (d) Operating Equipment:

**Equipment to be rented:**

| | |
|---|---|
| 10 Battery Lamps for 13.75 Mo. @ 1.28 Ea. per Mo. | 176.00 |

**Equipment to be Purchased:**

None

**Equipment to be Furnished by Operator:**

| | | | |
|---|---|---|---|
| 1 | Eimco 12-B Loader | 13.75 Mo. @ 35.00 per Mo. | 481.25 |
| 1 | S-58 Air Leg Drills | 13.75 Mo. @ 25.00 per Mo. | 343.75 |
| 1 | Grinder for Drill Steel | 13.75 Mo. @ 7.00 per Mo. | 96.25 |
| 1 | Impact Wrench | 13.75 Mo. @ 5.50 per Mo. | 75.63 |
| 1 | 4 Ton Trolley Locomotive | 13.75 Mo. @ 25.00 per Mo. | 343.75 |
| 1 | 15 HP Coppus Fan | 13.75 Mo. @ 12.50 per Mo. | 171.88 |

| | |
|---|---|
| Total Equipment Furnished by Operator | 1,512.51 |
| Total Operating Equipment | 1,688.51 |

UNITED PARK CITY MINES COMPANY

SCHEDULE II



6. (g) Miscellaneous:

| | No. of Men per Day | Shifts Worked | Monthly Wage Rate | |
|---|---|---|---|---|
| **Accounting:** | | | | |
| Various (Same personnel as mentioned in Schedule I) | 3/8 | 128.90625 | 460.00 | 2,578.13 |
| **Workman's Compensation:** | | | | |
| 3.6% of 85,275.02 | | | | 3,069.90 |
| **Payroll Taxes:** | | | | |
| F. I. C. A. | 2% of 85,275.02 | | 1,705.50 | |
| Unemployment Tax | 1.3% of 85,275.02 | | 1,108.58 | |
| Total Payroll Taxes | | | | 2,814.08 |
| **Welfare Insurance:** | | | | |
| 2.2% of 85,275.02 | | | | 1,876.05 |
| Total Miscellaneous | | | | 10,338.16 |

UNITED PARK CITY MINES COMPANY

SCHEDULE III - DIAMOND DRILLING

Exploration Project on Daly West 2100 Level South of Daly West Shaft.

5,000 Feet of Diamond Drilling to be placed on bid to an independent contractor

| | | | Total Cost | Cost per Foot |
|---|---|---|---|---|
| 6. | (a) | Independent Contract | 54,315.00 | 10.863 |
| 6. | (c) | Operating Materials & Supplies: | | |
| | | Electric Power for Compressors | 2,575.00 | .515 |
| | | Total Cost of Diamond Drilling | 56,890.00 | |
| | | Cost per Foot | | 11.378 |

The costs shown are from past experience but we feel we will receive bids for a lower rate.

The above costs were for drilling in broken quartzite and we do not anticipate such difficult drilling conditions.

UNITED PARK CITY MINES CO.

SCHEDULE IV - DIAMOND DRILL STATIONS

Six Diamond Drill Stations size 6' x8' - 10' with 25 feet of 6 x 6 Raise

| | |
|---|---|
| Advance: | 1 Station in 7 shifts<br>1 Station in 3½ days |
| Time Needed to Complete Stations | 21 Days<br>.84 Calendar Months |

Summary

| | | | Total Cost | Cost Per Station |
|---|---|---|---|---|
| 6. | (a) | No Independent Contracts | | |
| 6. | (b) | Personal Services | $5,214.93 | $ 869.16 |
| 6. | (c) | Operating Materials & Supplies | 2,790.94 | 465.16 |
| 6. | (d) | Operating Equipment | 103.15 | 17.18 |
| 6. | (e) | No Initial Rehabilitation | | |
| 6. | (f) | No New Buildings, Etc. | | |
| 6. | (g) | Miscellaneous | 646.39 | 107.73 |
| | | Total | $8,755.41 | |
| | | Cost per Station | | $1,459.23 |

SCHEDULE IV

RECAPITULATION OF ESTIMATED EXPENSE

6. (b) Personal Services:

| Labor: | No. of Men Per Day | Shifts Worked | Wage Rate Including Bonus | Total Basic Cost |
|---|---|---|---|---|
| Miners | 6 | 126 | 24.02 | 3,026.52 |
| Hoistman Daly West | 1 | 21 | 16.02 | 336.42 |
| Station Tender | 1 | 21 | 15.54 | 326.34 |
| Top Carman & Dumpman | 1 | 21 | 15.06 | 316.26 |
| Mechanic & Electrician | 1/4 | 5.25 | 16.50 | 86.63 |
| Timber Framer | 1/8 | 2.625 | 15.54 | 40.79 |
| Total Basic Labor Cost | | | | $4,132.96 |
| Time and one-half for 6-day week | | | 8.3-1/3% | 344.41 |
| Vacation | | | 3.6% | 148.79 |
| Holiday Pay | | | 1.8% | 74.39 |
| Premium Pay | | | 1.7% | 70.26 |
| | | | | 637.85 |
| Total Labor Cost | | | | $4,770.81 |
| **Supervision:** | | | Mo. Wage | |
| Shift Boss | 1/2 | 10.5 | 505.00 | 212.10 |
| Foreman | 1/8 | 2.625 | 570.00 | 59.85 |
| Mine Superintendent | 1/16 | 1.3125 | 975.00 | 51.19 |
| Total Supervision Cost | | | | 323.14 |
| **Geological & Engineering Service:** | | | | |
| Various | 1/4 | 5.25 | 530.00 | 120.98 |
| Same Personal as Mentioned in Schedule I | | | | |
| Total Personal Service | | | | $5,214.93 |

6. (c) Operating Materials and Supplies:

Timber:

| | | | |
|---|---|---|---|
| 16,578 Bd. Ft. Red Pine | 70.00 | | $1,160.46 |
| Nails, Etc. | | | 150.00 |
| Total Timber | | | 1,310.46 |

Explosives:

Continued Next Page
Balance Carried Forward 1,310.46

SCHEDULE IV

| | | | | | |
|---|---|---|---|---|---|
| Balance Brought Forward from Last Page | | | | | 1,310.46 |
| Explosives: (continued) | | | | | |
| 4 | Loading Sticks | .59 | Each | 2.36 | |
| 330 | Feet Annunciation Wire | 5.10 | M' | 1.68 | |
| 1,971 | Lbs. Gel. Extra 40% Explosive | 22.08 | CWT | 435.20 | |
| 500 | Electric Blasting Caps | .28 | Each | 140.00 | |
| Total Explosives | | | | | 579.24 |
| Track: | | | | | |
| 60 | Feet Track including 30# Rail Ties, Accessories | 2.50 | Foot | | 150.00 |
| Pipe: | | | | | |
| None | | | | | |
| Other Supplies: | | | | | |
| 13 | Pcs. 7'10" Coromant Steel | 20.32 | Each | 264.16 | |
| | Oils and Greases | | | 15.00 | |
| Total Other Supplies | | | | | 279.16 |
| Electric Power: | | | | | |
| .84 | Months Compressor | 80.00 | Per Mo. | 67.20 | |
| .84 | " Lights, Etc. | 12.00 | " | 10.08 | |
| .84 | " Daly West Hoist | 225.00 | " | 189.00 | |
| .84 | " 15-HP Fan | 75.00 | " | 63.00 | |
| .84 | " 75-HP MG Set | 170.00 | " | 142.80 | |
| Total Power | | | | | 472.08 |
| Total Operating Materials & Supplies | | | | | $2,790.94 |

6. (d) Operating Equipment:

Equipment to be Rented:

10 Battery Lamps for .84 Month @ 1.28 each per month 10.75

Equipment to be Purchased

None

Balance Carried forward to Next Page 10.75

SCHEDULE IV

| | | | | | |
|---|---|---|---|---|---|
| Balance Brought forward from Last Page | | | | 10.75 | |
| Equipment to be Furnished by Operator: | | | | | |
| 1 Eimco 12-B Loader | .84 Mo. | 35.00 | Per Mo. | 29.40 | |
| 1 S-58 Air Leg Drills | " | 25.00 | " | 21.00 | |
| 1 Grinder for Drill Steel | " | 7.00 | " | 5.88 | |
| 1 Impact Wrench | " | 5.50 | " | 4.62 | |
| 1 4-ton Trolley Locomotive | " | 25.00 | " | 21.00 | |
| 1 15-HP Coppus Fan | " | 12.50 | " | 10.50 | |
| Total Equipment Furnished by Operator | | | | | $ 92.40 |
| Total Operating Equipment | | | | | $103.15 |

6. (g) Miscellaneous:

| Accounting: | No. Men Per Day | Shifts Worked | Mo. Wage Rate | |
|---|---|---|---|---|
| Various<br>Same Personal as Mentioned in Schedule I | 3/8 | 7.875 | 460.00 | 157.50 |
| Workmans Compensation | | | | |
| 3.6% of $5,372.43 | | | | 193.41 |
| Payroll Taxes: | | | | |
| F.I.C.A. 2% of $5,372.43 | | | | 107.45 |
| Unemployment Tax 1.3% of $5,372.43 | | | | 69.84 |
| Total Payroll Taxes | | | | 177.29 |
| Welfare Insurance: | | | | |
| 2.2% of $5,372.43 | | | | 118.19 |
| Total Miscellaneous | | | | $646.39 |

7. (a) We are able to furnish our share of the costs as evidenced by the attached financial statement and are well prepared to do so.

7. (b) We will pay all costs of the project pending payment by the Government of their share.

# UNITED PARK CITY MINES COMPANY

## COMPARATIVE BALANCE SHEET

### ASSETS

| | Dec. 31, 1957 | Dec. 31, 1956 |
|---|---|---|
| CURRENT ASSETS: | | |
| Cash | $ 184,532.59 | $ 81,614.53 |
| United States Government Securities—at cost (at market quotations, $627,131.25 and $724,810.00, respectively) | 634,284.31 | 748,534.58 |
| Accounts receivable | 137,069.25 | 127,075.63 |
| Supplies — at cost less estimated obsolescence | 196,336.40 | 231,284.79 |
| Prepaid expenses | 6,262.65 | 1,531.85 |
| Total current assets | $ 1,158,485.20 | $ 1,190,041.38 |
| INVESTMENTS — at cost: | | |
| Investment in and advances to affiliated companies | $ 274,707.06 | $ 437,447.02 |
| Other investments | 111,706.29 | 111,706.29 |
| Total investments | $ 386,413.35 | $ 549,153.31 |
| PROPERTY, PLANT AND EQUIPMENT — see note: | | |
| Buildings, equipment and tunnels | $ 2,760,876.82 | $ 2,655,258.51 |
| Less accumulated depreciation | 2,161,155.24 | 2,141,941.34 |
| | 599,721.58 | 513,317.17 |
| Mines, mining claims and lands | 12,685,132.80 | 12,467,328.07 |
| Total property, plant and equipment | 13,284,854.38 | 12,980,645.24 |
| Total assets | $14,829,752.93 | $14,719,839.93 |

NOTE — PROPERTY, PLANT AND EQUIPMENT — BASIS OF VALUATION

Properties acquired in the consolidation of Park Utah Consolidated Mines Company and Silver King Coalition Mines Company on May 8, 1953 and in the merger with Daly Mining Company on June 28, 1957 are carried at the book values as of those dates, such values generally representing cost to the respective companies either in cash or in capital stock at par value. Other property acquired since May 8, 1953, is carried at cash cost.

### LIABILITIES, CAPITAL STOCK AND SURPLUS

| | Dec. 31, 1957 | Dec. 31, 1956 |
|---|---|---|
| CURRENT LIABILITIES: | | |
| Accounts and wages payable | $ 162,650.27 | $ 172,121.44 |
| Taxes accrued | 28,534.19 | 30,878.14 |
| Dividends unclaimed | 22,534.55 | 20,786.95 |
| Total current liabilities | 213,719.01 | 223,786.53 |
| RESERVE for Workmen's Compensation | 13,343.28 | 16,551.16 |
| CAPITAL STOCK AND SURPLUS: | | |
| Capital stock: Authorized — 6,000,000 shares of the par value of $1.00 each. | | |

| | Dec. 31, 1957 (shares) | Dec. 31, 1956 (shares) | | |
|---|---|---|---|---|
| Issued | 3,886,941 | 3,828,400 | | |
| Less held in treasury | 1,363.15 | 1,450.95 | | |
| | 3,885,577.85 | 3,826,949.05 | 3,885,577.85 | 3,826,949.05 |

| | | |
|---|---|---|
| Surplus (without deduction for depletion) — see note: | | |
| Capital surplus | 11,046,972.93 | 10,894,293.36 |
| Deficit from operations since May 8, 1953 (deduct) | 329,860.14* | 241,740.17* |
| Total capital stock and surplus | 14,602,690.64 | 14,479,502.24 |
| Total liabilities, capital stock and surplus | $14,829,752.93 | $14,719,839.93 |

The Company and its predecessors have consistently followed the practice of publishing their respective accounts without deduction for depletion of metal mines, and no such deduction is included in these financial statements.

No representation is made that the values at which property, plant and equipment is carried in the Balance Sheet indicate current values.

# UNITED PARK CITY MINES COMPANY

## COMPARATIVE STATEMENT OF PROFIT AND LOSS

| | Year 1957 | Year 1956 |
|---|---|---|
| Sales of ore | $ 2,263,137.82 | $ 2,314,065.87 |
| Royalties and other income from property | 28,024.98 | 43,604.89 |
| Interest income — net | 14,536.74 | 17,499.95 |
| | $ 2,305,699.54 | $ 2,375,170.71 |
| Cost of sales — operating expenses, development, exploration, maintenance, repairs and taxes except income taxes | $ 2,336,736.11 | $ 2,444,246.74 |
| Depreciation | 29,167.80 | 34,343.00 |
| Administrative expense | 27,915.60 | 20,517.16 |
| | 2,393,819.51 | 2,499,106.90 |
| Net Loss, without deduction for depletion | $ 88,119.97 | $ 123,936.19 |

## STATEMENT OF SURPLUS
(without deduction for depletion)

| | Year 1957 | Year 1956 |
|---|---|---|
| CAPITAL SURPLUS: | | |
| Balance at beginning of year | $10,894,293.36 | $10,894,321.76 |
| Surplus arising from merger with Daly Mining Company—June 28, 1957 | 152,660.40 | |
| Profit (loss*) in connection with transactions in treasury stock | 19.17 | 28.40* |
| Balance at end of year | $11,046,972.93 | $10,894,293.36 |
| DEFICIT FROM OPERATIONS SINCE MAY 8, 1953 | | |
| Balance at beginning of year | $ 241,740.17 | $ 117,803.98 |
| Net Loss, without deduction for depletion | 88,119.97 | 123,936.19 |
| Balance at end of year | $ 329,860.14 | $ 241,740.17 |

As approved by the stockholders of both companies, Daly Mining Company was merged with United Park City Mines Company during 1957, resulting in the issuance of 58,541 additional shares of United Park City Mines Company to former stockholders of Daly Mining Company. The merger gives unified ownership to the vital Ontario No. 2 drain tunnel, and has resulted in simplifying many operating problems.

The long-range minerals policy, promised by the government over a year ago, has yet to become a reality. An Emergency Lead-Zinc Committee, established by the industry, is working in Washington with government agencies trying to formulate government policy and legislation that will allow domestic mines to compete with low-cost foreign production. We trust that a solution will be found in the near future.

Respectfully submitted,

S. K. DROUBAY, *General Manager*

JOHN M. WALLACE, *President*

To the Shareholders of
UNITED PARK CITY MINES COMPANY:

World oversupply of most metals continued on through 1957 which resulted in drastic reduction in prices. Many domestic mines have been forced to close down or curtail operations because they cannot compete with low-cost foreign supply which dominates our markets. Lead prices declined from 16c per pound in January to 13c in December. Zinc prices declined from 13½ to 10c per pound in the same period. Wage rates were not increased during the year; however, other costs reflect the general inflationary trend. Because of the decline in metal prices, it was necessary to eliminate most long-range development work and lay off approximately twenty per cent of our employees in order to continue operating.

Approximately one ton of ore was developed for each ton mined, as reserves were slightly greater at the end of the year than they were at the beginning. This was accomplished even though long-range development, which is so vital to future operations, had to be discontinued until metal markets improve. As stated in past reports, there are strong potential areas in the property for development of relatively high grade lead-zinc-silver ore bodies, which if developed, would help compensate for present day unfavorable prices.

Most of the 1957 production came from the Ontario section of the mine where development work resulted in finding additional ore. The Park Utah and Daly West sections maintained a small production which should continue through 1958.

The following data represents operations during the year with comparisons with 1955 and 1956:

| Year | Average No. Employees Per Day | Feet of Development | Feet of Diamond Drill Holes | Feet of Long-hole Percussion Drill Holes | Dry Tons Ore Produced |
|---|---|---|---|---|---|
| 1955 | 236 | 21,160 | 6,683 | 20,139 | 79,363.5 |
| 1956 | 281 | 23,035 | 11,344 | 42,514 | 83,426.95 |
| 1957 | 268 | 17,272 | 4,227 | 58,301 | 96,404.83 |

METALS PRODUCED

| Year | Ounces Au | Ounces Ag | Pounds Pb | Pounds Zn | Pounds Cu |
|---|---|---|---|---|---|
| 1955 | 2900.5 | 344,286.95 | 12,790,969 | 16,815,181 | 193,022 |
| 1956 | 2525.28 | 476,661.11 | 11,841,005 | 16,082,800 | 208,729 |
| 1957 | 2677.29 | 634,997.17 | 12,634,207 | 17,484,547 | 240,806 |

AVERAGE ASSAY

| Year | Ounces Au | Ounces Ag | Per cent Pb | Per cent Zn | Per cent Cu |
|---|---|---|---|---|---|
| 1955 | .037 | 4.34 | 8.17 | 10.59 | .123 |
| 1956 | .030 | 5.71 | 7.10 | 9.64 | .125 |
| 1957 | .027 | 6.60 | 6.59 | 9.08 | .124 |

# AUDITOR'S CERTIFICATE

POGSON, PELOUBET & CO.
CERTIFIED PUBLIC ACCOUNTANTS
25 Broadway
New York 4, New York

To the Board of Directors,
United Park City Mines Company,
Salt Lake City, Utah

We have examined the Balance Sheet of United Park City Mines Company as of December 31, 1957 and the related Statements of Profit and Loss and Surplus for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

The practice of the Company in computing net income or net loss without deduction for depletion of metal mines is in accordance with accepted accounting procedures in industries engaged in the mining of copper, zinc, lead, silver and gold and is in agreement with long established and consistently maintained accounting practices and procedures of the Company and its predecessors and others similarly situated.

In our opinion, the accompanying Balance Sheet and Statements of Profit and Loss and Surplus, together with the explanatory notes, present fairly the financial position of United Park City Mines Company at December 31, 1957, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

POGSON, PELOUBET & CO.
*Certified Public Accountants*

New York, March 4, 1958

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RECEIVED APR 28 1958
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# STATEMENT

# 1957

# UNITED PARK CITY MINES COMPANY

OFFICE OF THE SECRETARY-TREASURER
1007 Kearns Building
Salt Lake City, Utah

Incorporated under the Laws of the State of Delaware
Par Value $1.00. Non-Assessable. Shares issued 3,886,950
Authorized Capital Stock $6,000,000

## OFFICERS

JOHN M. WALLACE, *President*
FRANK A. WARDLAW, JR., *Vice-President*
J. WM. STONER, *Secretary and Treasurer*
S. K. DROUBAY, *General Manager*

## DIRECTORS

S. K. DROUBAY.....Heber, Utah
J. FRANK FROST.....Salt Lake City, Utah
W. P. HEWITT.....Salt Lake City, Utah
JAMES E. HOGLE.....Salt Lake City, Utah
JAMES IVERS.....Salt Lake City, Utah
JOHN M. WALLACE.....Salt Lake City, Utah
FRANK A. WARDLAW, JR.....Salt Lake City, Utah

## TRANSFER AGENT

CITY BANK FARMERS TRUST CO.
22 William Street
New York City, New York

## REGISTRAR

GUARANTY TRUST COMPANY OF NEW YORK
140 Broadway
New York City, New York

4. (a)

ORIGINAL FILE COPY
SEP 28 1959

# Memorandum

on

## Geology and Ore Possibilities in Formations Underlying the Weber Quartzite

## DALY WEST - JUDGE AREA

## UNITED PARK CITY MINES COMPANY

April 11, 1958

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## CONTENTS

| | Page |
|---|---|
| Introduction - - - - - - - - - - - - - - - - - - - - - - | 1 |
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| Stratigraphy - - - - - - - - - - - - - - - - - - - | 2 |
| Structure - - - - - - - - - - - - - - - - - - - - | 3 |
| Probable Character of Mineralization - - - - - - - - | 5 |
| Method of Exploration and Amount of Work Required - - - - - - - - - - - - - - - - - - - - - - | 5 |

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# M e m o r a n d u m

on

Geology and Ore Possibilities in Formations
Underlying the Weber Quartzite

DALY WEST - JUDGE AREA

UNITED PARK CITY MINES COMPANY

April 11, 1958

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## M A P S

| No. | | Scale |
|---|---|---|
| 0 | Index Map, showing principal ore bodies of Park City District, property of United Park City Mines Company, and location of Daly West-Judge exploration project... | 1" = 1000' |
| 1 | Plan Map of Daly West 2100 Level, showing geological projections and proposed exploration headings ..... | 1" = 200' |
| 2 | Cross Section I-A (through Daly West-Judge Area) ..... | 1" = 200' |
| 3 | Cross Section II-A (through Daly West-Judge Area) .... | 1" = 200' |
| 4 | Cross Section III-A (through Daly West-Judge Area) ... | 1" = 200' |
| 5 | Plan Map of Daly West 1200 Level ..... | 1" = 200' |
| 6 | Composite Plan showing stoped areas on Jenney ore bed along Judge-Daly West fissure zones ..... | 1" = 200' |
| 7 | Cross Section through Ontario mine, showing Ontario fissure ore in Weber quartzite and replacement ore bodies beneath Weber formation..... | 1" = 100' |

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# Memorandum

on

Geology and Ore Possibilities in Formations
Underlying the Weber Quartzite

DALY WEST - JUDGE AREA

UNITED PARK CITY MINES COMPANY

April 11, 1958

## INTRODUCTION

The purpose of the proposed Daly West-Judge exploration program is the exploration of the downward extension of the Judge-Daly West fissure systems within the formation underlying the Weber quartzite.

Company records show that approximately 3,400,000 tons of silver-lead-zinc ore have been mined from these fissures and from bedded replacement ore bodies associated with these fissures in the Park City formation, which overlies the Weber quartzite. Thus the area under consideration has been one of the most highly mineralized parts of the Park City district above an elevation of about 7300 feet (see Section I-A). Furthermore, the important ore bodies in the vicinity of the Ontario No. 5 shaft, which have been the source of most of the company's production for the past several years, are localized within the upper Humbug formation, in beds which lie stratigraphically about 800 feet below the base of the Weber quartzite. These ore bodies have now been developed to a depth of about 300 feet vertically below the lowest levels in the Daly West-Judge area (Daly West 2100 level). Also the recent discovery of profitable lead-zinc-silver ore in and along the Back Ledge vein, in the area south of the Daly West shaft on the 2100 level, has shown that such fissures can contain ore shoots of profitable grade at this elevation and within beds at or below the base of the Weber formation.

In view of the above facts, increased attention has recently been focused on the possibility of discovering other new ore shoots in the pre-Weber formations within the block of ground lying to the southwest of the Daly West shaft, for this represents one of the largest areas where the lower limestone formations can be explored from the main drain tunnel level. This area also lies along the downward projection of a strong zone of mineralizing fissures and within this block structural conditions should be similar to those existing in the overlying highly productive parts of the old Judge and Daly West mines.

It is therefore believed that the area under consideration offers a promising target for exploration within the property of the United Park City Mines Company and that the large potential tonnage of new reserves which may exist here justifies the proposed exploration program.

## GEOLOGY OF AREA TO BE EXPLORED

### Stratigraphy

Recent development work along the Back Ledge vein on the Daly West 2100 level, together with a diamond-drill hole drilled downward from a point near the Daly West shaft on this level, has indicated that the massive Weber quartzite unit in this area may overlie about three hundred feet of limestone which is in turn underlain by another quartzite bed of equal thickness. The limestone unit and the so-called "lower quartzite" unit may represent the lower part of the Weber formation. As shown by the above-mentioned drill hole, these beds are underlain in turn by about eight hundred feet of limestone, sandy limestone and shale which are believed to represent the Morgan and Doughnut formations. The drill hole bottomed in a dark shale unit which probably represents the shale unit at the base of the Doughnut,

immediately overlying the Humbug formation. It thus seems certain that the great thickness of calcareous beds underlying the massive Weber quartzite will be present on or below the 2100 level in the area under consideration. These pre-Weber formations include several horizons known to be favorable for replacement by ore in the Ontario and New Park mines.

Structure

In the vicinity of the Daly West shaft the various bedded formations, on both the upper and lower levels, have a general northeasterly strike, with a general dip of about 30 degrees to the northwest (see Plates 1 and 5). As shown by the extensive workings of the Judge mine, the beds gradually swing to a more easterly-westerly direction as they are followed southwesterly and westerly, so that in the area south of the Judge shaft, the general strike is about south 70 degrees west. This results in the development of a broad synclinal fold, plunging gently in a northwesterly direction toward the Daly fault. The great bedded replacement ore bodies of the Judge and Daly West mine, localized in the lower Park formations, were formed along the east flank of this fold, where the favorable beds were cut by the major fissure zones (Roll stope, etc.) and also extended westerly along the fissures to the trough of the syncline where the strike of the beds is parallel to that of the feeding fissures. The extent of the stoping on the Jenney horizon (lower Park City formation) along the Judge-Daly West fissure zone is shown on Plate 6.

The same synclinal structure should be present in the limestone horizons below the Weber quartzite on the Daly West 2100 level, as shown by the projection made on Plate 1.

As shown by Plates 2, 3, and 4, the sediments in the block between

the Daly fault to the north and the large diorite intrusive to the south are cut by a series of easterly-westerly fissures and faults, with most of the mineralized structures dipping to the south. The series of fissures and faults which is known on the Middle Vein system is also associated with several steeply-dipping dikes of diorite-porphyry. Most of the south-dipping faults have lateral or normal fault-type displacements successively dropping the beds to the south. The major productive fissures within this block are (1) the Back Ledge vein, productive through the Weber formation in the area east and southeast of the Daly West shaft, (2) the Roll vein, productive above the Weber in the area between the Daly West and Judge shafts, (3) the Middle Vein system, productive above the Weber over a total length of about 5000 feet, and (4) the Back Vein, productive for a total length of about 2000 feet.

With the exception of the Back Ledge vein, all of these structures must be projected to the 2100 level from their known locations on the upper levels near the top of the Weber quartzite (as shown on Plate 1). The Back Vein of the Judge mine is a strong, well-defined mineralized fault which can be projected with a fair degree of certainty to the 2100 level elevation. The Middle Vein system, considered as a zone of fissuring in combination with porphyry dikes, can also be assumed to extend downward through the Weber quartzite. The Roll vein is a weaker structure and may not extend through the Weber: the Back Ledge vein appears to weaken west of the Daly West shaft. However, it is believed that sufficient fissuring associated with the Middle and Back vein zones will be found below the Weber quartzite to allow extensive mineralization in the pre-Weber formations.

PROBABLE CHARACTER OF MINERALIZATION

The probable character of the mineralization at this depth and in this sector of the Park City district may, to some degree, be a matter of speculation, but in this respect the most recent developments on the Daly West 2100 level have been reassuring. During the past several years lead-zinc-silver ore of good grade has been developed along the Crescent fault zone on this level: like mineralization of good grade has been exposed along the Daly fault and in associated fissures. Even more pertinent to this question is the grade of the new ore shoot now being developed and mined on the Back Ledge vein where production to date has had an average content of approximately .03 oz. gold, 7 oz. silver, 7.5% lead and nearly 9% zinc. This can be compared with the overall average grade of over 4 million tons produced from the Daly West and Judge mines as follows: gold = 0.02 oz., silver = 12.0 oz., lead = 8.7% and zinc = 4.7%. Thus there is good evidence for believing that lead-zinc-silver ore of profitable grade can be found in this area on or below the elevation of the present lowermost workings.

METHOD OF EXPLORATION AND AMOUNT OF WORK REQUIRED

Based upon the geological projections shown on the accompanying maps, it appears that the preliminary exploration of this area could best be done by driving southwesterly from the present Back Ledge workings on the 2100 level to crosscut the Middle and Back Vein fissure zones in the area west of the New Quincy property line, followed by drifting westerly along these fissure zones, provided that favorable structures be cut by the crosscut heading. Should ore or encouraging mineralization be found in these drifts, vertical exploration by raising, sinking or diamond drilling might also be required.

A lay-out for the proposed main crosscut and drifts is shown on Plate 1. As here shown, the proposed main crosscut would have a total length of approximately 2500 feet. Assuming that favorable geological conditions for ore formation are indicated by this penetration, 1500 feet of drifting along the Middle Vein zone and 1000 feet of drifting along the Back Vein are included as part of this project, making a total footage of 5000 feet for the main exploration headings. Furthermore, in connection with the proposed drifting, an additional 500 feet of headings, in the form of short crosscuts to locate, penetrate or sample the mineralized structures, will probably be necessary. Also, vertical exploration along the fissure zones to test favorable bedded horizons, either above or below the 2100 level, will doubtless be required if mineralized fissures are exposed in the 2100 level headings and a total of 5000 feet of diamond drilling, from six diamond drill stations, is estimated for this phase of exploration. The exact locations of the diamond drill stations, as well as the short crosscuts mentioned above, are not shown on Plate 1 as the positions of these workings will be determined by geological data to be obtained as the work progresses in the main drifts or crosscuts.

The total estimated footage thus includes (1) 2500 feet for the main penetration crosscut, (2) 2500 feet of drifting, (3) 500 feet for short crosscuts from the main drifts, (4) six diamond drill stations, and (5) 5000 feet of diamond drilling.

MME Form
(10-58)

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| 5/11 | Selfridge | 120 |
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MAY 12 1959

Mr. S. K. Droubay
Vice President-General Manager
United Park City Mines Company
Heber, Utah

Re: United Park City Mines Company
Salt Lake, Summit and Wasatch
Counties, Utah

Dear Mr. Droubay:

This is in reference to your inquiry of May 1, 1959, concerning a re-submittal of your previous DMEA application under the Office of Minerals Exploration program. We regret that we could not give consideration to a project of such magnitude because the funds now available for exploration work are quite limited. Furthermore, we must give preference to projects involving minerals in short supply.

Nevertheless, we could consider a more modest project, perhaps consisting mainly of diamond drilling. If you should feel that you have an area in your mines where such a relatively modest project would be warranted, you may be sure that an application will be carefully reviewed by us.

Sincerely yours,

(signed) FRANK E. JOHNSON

Acting Director

(fh)

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UNITED PARK CITY MINES COMPANY

GENERAL OFFICE

HEBER, UTAH

May 1, 1959

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Mr. Frank Johnson, Administrator
Department of the Interior
Office of Minerals Exploration
Washington 25, D. C.

Dear Mr. Johnson:

During the last weeks of DMEA we submitted an application for aid, number 4996 (lead-zinc), the application was denied according to Mr. Mittendorf's letter of June 26, 1958. We were extremely disappointed in the action taken by the Government and felt that perhaps if we had not been in such a rush to meet the deadline, a better understanding by the field team would have been accomplished. This is pointed out in the attached copy of a letter from Mr. Mittendorf dated July 18, 1958.

We have studied geological records of the area and compiled better cross sections and have also done a considerable amount of work on the Back Ledge fissure east of the Daly West shaft and are more convinced than we were a year ago that the project is well worthwhile.

Our Company suffered an additional loss of $101,265.00 during the year 1958. We are still hopeful that we can survive the continued depressed condition of the domestic lead-zinc miner. It is very important that we discover new areas for future production.

I would like to inquire whether you feel that it would be worthwhile for us to re-submit our application for aid to OME for this same project. I would also like to ask your advice as to the proper way to go about re-applying. If you think it advisable we could re-submit the project under the new set of forms, together with maps that are more in detail. I would think, however, that the field team would be more able to determine the merits of the project by examining the ground and our vast records here at the mine than we could possibly convey in a geological report.

Kindly let me know your opinion in regards to this matter. If you think it advisable I would make a trip to Washington, accompanied by a member of our geological staff to discuss the matter with you.

Sincerely yours,

S. K. Droubay

S. K. Droubay
Vice President-General Manager

SKD:ncn

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UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
Washington 25, D. C.

July 18, 1958

COPY

Mr. S. K. Droubay, General Manager
United Park City Mines Company
Heber, Utah

Re: Docket No. DMEA-4996 (Lead-Zinc)
United Park City Mines Company
Daly West Area
Salt Lake, Summit and Wasatch
Counties, Utah

Dear Mr. Droubay:

I have your letter of July 14 regarding the cited application. If pending legislation for continuance of Government aid in exploration should be enacted, you certainly should feel free to re-apply for such assistance.

With reference to the denial of your application, while all reviewers were unanimous in their opinion, we did regret having to take such action. I may say that the underlying reason was the uncertainty as to the actual detailed structure and stratigraphy in the immediate target area, plus some concern as to the desirability of the proposed method of attack.

When we set up a very large program, involving 5500 feet of mine openings and thousands of feet of diamond drilling, upon a basic geologic uncertainty we are actually compounding the inherent exploratory hazard. Nevertheless, it is my impression that the reviewers felt that worth while targets may exist and that, had the time interval not been so short, you might have been able to present additional evidence to demonstrate the possible locations of such targets.

In any event, should new legislation be enacted, and you should care to re-apply under the regulations pertaining thereto, you may be sure that I would be glad to ask the Field Team to cooperate with you in working out a satisfactory plan for exploration of the Daly West Area.

Sincerely yours,

s/ C. O. Mittendorf

DMEA Form 7
(12-56)

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| " | Johnson | 110 |
| " | Mittendorf | 100 |
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JUL 18 1958

Mr. S. K. Droubay, General Manager
United Park City Mines Company
Heber, Utah

Re: Docket No. DMEA-4996 (Lead-Zinc)
United Park City Mines Company
Daly West Area
Salt Lake, Summit and Wasatch
Counties, Utah

Dear Mr. Droubay:

I have your letter of July 14 regarding the cited application. If pending legislation for continuance of Government aid in exploration should be enacted, you certainly should feel free to re-apply for such assistance.

With reference to the denial of your application, while all reviewers were unanimous in their opinion, we did regret having to take such action. I may say that the underlying reason was the uncertainty as to the actual detailed structure and stratigraphy in the immediate target area, plus some concern as to the desirability of the proposed method of attack.

When we set up a very large program, involving 5500 feet of mine openings and thousands of feet of diamond drilling, upon a basic geologic uncertainty we are actually compounding the inherent exploratory hazard. Nevertheless, it is my impression that the reviewers felt that worth while targets may exist and that, had the time interval not been so short, you might have been able to present additional evidence to demonstrate the possible locations of such targets.

In any event, should new legislation be enacted, and you should care to re-apply under the regulations pertaining thereto, you may be sure that I would be glad to ask the Field Team to co-operate with you in working out a satisfactory plan for exploration of the Daly West Area.

WRGriswold/er 7/18/58
Rewritten (7/16 & 18/58)
Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Region III (2)
Chron.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

8623

DMEA Form 7
(12-56)

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Mr. S. K. Droubay, General Manager
United Park City Mines, Company
Heber, Utah

Re: Docket No. DMEA-4996 (Lead-Zinc)
United Park City Mines Company
Daly West Area
Salt Lake, Summit and Wasatch
Counties, Utah

Dear Mr. Droubay:

I have your letter of July 14 regarding the cited application. If legislation which is presently pending, should be enacted, for the continuance of Government aid in exploration, you certainly should feel free to re-apply for such assistance.

With reference to the denial of your application, while all reviewers were unanimous in their opinion, yet we did regret having to take such action. I may say that the underlying reason was the uncertainty as to the actual detailed structure and stratigraphy in the immediate target area, plus some concern as to the desirability of the proposed method of attack.

When we set up a very large program, involving 5,500 feet of mine openings, plus thousands of feet of diamond drilling, upon a basic geologic uncertainty, we are actually compounding the inherent exploratory hazard.

Nevertheless, it is my impression that the reviewers felt that worthwhile targets may exist and that, had the time interval not been so short, a program might have been devised that would have been satisfactory to all parties. Possibly the preliminary phase of such a program might have consisted of the necessary effort and expense in obtaining the fundamental and basic geologic data required as an initial step.

In any event, should new legislation be enacted, and you should care to re-apply under the regulations pertaining thereto, you may be sure that I would be glad to ask the Field Team to co-operate with you, in the preparation of a proposed program.

Sincerely yours,

Administrator

WRGriswold/er 7/16/58
Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Region III (2)
CHron.

8623

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UNITED PARK CITY MINES COMPANY

GENERAL OFFICE

HEBER, UTAH

July 14, 1958

Mr. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
U. S. Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-4996 (Lead-Zinc)
United Park City Mines Company
Daly West Area

Dear Mr. Mittendorf:

This will acknowledge your letter of June 26, 1958, advising us that our application for exploration aid had been denied because, in the opinion of your staff, the project was not sufficiently promising to justify Government participation.

This action on the part of the Government is exceedingly disappointing to us, especially the reason given for turning down the application. We had solicited the council of five geologists of outstanding reputation who are familiar with lead-zinc replacement deposits, on the merits of this program. This was done before submitting it for DMEA aid. These geologists are all independent of the United Park City Mines Company geological department, and all of them concurred with our own geological staff in that the project is a sound geological risk.

I am sorry that the members of your organization could not agree with the findings of our own consulting staff who recommended that we spend our money to process this development project. In any event, I thank you for the consideration that you have given us.

If it would be practical I would like to furnish more detailed geological information and re-submit the application under the new bill that we all expect to become law and which will continue to grant exploration aid to the domestic mining industry.

Sincerely yours,

S. K. Droubay

S. K. Droubay
General Manager

SKD:ncn

DMEA Form 7
(12-56)

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June 25, 1958

Memorandum for the Docket

From: Director, Division of Base Metals

Subject: Justification for denial of Docket No. DMEA-4996, United Park City Mines, Company, Daly West Area, Salt Lake, Summit and Wasatch Counties, Utah, Lead-Zinc.

We regret that we are unable to recommend a contract for the cited property. Past production has been substantial and beyond doubt there are unexplored areas that may merit investigation.

However, none of the reviewer like the project, as presently set up. The Field Team says "we view . . . unenthusiastically, there are almost no data on the detailed stratigraphy, or structure, or the ore potential of the immediate target area, and it has been necessary for the Examiners to build their case on long projections, which . . . may prove to be incorrect."

Bishop says "targets whose locations are assumed from projections several thousand feet from the target area."

Nelson states "in order to do the exploratory drilling, much 'dead' drifting and crosscutting are necessary . . . the proposed manner of doing much of the testing by drilling near and parallel to the assumed steeply dipping Middle and Back veins for 800-1000 feet appears to be impractical."

The undersigned is unable to quarrel with any of the adverse criticisms of the various reviewers; the facts are too obvious. Yet, we should not be too smug in our criticism, the Applicant might [illegible] tempted to say," Since you people are so critical, what do you sugge[illegible] have been operating these mines for almost a century and we are [illegible]g the knowledge gained over that period".

8623

A suggested reply would be about as follows, " if our authority should be continued, we would be glad to co-operate with you in an attempt to set up a logical and feasible program; possibly we could also provide Government financial assistance in the gathering of the fundamental geologic data which should be preliminary to a program involving thousands of feet of mine openings. Probably worthwhile targets do exist, but lets not put the cart before the horse."

W. R. Griswold

WRG/er
Copy to: Docket
Admr R File
Chron.

DMEA Form 7
(12-56)

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| Date | Surname | Code |
|---|---|---|
| 6/25 | Trusinski | 500 |
| 6/25 | [illegible] | 130 |
| 6/25 | Lamb | 130 |
| 6/25 | Kiilsgaard | 130 |
| " | [illegible] | 110 |
| " | Mittendorf | 100 |
| | | 225 |
| | | |
| | | |

Noted: 6/25

JUN 2[illegible]

Mr. S. K. Droubay, General Manager
United Park City Mines, Company
Heber, Utah

Re: Docket No. DMEA-4996 (Lead-Zinc)
United Park City Mines Company
Daly West Area
Salt Lake, Summit and Wasatch
Counties, Utah

Dear Mr. Droubay:

Your application for aid for an exploration project and other data available to us in Washington concerning your application have been reviewed.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding materials of acceptable grade in quantities that will significantly improve the mineral supply position for the National Defense Program.

Careful study of all our information indicates to us that the probability of disclosing significant ore reserves by your proposed program is not sufficiently promising to justify Government participation. We regret to advise you, under these circumstances, that your application for exploration assistance is denied.

We wish to thank you for your interest in the Defense Minerals Program and for bringing your property to our attention.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

WRGriswold/er 6/25/58
Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
~~MTX~~ Region III (2)
Chron.

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IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

June 12, 1958
Re: DMEA 4996
United Park City Mines Company
Daly West Area
Summit and Wasatch Counties, Utah
Applicant's Estimate $351,973.66 - Lead-zinc
Recommended Estimate $349,708.45

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Field Team Report

The applicant requested assistance in exploring, largely by diamond drilling, for hypothetical ore bodies in the intersections of long lateral and downward projections of faults and beds whose presence is a good assumption but whose positions are not definitely known. The beds to be explored underlie stratigraphically and actually the 1700-foot, plus or minus, gently dipping Weber quartzite, a generally unfavorable bed above which most of the production of the immediate area has been made.

In order to do the exploratory drilling, much 'dead' drifting and crosscutting are necessary near the bottom of the Weber in order to get into a position from which the drilling to the underlying beds may be done to less than fair advantage. From the underlying beds, considerable production has been obtained in the large Park City district, but nothing is known of their potential in the area to be tested.

The proposed manner of doing much of the testing by drilling near and parallel to the assumed steeply dipping Middle and Back veins for 800-1,000 feet appears to be impractical.

I recommend that the application be denied.

N. E. Nelson

N. E. Nelson

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| 6/11 | WRG. | 500 |

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

June 10, 1958

Re: DMEA 4996; Lead-Zinc
$352,000
United Park City Mines Co.
Salt Lake, Wasatch and
Summit Cos., Utah

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop, USBM

Subject: Review of field examiners report dated May 28 and received Washington June 2, 1958

The applicant has applied for a loan of $352,000 to explore the downward extension of the Judge-Daly West fissure systems within formations underlying the Weber quartzite. The examiners recommend approval of a project essentially the same as that proposed by the applicant.

The field examiners report adds no detail on which the project can be justified. The favorability of the intersections of pre-mineral fault fissures with the limestone members underlying the Weber quartzite is not challanged. However, the $350,000 program is planned to explore specific targets whose locations are assumed from projections several thousand feet from the target area.

I conclude the observable data does not justify the project and, recommend denial without prejudice.

O. M. Bishop

O. M. Bishop

cc: Division of Minerals
Mr. Kiilsgaard
Mr. Lamb
Mr. Callaway
F I L E S

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
224 New Customhouse
Denver 2, Colorado

May 29, 1958

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| 6/5 | C | 220 |
| 6/5 | copy | 500 |

SPECIAL DELIVERY

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket No. DMEA 4996 (Lead-Zinc) United Park City Mines Company (Daly West Area) Summit and Wasatch Counties, Utah
Joint Report of Examination

Enclosed are the original and two copies of a Joint Report of Examination on the subject property by Paul V. Fillo, USBM, and Frank B. Moore, USGS.

The Field Examiners conclude that the probability for making a significant discovery is sufficiently promising to justify Government participation. They recommend that the application, as modified by them, be approved.

Although we concur with the Examiners' belief that exploration targets exist at the intersections of the Middle and Back veins with the formations below the Weber quartzite, particularly the favorable Humbug formation, we view the proposed exploration project unenthusiastically. There is almost no data on the detailed stratigraphy, or structure, or the ore potential of the immediate target area, and it has been necessary for the Examiners to build their case for approval on long projections, which in detail may prove to be incorrect.

If the proposed work is approved, we believe that the first drilling should be used to determine the stratigraphy and structure in the target area in some detail. The difficulty of drilling parallel to veins and intersecting ore bodies at depths of 800 to 1,000 feet, particularly when these ore bodies are expected to extend not more than 75 feet from the veins, is obvious. For this reason we recommend that the contract provide for surveying of all drill holes. If you concur with our opinion that drill hole surveying is necessary, please advise by teletype and we will obtain cost quotations.

The applicant has been niggardly in subordinating ground for the proposed project. We believe the east and north boundaries of the block should be moved at least 100 feet east and north, respectively, and that the west boundary should be moved as much as 2,500 feet west.

Relative to timbered or untimbered drifts or crosscuts, it is recommended that all such work be included on an untimbered basis and that the footage of drift timbering be included as a separate item.

Enclosed also are the following:

1. The original and one copy of a letter dated May 16, 1958, from S. K. Droubay, General Manager, United Park City Mines Company, to Mr. Stephen R. Wilson suggesting that a ceiling be established at the 7,000 foot elevation mark on the DMEA block.

2. Two copies of drilling bids from E. J. Longyear Company. + 5/19/58

3. Two copies of drilling bids from Boyles Bros. Drilling Company. + 5/4/58

4. Two copies of drilling bids from the R. S. McClintock Company. + 5/21/58

5. Eight extra copies of Figures 2, 6, and 8 for use in the contract. 9 cys need

J. W. Townsend

E. N. Harshman

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION III

INTERMOUNTAIN
EXPERIMENT STATION

May 28, 1958

DMEA
DEPARTMENT OF THE INTERIOR
MAY 30 1958
REGION III
DENVER, COLORADO

RECEIVED JUN 2 1958
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220

1600 EAST 1ST SOUTH STREET
SALT LAKE CITY, UTAH

Memorandum

To: E. N. Harshman, Acting Executive Officer, DMEA Field Team, Region III

From: Supervising Mining Engineer

Subject: Docket No. DMEA-4996 (Lead-zinc), United Park City Mines Co. (Daly West area), Summit and Wasatch Counties, Utah

Enclosed are 10 copies of an engineering and geologic report covering examination of the subject property for appraisal of a request for DMEA assistance. The report was prepared by P. V. Fillo and F. B. Moore. Also included is the Routing Control sheet. The application has been retained in this office.

The report was assembled by Fillo after receipt of a rough draft of Moore's section of the report. Figures 1 and 2 to be attached to copies of the report, and 10 extra prints of figure 2 for possible use in a contract, are enclosed. Figures 3, 4, 5, 6, 7, 8, and 9 have been prepared by Moore and are to be attached to copies of the report in Denver.

Three copies each of diamond drilling bids, submitted to the applicant by Boyles Bros. Drilling Co., E. J. Longyear Co., and R. S. McClintock Co., are enclosed. Also included are three copies of a letter, dated May 16, 1958, from S. K. Droubay, General Manager, United Park City Mines Co., wherein he discusses reasons for his request to allow an upper limit for the proposed DMEA block.

The applicant has applied for a loan of $351,973.66 to explore the downward extension of the Judge-Daly West fissure systems within formations underlying the Weber quartzite. The examiners recommend that the applicant be granted a loan to perform work under a slightly revised program consisting of 5,500 feet of drifting and crosscutting and 10,000 feet of diamond drilling, with allowance for 12 diamond-drilling stations. The estimated total cost of the recommended program is $349,708.45.

Stephen R. Wilson

Stephen R. Wilson

Enclosures
cc: J. B. Clemmer

Reviewed by
DMEA OPERATING COMMITTEE
6-4-58
(date)

UNITED PARK CITY MINES CO.
DALY WEST UNIT
SUMMIT AND WASATCH COUNTIES, UTAH
DMEA-4996
Lead-Zinc

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ON-SITE Report

# Engineering and Geologic Report

By Paul V. Fillo
Mining Engineer
Bureau of Mines

and

Frank B. Moore
Geologist
Geological Survey

May 28, 1958

Reviewed by
DMEA OPERATING COMMITTEE
6-4-58
(date)

UNITED PARK CITY MINES CO.
DALY WEST UNIT
SUMMIT AND WASATCH COUNTIES, UTAH

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| Conclusions and recommendations | 17 |


ILLUSTRATIONS


Fig. 1. Location map, United Park City Mines Co., Daly West unit, Summit and Wasatch Counties, Utah
Fig. 2. Property map
Fig. 3. Map showing ore bodies and veins in Daly West area, Wasatch County, Utah (Plate 6)
Fig. 4. Longitudinal section showing ore bodies along the Middle vein, Daly West-Judge area, Wasatch County, Utah
Fig. 5. Geologic map of the Daly West 1200 level, Daly West area, Wasatch County, Utah (Plate 5)
Fig. 6. Geologic map of the Daly West 2100 level showing recommended exploration (Plate 1)
Fig. 7. Geologic section I-A, Daly West area, etc. (Plate 2)
Fig. 8. Geologic section II-A, Daly West area (Plate 3)
Fig. 9. Geologic section III-A, Daly West area (Plate 4)

## INTRODUCTION

United Park City Mines Co., Star Route, Heber, Utah, applied April 25, 1958, to Defense Minerals Exploration Administration for assistance in exploring lead-zinc mineralization in the downward extension of the Judge-Daly West fissure systems. The blocked area involved in the application consists of approximately 364 acres under patented lode claims.

Examination of the property was made May 8, 1958, by Frank B. Moore of the Geological Survey and P. V. Fillo of the Bureau of Mines. The examining team was accompanied by S. K. Droubay, general manager of United Park City Mines Co., and Marvin Barnes, company geologist.

The applicant has proposed exploratory work consisting of the following: 3,000 feet of crosscutting, 2,500 feet of drifting, and 5,000 feet of diamond drilling from 6 drilling stations.

The estimated cost of the project is $351,973.66, and Government participation at 50 percent amounts to $175,986.83. The applicant estimates that 25 months will be required to complete the work.

## LOCATION, TOPOGRAPHY AND CLIMATE

The mine office of United Park City Mines Co. is located at Keetley, Utah, in the Park City district, approximately 35 miles southeast of Salt Lake City. The company also has a geological office in Park City, 26.7 miles southeast of Salt Lake City by way of U. S. Highway 40 and 40 Al. (fig. 1).

The project area lies on the east slope of the Wasatch Mountains at an altitude of 8,500 feet. The block of ground proposed for subordination to the Government is located in the S. 1/2, sec. 29, T. 2 S., R. 4 E., Salt Lake Base and Meridian, Summit and Wasatch Counties, Utah.

Summer months in the area are short and cool, followed by autumn and winter months of low temperatures and heavy snowfalls.

Vegetation in the area includes evergreens, cottonwoods, and aspens. Springs and water courses cut by underground workings yield a constant supply of water the year around.

OWNERSHIP AND EXTENT

Patented mining property, proposed for inclusion in a DMEA contract, is described as follows:

Government tie: Beginning at Cor. No. 1, from which the corner common to Sections 29, 30, 31 and 32, T. 2 S., R. 4 E., Salt Lake Meridian, a granite stone 6 x 10 in., 14 in. above ground, marked 5 notches on E edge and 1 notch on S edge, bears S. 21° 43' W 2052.0 ft.; running thence South 3937.0 ft. to Cor. No. 2, thence S. 55° 21' E., 1111.8 ft. to Cor. No. 3, thence S. 41° 19' W., 75.3 ft. to Cor. No. 4, thence S. 55° 55' E., 293.8 ft. to Cor. No. 5, thence S. 49° 45' E., 235.4 ft. to Cor. No. 6, thence S. 51° 32' W. 586.8 ft. to Cor. No. 7, thence S. 36° 47' E., 612.2 ft. to Cor. No. 8, thence N. 51° 10' E., 1493.5 ft. to Cor. No. 9, thence N. 51° 49' E., 812.1 ft. to Cor. No. 10, thence N. 67° 09' E., 451.0 ft. to Cor. No. 11, thence N. 36° 30' W., 605.1 ft. to Cor. No. 12, thence N. 45° 00' W., 1147.8 ft. to Cor. No. 13, thence N. 50° 22' E., 767.5 ft. to Cor. No. 14, thence

N. 67° 41' E., 20.2 ft. to Cor. No. 15, thence N. 50° 00' W., 190.1 ft. to Cor. No. 16, thence N. 47° 05' E., 798.5 ft. to Cor. No. 17, thence S. 86° 30' E., 267.4 ft. to Cor. No. 18, thence S. 47° 30' W., 100.0 ft. to Cor. No. 19, thence S. 86° 45' E., 278.0 ft. to Cor. No. 20, thence N. 47° 05' E., 488.7 ft. to Cor. No. 21, thence N. 37° 15' W., 199.0 ft. to Cor. No. 22, thence N. 00° 23' E., 1331.4 ft. to Cor. No. 23, thence West 4007.0 ft. to Cor. No. 1, and place of beginning; including an area of 364.739 acres. (Cors. Nos. 2 to 22 inclusive are on the southerly boundary of the United Park City Mines Co. property.)

The above ground is believed adequate to protect the Government's interest in the event a contract is drawn.

The applicant, in a letter dated May 16, 1958, has asked that an upper vertical limit be placed on the proposed project block, at an elevation of 7,000 feet above sea level. This will allow a vertical distance of approximately 600 feet above the 2100 level for conduct of the proposed exploratory work. The operator, on company account, plans to enter areas of known ore around some of the old stopes in the Weber quartzite. The request appears reasonable.

## HISTORY AND PRODUCTION

In 1869 lead-silver deposits were discovered in the Park City district. The principal ores mined in the early days were galena and lead carbonate ores in limestone. High-grade silver ore occurred intermittently.

The Daly West mine is 2 miles south-southeast of Park City, near the head of Empire Canyon. The property was first worked in 1882 at

the western extension of the Ontario lode veins. Production of the mine totals approximately 3,400,000 tons of ores containing silver, lead, and zinc which was mined from the Judge-Daly West fissures. The mineralization occurs in fissures that are extensions of the Ontario mine ore bodies.

The company is presently working on the main drain-tunnel level of the Daly West 2100 level, where a recent discovery of ore was made along the Back Ledge vein.

## GEOLOGY

Sedimentary rock units in the Park City district range in age from lower Paleozoic to Jurassic; however, the stratigraphic section below the Pennsylvanian Weber quartzite is not well known. In the Daly West-Judge area, as well as in the southeast part of the district, limited underground exploration below the Weber quartzite has been done in the past few years. The section given below is based, in part, on such recent work and, in part, on the section as established in the adjoining Cottonwood-American Fork district.

### Stratigraphy of the Park City District

(Formations below the Humbug are based on data from the Cottonwood-American Fork district)

| | Formation | Lithology | Thickness (in feet |
|---|---|---|---|
| Jurassic | (Nugget ss. | Light colored sandstone with interbedded red shale | -- |
| Triassic(?) | (Ankareh sh. | Red shale, locally sandy with interbedded coarse gray sandstones | 1,225 |

| | Formation | Lithology | Thickness (in feet) |
|---|---|---|---|
| Triassic | Thaynes fm. | Limestone with sandstone and shale. A stratum of red shale (the Midred) separates the more calcareous upper portion from a more sandy lower portion. | 1,150 |
| | Woodside sh. | Shale, mainly red, partly altered to green; fine-grained, thin bedded. | 700 |
| Permian | Park City fm. | Limestone with interbedded quartzite, sandstone, and shale. | 700 |
| Pennsylvanian | Weber quartzite | Pale gray to white, thick bedded quartzite, with interbedded limy sandstone and thin limestone. | 1,500-2,000 |
| | Morgan fm. | Pale gray limestone in 1-2 foot beds. Pink cherty fossils. | 350 |
| Mississippian | Doughnut fm. | Thin-bedded black limestone, locally cherty and highly fossiliferous | 250-350 |
| | Humbug fm. | Interbedded tan sandstone or quartzite and dark gray limestone. | 400 |
| | Deseret ls. | Medium- to thick-bedded dark gray to black limestone and dolomite, locally cherty. | 800 |
| | Madison ls. | Thin-bedded dark gray limestone. | 450 |
| | Jefferson dolomite | (Upper) Pale gray massive dolomite. (Lower) Dark gray massive dolomite. Both locally vuggy, thin basal bed of sandstone or gritty siltstone. | 120 |
| | | Unconformity | |
| Cambrian | Maxfield ls. | Oolitic, pisolitic, speckled, or wavy-bedded limestone. Thin- to thick-bedded. | 0-1,000 |
| | Ophir fm. | (Upper) Fine-grained limy sandstone<br>(Middle) Wavy-bedded gray limestone<br>(Lower) Green micaceous shale | (160)<br>( 40)<br>(200) |
| | Tintic quartzite | Massive tan quartzite | 1,000 |

Diorite and quartz diorite porphyry intrude the sediments as dikes, sills, and irregular masses. The centers of intrusion are south and east of the Daly West-Judge area; however, several dikes and sills have been encountered in the workings near the Daly West shaft.

The sedimentary rocks have been folded into a broad north-northeast-plunging anticline, the axis of which lies a short distance east of the town of Park City. Most of the mines, including the Daly West and Judge, are on the west flank (fig. 2).

A series of pre-mineral faults or fissure zones, trending slightly north of east, cut the western flank of the anticline in that part of the district containing the most productive mines. The movement along these faults is normal and, in part, post mineral.

In the Daly West-Judge area the sedimentary rocks dip about 30° to the northwest, reflecting the general effect of the Park City anticline. As shown by the Judge mine workings above the levels to be explored, the beds locally are warped into a broad synclinal fold which plunges gently northwest. The replacement deposits of the Judge and Daly West mines formed along the flanks and trough of the syncline where cut by major fissure zones.

The fissure zones include the well-known Ontario-Daly zone and, immediately to the south, the productive Back Ledge, Roll, Middle, and Back fissures (figs. 6, 7, 8, 9). All strike northeasterly and dip steeply southeast except the Ontario-Daly, which dips steeply northwest. With the exception of the Daly and Back fissures, which

have displacements of 500 and 200 feet, respectively, the displacement along the fissures is less than 100 feet.

## ORE DEPOSITS

The Daly West mine contains deposits of both lode and bedded type. To date most of the production from the mine has come from the Permian Park City formation above the Pennsylvanian Weber quartzite. For the past few years, however, ore has been produced at the nearby Ontario mine from upper beds of the Mississippian Humbug formation about 800 feet stratigraphically below the Weber quartzite. At the Daly West mine, lode-type lead-zinc-silver ore also has been discovered in beds at or below the base of the Weber quartzite along the Back Ledge vein.

The ore bodies in the Daly West-Judge area occur as bedded replacements in the Jenney (lower) and 920 (upper) horizons of the Park City formations (fig. 4); along the Daly fault, lode ore occurred in the Park City and other formations. Individual ore bodies have been mined for lengths of several thousand feet and bed out in places as much as 100 feet from the fissures (fig. 3). The fissures, other than the Daly, have been productive as follows: (1) the Back Ledge vein, productive through the Weber formation in the area east and southeast of the Daly West shaft; (2) the Roll, productive above the Weber in the area between the Daly West and Judge shafts; (3) the Middle vein system, productive above the Weber over a total length of about 5,000 feet; and (4) the Back vein, productive for a total length of about 2,000 feet. The operators estimate that in the Daly West-Judge area the combined production of the Back Ledge, Roll, Middle, and Back veins exceeds that from the Daly vein.

The Daly West ore is valued chiefly for its silver, lead, and zinc content. Copper and gold are present in small quantities. Galena and sphalerite are the principal ore minerals, with some tetrahedrite and chalcopyrite. Quartz and pyrite form the gangue. Silver occurs in galena, pyrite, tetrahedrite, and sphalerite. The zone of oxidation is shallow and the usual secondary minerals found near the surface are not present at depth.

The overall average grade of more than 4 million tons of ore produced from the Daly West and Judge mines is: 8.7 percent lead, 4.7 percent zinc, and 0.02 ounce gold and 12.0 ounces of silver per ton. Ore from the 2100 level on the Back Ledge vein, which is currently being mined, averages 7.5 percent lead, 9.0 percent zinc, and 0.03 ounce gold and 7.0 ounces of silver per ton. Although no definite conclusions can be drawn from one ore body compared to many, a few factors may be noted. The increase in zinc content at depth is to be expected. The lead content holds up surprisingly well. What appeared to be a high pyrite content in the 2100 level ore is, according to the operators, rather common at higher levels, thereby discounting apparent evidence of vertical zoning.

## PROPOSED EXPLORATION AND COSTS

The applicant proposes to explore the Middle and Back veins on and below the 2100 level in the area southwest of the Daly West shaft. The applicant estimates that 2,500 feet of crosscutting is needed to reach the two target veins with 1,500 feet of drifting on the Middle and 1,000 feet of drifting on the Back vein necessary to properly explore the two

veins. An additional 500 feet of crosscutting will be needed for laterals. Because at the 2100 level in this area both veins are expected to cut Weber quartzite, the applicant proposes to drill 5,000 feet of diamond-drill holes to test for bedded deposits along the two veins in the favorable Humbug formation 800 to 1,000 feet stratigraphically below. In reaching the target area the Back Ledge vein will be followed westerly for several hundred feet and the Roll vein will be intersected. These veins present secondary targets which could be explored if conditions warrant.

The following costs of the proposed work were estimated by the applicant:

| | |
|---|---|
| Crosscutting, 6' x 9' with 12" x 24" ditch (untimbered), 2,750 feet at $46.198 per foot | $127,044.76 |
| Drifting, 8' x 9' with 12" x 24" ditch (timbered), 2,500 feet (timbered drift) | |
| 250 feet (timbered crosscut) | |
| 2,750 feet at $57.92 per foot | 159,283.49 |
| Diamond drilling, 5,000 feet at $11.378 per foot | 56,890.00 |
| 6 diamond drill stations, size 6' x 8' x 10' with 6' x 6' x 25' raise, cost ~~per~~ for drill station | 8,755.41 |
| Total estimated cost | $351,973.66 |
| Government participation at 50 percent | $175,986.83 |

The estimated work schedule is as follows:
(25 working days per month)

Schedule I

Crosscutting, 2,750 feet (untimbered)
5 feet per shift, 10 feet per day ---------- 11 months

Schedule II (drifting and crosscutting to be done simultaneously)

Drifting, 2,500 feet (timbered)
Crosscutting, 250 feet (timbered)
4 feet per shift, 8 feet per day

Schedule III

5,000 feet of diamond drilling

Schedule IV

6 drill stations, 6' x 8' x 10', and
6' x 6' x 25' raise

Schedules II, III, and IV ---------- 13.75 months

Total ---------- 24.75 months

The above work and cost schedule for drifting and crosscutting appears to be reasonable. The cost of diamond drilling is high and can be accomplished at a lower rate per foot.

## RECOMMENDED EXPLORATION AND COSTS

The applicant's proposed program appears to be sound and, with minor modifications, is recommended for approval. The one unfavorable factor is the rather large stratigraphic distance of the exploratory drifts above the target Humbug horizon. The possibility of deepening the Daly West shaft was discussed with the applicant, but for operational reasons and because of the cost involved, such a program was not favored. In fact, the applicant had previously worked up this type of exploratory program, but discarded it in favor of the present proposal.

Near the starting point of the proposed exploration, good-grade ore is currently being mined along the Back Ledge vein in places where one wall is limestone. However, positive identification of the limestone has not been made because of an inconsistency near the base of the Weber. It is tentatively classed as part of the lower Weber, but may be the Morgan, which underlies the Weber. If it is Morgan, distances to the Humbug may be shorter than anticipated.

The limited drifting along the Back Ledge vein, possible drifting along the Roll vein, and the drifting along the Middle and Back vein will be done in areas where the Weber-Morgan limestone is expected to form one or both walls.

In reference to the drilling program, the stratigraphic control for the formations below the Weber quartzite is based on the following factors: The New Park Mining Co. at the Mayflower mine, 2 miles to the east, has explored the sedimentary rocks to the middle of the Deseret formation, which is stratigraphically below the Humbug. United Park City Mines Co., in the Ontario mine, 1 mile to the northeast, has been mining ore for several years from the upper Humbug formation. In the adjoining Cottonwood-American Fork district, 6 miles to the west, the sedimentary rocks through the Cambrian Ophir formation have been explored by numerous underground workings. Because limestones traditionally are one of the more consistent formations, and because many of the Paleozoic limestones (i.e., Humbug) can be correlated over large areas in Utah, projections of the section from nearby areas can reasonably be made. In addition, the section to a point near the base of the Doughnut has been tentatively established by a diamond drill hole near the bottom of the Daly West shaft (fig. 9).

The probability that the various fissures will be present at depth varies with the individual fissure. The Back vein is a strong, well-defined fissure which can be projected to depth with considerable confidence. The Middle vein system consists of several branches associated with porphyry. Because of its long lateral extent of over 5,000 feet,

it, too, can be expected to continue at depth. The Back Ledge fissure, explored on the 2100 level, is, from evidence above, expected to weaken to the west. The Roll vein, in general weaker than the others, may not extend to the exploration depths.

The drill holes, in general, will be drilled adjacent to the Middle and Back fissures and the ore bodies can be expected to bed out for 50 to 75 feet from the fissures. The drill holes should cut the favorable Doughnut formation and the favorable upper part of the Humbug, which may require depths of 1,000 feet in places. Because it is believed that more information may be required than 6 holes can give, and that by increasing the drilling a better balance can be gained between dead work and active exploration, it is recommended that the diamond drilling footage be increased from 5,000 to 10,000 feet. The drifting, although not completely dead work, is in a horizon secondary in importance to the lower beds.

The positions, bearings, and inclinations of the drill holes are to be determined from the results of drifting.

It appears there is an excellent chance of discovering significant quantities of lead-zinc ores in down-dip extensions of known ore bodies, and it is recommended that the application for DMEA assistance be approved and that the following program and estimated costs be allowed:

## Estimated Work Schedule

(25 work days per month)

Schedule I

Crosscutting, 2,750 feet (untimbered)
5 feet per shift, 10 feet per day ---------- 11 months

Schedule II (Drifting and crosscutting to be done simultaneously)

Drifting, 2,500 feet (timbered)
Crosscutting, 250 feet (timbered ---------- 13.75 months

Schedule III

10,000 feet of diamond drilling
20 feet per shift

Schedule IV

12 drill stations, 6' x 8' x 10', and
6' x 6' x 25' raise

| | |
|---|---|
| Schedules III and IV ---------- | 2 months |
| | 26.75 months |

Schedules II, III, and IV will be worked simultaneously in order to complete the work in the specified period.

## Estimated Cost

Schedule I

2,500 feet untimbered crosscut 6' x 9'; with 12" x 24" ditch,
250 feet stub crosscut, 6' x 9'

| | | Total | Cost/foot |
|---|---|---|---|
| Independent contracts | none | | |
| Labor | | $ 62,474.91 | $22.718 |
| Supervision | | 5,815.80 | 2.114 |
| Operating materials and supplies | | 42,306.02 | 15.384 |
| Power | | 6,182.00 | 2.248 |
| Water | no charge | | |
| Fuel | no charge | | |
| Operating equipment | | 1,625.80 | .591 |
| Rehabilitation and repairs | none | | |
| New buildings | none | | |
| Miscellaneous | | 8,640.23 | 3.142 |
| Total cost ---------- | | $127,044.76 | $46.197 |

## Schedule II

2,500 feet timbered drift 8' x 9'; with 12" x 24" ditch,
250 feet stub crosscut, 6' x 9'

| | | Total | Cost/foot |
|---|---|---|---|
| Independent contracts | none | | |
| Labor | | $75,427.13 | $27.428 |
| Supervision | | 7,269.76 | 2.643 |
| Operating materials and supplies | | 56,832.43 | 20.666 |
| Power | | 7,727.50 | 2.810 |
| Water | no charge | | |
| Fuel | no charge | | |
| Operating equipment | | 1,688.51 | .614 |
| Rehabilitation and repairs | none | | |
| New buildings | none | | |
| Miscellaneous | | 10,338.16 | 3.759 |
| Total cost | | $159,283.49 | $57.92 |

## Schedule III

10,000 feet diamond drilling, BX size

| | Total | Cost/foot |
|---|---|---|
| Independent contract | $60,000.00 | $ 6.00 |
| Power for compressor | 5,150.00 | .515 |
| Total cost | $65,150.00 | $ 6.515 |

## Schedule IV

12 diamond drill stations, 6' x 8' x 10' (25' raise 6' x 6')

| | | Total | Cost/station |
|---|---|---|---|
| Independent contracts | none | | |
| Labor | | $ 9,541.62 | $795.135 |
| Supervision | | 888.24 | 69.263 |
| Operating material and supplies | | 4,637.72 | 386.476 |
| Power | | 944.16 | 78.680 |
| Water | no charge | | |
| Fuel | no charge | | |
| Operating equipment | | 206.30 | 17.191 |
| Rehabilitation and repairs | none | | |
| New buildings | none | | |
| Miscellaneous | | 1,292.78 | 10.773 |
| Total cost | | $17,510.82 | $1,357.518 |
| | | | 0.983 per cubic foot |

Assays

| | |
|---|---|
| Drifting, 400 samples at $4.50 per sample---------- (Lead, zinc, gold, silver) | $ 1,800.00 |
| Diamond drilling, 200 samples at $4.50 per sample-- (Lead, zinc, gold, silver) | 900.00 |
| Estimated total cost ---------- | $371,689.07 |
| Government participation at 50 percent ---------- | $185,844.53 |

The above schedules show a summation of the project costs. The application contains detailed and complete estimated cost figures. These figures have been carefully studied and the basic costs are found to be fair and accurate.

The applicant has based the total cost of drifting on the necessity of 100 percent timber requirement. However, the application includes a statement that of a total of 2,438 feet of drifting and crosscutting completed on the 2100 level southeast from the Daly West shaft, only 270 feet required timbering. Little, if any, timber is needed in crosscutting. It is believed, therefore, that the above estimate under Schedule II can be reduced in total cost, inasmuch as all drifts will not require timber.

Approximately 1,100 feet of the above total of 2,438 feet of drifting and crosscutting may be considered drifting. A total of 270 feet of the 1,100 feet of drifting, or 24.5 percent, required timber. Based on this percentage, it appears logical to reduce the timbering requirements under the above Schedule II to 625 feet of drifting instead of 2,500 feet. This will result in a reduction per foot of $57.92 -- $46.197, or $11.723 for 1,875 feet of drifting under the above Schedule II. The total cost under this schedule will be reduced

by 1,875 x $11.723, or $21,980.62. The revised total cost under this schedule will then be $159,283.49 -- $21,980.62, or $137,302.87. This procedure will result in a total project cost of $349,708.45.

The application includes an estimated cost of $11.378 per foot for diamond drilling with the bit size not specified. This cost is high. At the time this report was prepared, the applicant had received one bid for performance of the diamond drilling. This bid is based on $6.00 per foot for BX size. Although the charges against diamond drilling, such as reaming, casing, or standby costs, may result, the operator has agreed to have the work performed by a subcontractor at a cost of $6.00 per foot plus compressor power of $0.515 per foot. This cost is shown in the above estimate under Schedule III.

## CONCLUSIONS AND RECOMMENDATIONS

Several limestone formations underlying the Pennsylvanian Weber quartzite have recently been found favorable for ore deposition in the Park City district. The proposed program is designed to explore two of these limestone formations beneath an area from which ore valued at more than $11,000,000 was produced from 1893 to 1906 in beds above the Weber quartzite. Newly discovered ore bodies are expected to be chiefly bedded replacement type, although some lode ore may also be anticipated. The discovery of such ore bodies at these horizons will open up large new areas for further exploration and greatly increase the ore reserves of the Park City district.

Because there appears to be sound geologic reasons for expecting significant ore deposits in the area to be explored, it is recommended that the application as modified above be approved.

DMEA
DEPARTMENT OF THE INTERIOR
MAY 29 1958
REGION III
DENVER, COLORADO

May 21, 1958

Mr. S. K. Droubay, General Manager
United Park City Mines Company
General Office
Heber, Utah

Dear Mr. Droubay:

We understand you wish to diamond drill a minimum of 5,000 feet from the Daly Shaft consisting of 1,000 foot holes and shorter, and that you will furnish us adequate air and water at the drill set ups which will be made large enough for 20 foot pulls.

We propose to furnish the drill labor, rods, casing, drill rig and all drilling accessories and will use wire-line equipment when contractors feels applicable for the following prices per foot:

| | | |
|---|---|---|
| NX Collarpipe | 0 - 50 feet | $6.85 per foot |
| BX or AX | 0 - 1000 feet | $6.95 per foot |

Mobilization and demobilization is included in the above prices per foot.

In the event of loose or caving ground or water courses, or any conditions are encountered which in the contractor's opinion tend to make drilling impractical without the use of casing or cement, a charge of $2.75 per foot will be made for placing cement and redrilling the cemented section of the hole, and a charge of $2.75 per foot will be made for reaming and landing the casing.

In case of delays not attributable to contractor or breakdown of his equipment we shall expect to be reimbursed at the rate of $8.00 per hour, which time will include survey of hole and time expended at your company's request.

Our employees will be covered by Workman's Compensation to comply with the State Act and the job will be covered by Public Liability in the amounts of $100,000.00 and $300,000.00 and Property Damage in the amount of $100,000,00.

We appreciate the opportunity of furnishing this proposal and thank you for the courtesies extended Mr. Greenwood in connection with seeing the job. Please be assured of our full cooperation.

Very truly yours,

R. S. McC. INTOCK COMPANY

s/ Philip H. Irwin

Longyear
E. J. LONGYEAR COMPANY
General Offices, 76 South 8th St.
Minneapolis 2, Minnesota, U. S. A.
TELEPHONE: FEDERAL 9-7631 • CABLE LONGCO

DMEA
DEPARTMENT OF THE INTERIOR
MAY 30 1958
REGION III
DENVER, COLORADO

May 19, 1958

United Park City Mines Company
Heber, Utah

Attention: Mr. S. K. Droubay, General Manager

EXPLORATORY DRILLING PROGRAM - DALY WEST MINE, VICINITY OF PARK CITY, UTAH

Gentlemen:

1. With reference to our telephone conversation of today, we are pleased to submit below our proposal for your contemplated exploratory drilling program which is to be carried out in the above-described mine.

2. We understand that the work as now planned will consist of a minimum of 5,000 feet of drilling and a maximum of approximately 10,000 feet, in angle holes varying in inclination from minus 65 degrees (measured from the horizontal) to vertical, and ranging up to a maximum of 1200 feet in depth; that the holes will be collared below the Weber quartzite; and that the materials to be penetrated will consist mainly of limestone, siltstone, sandstone, and minor amounts of quartzite and porphyry. We further understand that a minimum of AX-size core is desired, but that you will accept EX or AX wire line core in the event that it does not prove practical to complete the hole to the desired depth with larger size tools.

3. For this work we propose to furnish one complete Longyear underground diamond core drill of suitable capacity together with the necessary accessory equipment, including wire line coring tools, required to complete the work as now planned. We further propose to operate the drill on a two shift basis, six days per week.

4. We will carry public liability insurance covering personal injury and property damage, and Workmen's Compensation insurance, and also, all-risk insurance on the drilling equipment protecting against loss by theft, fire, flood, land-slides and other similar hazards.

We will also assume and pay any and all Old Age Benefit, Unemployment and Social Security taxes and contributions imposed by federal or state authorities.

Certificates showing the coverage referred to will be furnished upon request.

5. Based upon the conditions as outlined above, we are pleased to quote as follows:

a) Diamond core drilling, in angle holes varying in inclination from minus 65 degrees (measured from the horizontal) to vertical

| | BX WL and/or AX Standard | AX WL and/or EX Standard |
|---|---|---|
| 0 to 250 feet in depth..... | $ 7.75 per ft. | $ 7.45 per ft. |
| 250 to 500 feet in depth..... | $ 8.00 per ft. | $ 7.70 per ft. |
| 500 to 750 feet in depth..... | $ 8.50 per ft. | $ 8.20 per ft. |
| 750 to 1000 feet in depth..... | $ 9.35 per ft. | $ 9.05 per ft. |
| 1000 to 1250 feet in depth.... | $10.50 per ft. | $10.20 per ft. |

b) Reaming and Casing

0 to 500 feet in depth -

Ream AX-size hole to receive AX Casing.....$2.50 per ft.
Ream BX-size hole to receive BX Casing.....$3.00 per ft.

500 to 1000 feet in depth -

Ream AX-size hole to receive AX Casing.....$3.00 per ft.

In addition to the above tabulated rates, it is understood and agreed that we would be reimbursed for any casing lost or left in holes.

c) Cementing, waiting for cement to set, and drilling out cement.....$8.50 per hour, per two man crew, plus cost of materials used.

d) Drill hole inclination tests.....$8.50 per hour, for two man crew.

e) Delays for your convenience or for which you are responsible.....$7.50 per hour, with two man crew

f) Moving allowance -- In the event that a total of more than 48 man hours is consumed in completing moving and rigging operations at any given location, it is understood and agreed that we would be reimbursed for all such excess time at the rate of $3.75 per man hour.

6. The above-quoted drilling rates are based on wages currently being paid in the State of Utah. If during the life of this project it becomes necessary for us to adjust the wages being paid our workmen because of demands of labor union or otherwise, it is understood and agreed that the Longyear Company reserves the right to increase drilling rates to cover resultant additional operating expenses.

7. Other Provisions -- It is understood and agreed that adequate underground drill stations will be prepared by you from which diamond core drilling operations can be carried out in an efficient and workmanlike manner; and that you will also furnish at each drill hole location, electric power and air and water in sufficient quantities and pressures so as to permit the drilling operations to be carried out efficiently.

8. Drill cores will be turned over to your representative at the drill stations in receptacles furnished by you.

9. Statements will be rendered as promptly as possible after the first of each month.

10. We very much appreciate the opportunity to consider this project. If our proposal is found acceptable, we would be prepared to commence the work within a maximum of 15 days after receipt of official notice to proceed.

Sincerely,

B. J. LONGYEAR COMPANY

M. J. Gleason

Manager
Contract Drilling Division

M.J.Gleason:bal

ACCEPTED:

UNITED PARK CITY MINES COMPANY

By: _____

Date: _____

(2)

UNITED PARK CITY MINES COMPANY
1007 KEARNS BUILDING
Salt Lake City 1, Utah

DMEA
DEPARTMENT OF THE INTERIOR
MAY ~~30~~ 29 1958
REGION III
DENVER, COLORADO

May 16, 1958

J. WM. STONER
Secretary-Treasurer

Mr. Steven R. Wilson
DMEA
Bureau of Mines
1600 East 1st South
Salt Lake City, Utah

Re: DMEA Docket #4996

Dear Mr. Wilson:

Mr. Osika and I were discussing some of the details of our DMEA application with Mr. Paul Fillo and it occurred to us that we had better define a ceiling on the area of ground covered by our application. If reference be made to the vertical cross-sections, you will note that the stopes in the areas above the Weber Quartzite are quite extensive and we may re-enter some of the old stopes for the purpose of extracting pillars and marginal areas. We are in the process now of cleaning up one of the drifts on the Daly West 1200 level, in order to examine some of this country that has been dormant for many years. There is a small amount of ore left in what is known as the Shaft Ore Body and it may be that leasers or the company itself may try to salvage the balance of this ore.

In discussing the matter with Mr. Fillo, we thought that perhaps a ceiling established at the 7,000 foot elevation mark would protect our interests in the formations above the Weber Quartzite and would give the government 600 feet of elevation above the 2100 level workings in case ore is located above the level.

Would you kindly consider this request and pass it along to interested parties.

Sincerely yours,

UNITED PARK CITY MINES COMPANY

By S. K. Droubay
S. K. Droubay
General Manager

Diamond Core Drilling
Mining
Quarries
Shaft Sinking
Tunnel Driving

**Boyles Bros. DRILLING COMPANY**

CONTRACTORS · ENGINEERS · GEOLOGISTS
General Offices
1321 South Main Street Phone HUnter 4-4691
SALT LAKE CITY 15, UTAH

DMEA
DEPARTMENT OF THE INTERIOR
MAY ~~30~~ 29 1958
REGION III
DENVER, COLORADO

OFFICIAL FILE COPY
DMEA
RECEIVED 1958
DATE

May 6, 1958

Reply to: S.L.C.

Mr. S. K. Droubay, Gen. Mgr.
United Park City Mines Co.
Heber, Utah

Dear Mr. Droubay:

We have examined the core and the drillers reports, as well as talked with Mr. Stewart with reference to your proposed DMEA program for approximately 5,000 feet of drilling.

We submit the following quotation for this work using our BX wireline, that gives a BX core and bottoming this size if possible.

1. Drilling rate: all sizes
   O - 1,000 feet, $6.00 per foot.

2. If the diamond cost exceeds $1.00 per foot the extra cost would be to your account. We do not anticipate this higher cost unless, considerable quartzite or silicified lime are drilled.

4. Reaming if required, will be charged for at $2.90 per foot for all sizes.

5. Surveying or delays ordered by the company will be charged for at $8.60

6. Drill station of adequate size will be furnished at no cost to contractor.

7. Adequate air and water will be furnished free of cost to contractor at the drill stations.

Thank you for the opportunity of bidding on your work and we would appreciate knowing the disposition of this work. If there are any questions with reference to our bid, feel free to call on us.

Yours very truly,

P. A. Park

P. A. Park
Ass't Mgr. Drilling Division

PAP:je

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DMEA
RECEIVED MAY 15 1958

| DATE | INITIAL | CODE |
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| 5/15 | GWB. | 500 |
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22d Nev Customhouse
Denver 2, Colorado
May 13, 1958

Memorandum

To: E. N. Harshman
M. H. Moore

From: Acting Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA 4996 (Lead-Zinc) United Park City Mines Company (Daly West Area) Salt Lake, Summit and Wasatch Counties, Utah

For your information, enclosed are the following:

1. Review of the subject application by O. M. Bishop, USGS.

2. Review of the subject application by W. P. Williams, USGS.

3. Letter of transmittal of the foregoing from the Chairman, Operating Committee dated May 8, 1958.

4. Routing Control sheet.

Original signed by
E. N. HARSHMAN
E. N. Harshman

EHH:dj

cc: Ref. Op. Comm. (2)
Docket
Corres.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

| Date | Surname | Code |
|---|---|---|
| 5/6 | Trumpel | 500 |
| 5/7 | Selfridge | 130 |
| 5/7 | Lamb | 130 |
| 5/7 | Kilsgaard | 130 |
| " | Johnson | 110 |
| " | Stockebrand | 100 |
| 5/8 | | 220 |
| | | 500 |
| | | |

MAY 8 1958

Mr. S. K. Droubay, General Manager
United Park City Mines, Company
Heber, Utah

Re: Docket No. DMEA-4996 (Lead-Zinc)
United Park City Mines Company
Daly West Area
Salt Lake, Summit and Wasatch
Counties, Utah

Dear Mr. Droubay:

We have your letters of April 24 and 26, 1958, referring to the cited application. It has been reviewed by the Division of Base Metals of the Defense Minerals Exploration Administration and is now being referred by us to:

Mr. E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

It is our understanding that the field examination has already been made.

Should further information be required, the Field Team will again get in touch with you; any assistance you may give them will be appreciated.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

WRGriswold/er 5/6/58
Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Region III (2)
Chron.

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

| Date | Surname | Code |
|---|---|---|
| 5/6 | Brunner | 500 |
| 5/7 | Selfridge | 130 |
| " | Lamb | 110 |
| " | Chatterton | 100 |
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500

MAY 8 1958

Mr. E. N. Harshman
Acting Executive Officer
DMEA Field Team, Region III
224 New Customhouse Bldg.
Denver 2, Colorado

Re: Docket No. DMEA-4996 (lead-Zinc)
United Park City Mines Company
Daly West Area
Salt Lake, Summit and Wasatch
Counties, Utah

Dear Mr. Harshman:

The cited application is being referred to your office for consideration and recommendations; we understand from Mr. Kiilsgaard that the field examination has already been made.

Copies of memoranda dated May 1 and 2, 1958, by O. M. Bishop, Bureau of Mines, and W. P. Williams, Geological Survey, respectively, relating to the project, are enclosed for your information. We call your attention to the notation on costs by Mr. Williams; we believe the Applicant understands that bids must be submitted covering the diamond drilling. Please note also that any "Depreciation" costs must be substantiated by a reasonable description of each equipment unit, and its present fair value.

We are also enclosing an additional copy of the application for Field Team use.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

Enclosures
APPROVED:

Frank D. Lamb (GCS)
Member, Bureau of Mines

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

WRGriswold/er 5/6/58
Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

8623

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

May 2, 1958

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: W. P. Williams, U. S. Geological Survey

Subject: Review of application, DMEA 4996 (lead-zinc), United Park City Mines Company, Salt Lake, Summit, and Wasatch Counties, Utah

The applicant proposes an ambitious exploration project in an attempt to discover new lead-zinc ore reserves. The proposed work would consist of a total of 5,500 feet of crosscutting and drifting, and 5,000 linear feet of diamond drilling. The applicant estimates the total cost of the project at $351,974.

The object of the project would be to seek for the downward extension of the Judge-Daly West fissure systems in the formation underlying the Weber quartzite. I believe the proposed project has geologic merit. The same mode of attack was made at the Ontario mine, about a mile to the northeast, with success.

I recommend that the application be referred to the Field Team for detailed study and report. The applicant's estimated costs are excessive. They quote, for instance, a cost of $11.38 per foot of diamond drilling; and a rough calculation indicates they estimate the cost of their underground headings at about $50 per linear foot.

W. P. Williams

W. P. Williams

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DMEA
RECEIVED MAY 2 1958

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

May 1, 1958

Re: DMEA 4996; Lead-Zinc
$352,000
United Park City Mines Co.
Salt Lake, Wasatch and
Summit Cos., Utah

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop, USBM

Subject: Review of application dated April 25 and received Washington April 28, 1958

The applicant desires DMEA assistance in a project to explore the lower limestones on fissures that were productive in higher horizons. The project includes three thousand feet of crosscutting, twenty-five hundred feet of drifting and five thousand feet of diamond drilling.

The application and the conference with Mr. Droubay indicate all intersections of pre-mineral fissures with the lower limestone horizons are valid exploratory targets. With this premise I hardily agree. However, the program is planned to explore specific target locations made from projections several thousand feet from the target area. Neither the application nor the previously submitted report attempts to justify the projections of the vein structures or the stratigraphic units.

I recommend an appraisal by the Field Team with emphasis on reducing generalities to precise geologic interpretations of engineering measurements.

O. M. Bishop

O. M. Bishop

cc: Mr. Kiilsgaard
Mr. Lamb
Mr. Callaway
Division of Minerals
F I L E S

28 058

7/30 C 200
300 Com 100
4/1 Geol 500

COPY

April 25, 1958

Mr. Thor H. Kiilsgaard
Staff Assistant for DMEA
Mineral Deposits Branch
U. S. Geological Survey
Washington 25, D. C.

4996

Dear Thor:

Your air mail letter of April 22, 1958, regarding the probable application of United Park City Mining Company arrived at 9:30 A.M. today.

Frank and Max met in Salt Lake City Monday evening and with Mike Howes of the U.S.B.M. were to make the New Park examination on Tuesday. They were to remain in Salt Lake long enough to come up with a firm program of exploration so that Frank and Mike could proceed with their recommendations with a minimum of difficulty.

Immediately upon receipt of your letter, I called Salt Lake and learned that the examination was completed, a program was agreed upon, and that Frank was on his way back to Denver.

Mike Howes believed that Max was not planning to leave for Menlo Park until this afternoon or evening, and Howes is attempting to contact him for a conference with Droubay sometime today (Friday). If Mike and Max can confer with Droubay today, Frank may be able to work up a report on United Park City without returning to Salt Lake City. If the conference cannot be arranged, I will have Frank return to Salt Lake City after the completion of his New Park report.

The tempo of new applications increases, and it looks as if the next month or two will be a mad rush.

Sincerely,

sgd/Harsh
E.N. Harshman

28

571 corrab 500

COPY

4996

Friday p.m.

Thor:

Pay no attention to my letter of this a.m. regarding the United Park City application.

Just heard from Salt Lake that they caught Frank at airport and Max in command held conference with Droubay.

I requested that Droubay send 2 copies of application to Washington, 1 to Denver, and 1 to U.S.B.M. in Salt Lake. This will speed things up somewhat give the field a chance to get started on the report.

Hastily

"Harsh"

UNITED PARK CITY MINES COMPANY

GENERAL OFFICE

HEBER, UTAH

28

April 26, 1958

Mr. C. O. Mittendorf, Adminstrator
U. S. Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Dear Mr. Mittendorf:

After mailing the two copies of our application for aid to your office and giving one copy to Frank Moore to deliver to Mr. Harshman in Denver, I noted that I had forgotten to sign the application. I have attached my signature to the copy that will go to Mr. Wilson of the Bureau of Mines in Salt Lake, and am enclosing three signed copies to be substituted for the unsigned ones sent to you.

We were fortunate to be able to meet together with your field team in Salt Lake for a few minutes yesterday and have quite an extensive discussion in regards to the geology and feasibility of the proposed work. At least two of these men will probably examine the underground workings in the near future.

Sincerely yours,

S. K. Droubay

S. K. Droubay
General Manager

SKD:ncn

enclosures

Third copy of signed application sent to Reg III with acknowledgment letter. ca

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

April 30, 1958

United Park City Mines Company
Star Route
Heber, Utah

Attention Mr. S. K. Droubay

Subject: DMEA-4996

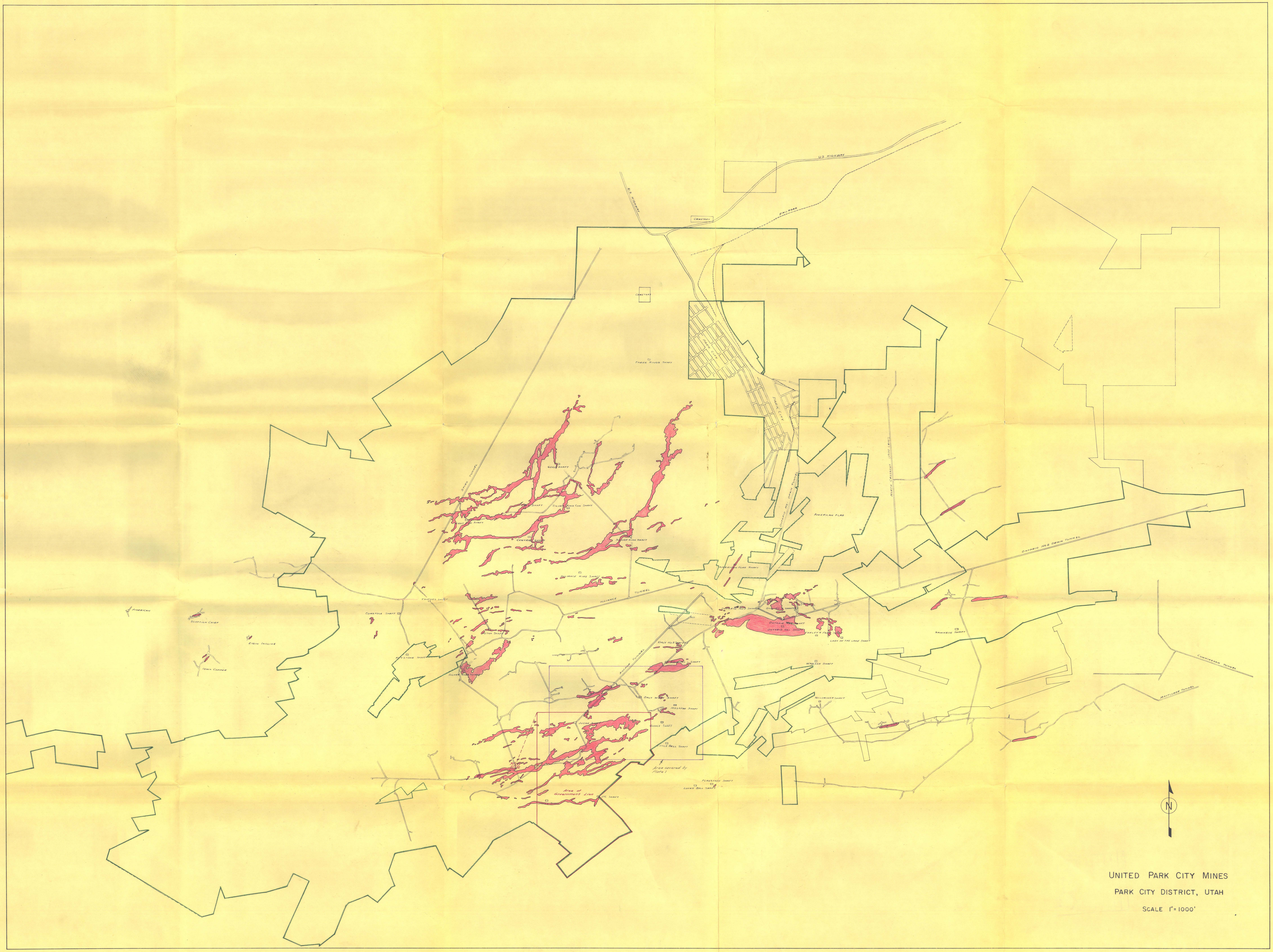
Gentlemen:

Your application for exploration assistance, dated April 25, 1958 submitted to our office at Washington, D. C. has been assigned Docket Number DMEA-4996 and referred to the Base Metals Division in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

Allen S. Dakan, Director
Operations Control and
Statistics Division

Copy to: Region III

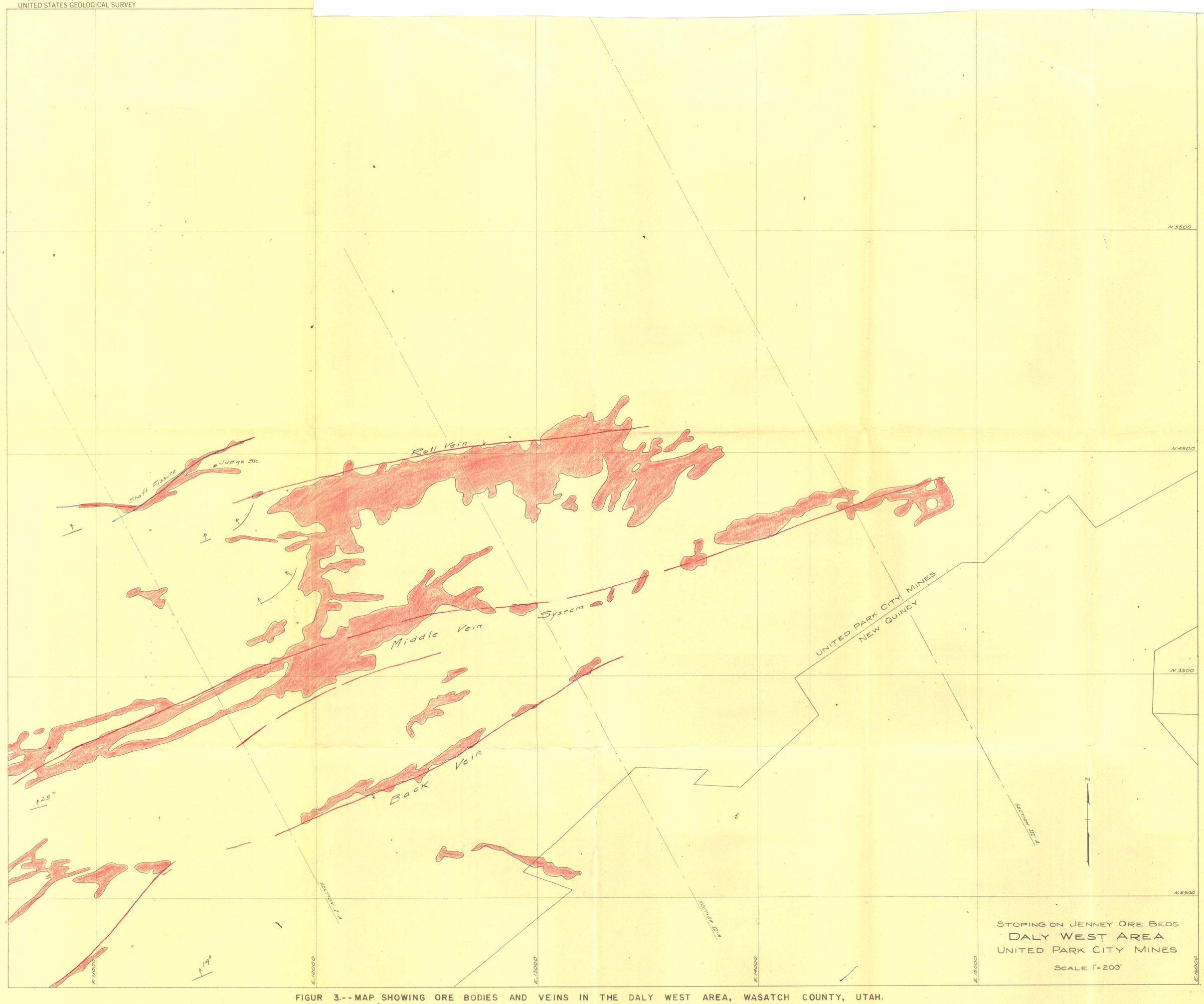



UNITED PARK CITY MINES

PARK CITY DISTRICT, UTAH

SCALE 1" = 1000'

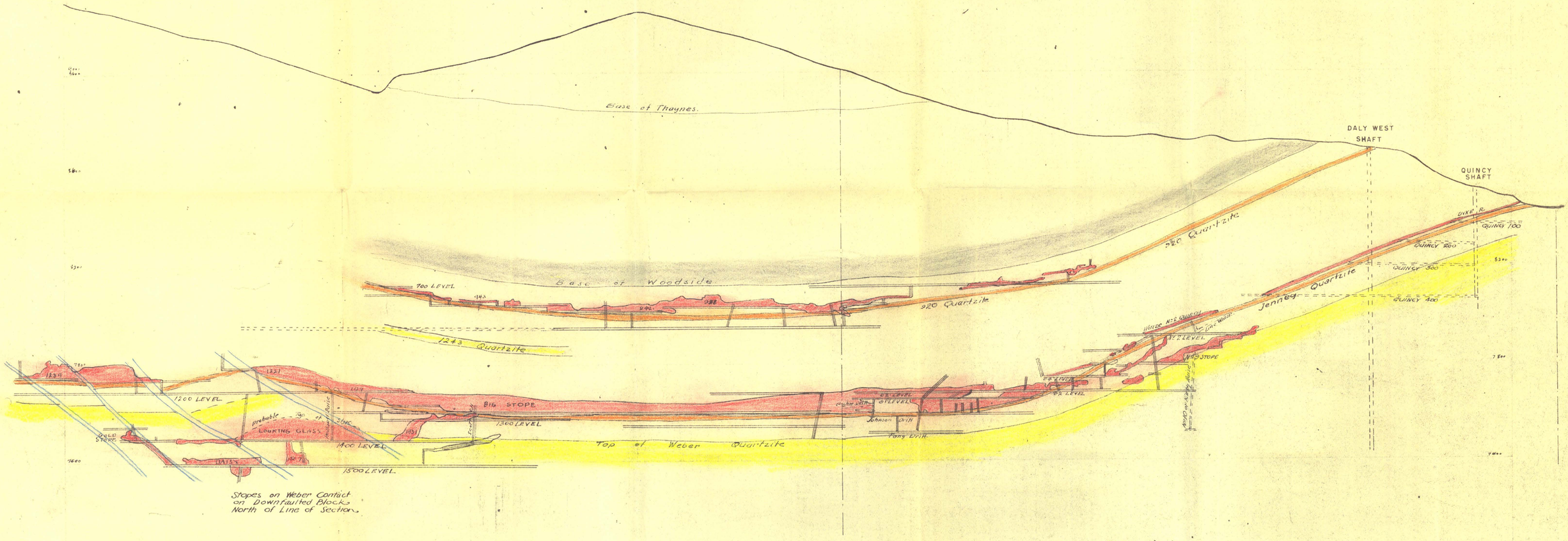
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY




FIGUR 3.--MAP SHOWING ORE BODIES AND VEINS IN THE DALY WEST AREA, WASATCH COUNTY, UTAH.

# LONGITUDINAL SECTION
OF THE
# MIDDLE & O2 VEINS
## JUDGE & DALY WEST MINES.

LOOKING NORTH SCALE 1 IN = 200 FT.




Middle Vein.

O2 Vein

Approximate project boundary

Approximate western limit of exploration

By Billingsley

Poc. 4.
Fold 1.

FIGURE 4.--LONGITUDINAL SECTION SHOWING ORE BODIES ALONG THE MIDDLE VEIN, DALY WEST-JUDGE AREA, WASATCH COUNTY, UTAH.

I.S.&R.
2-3

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

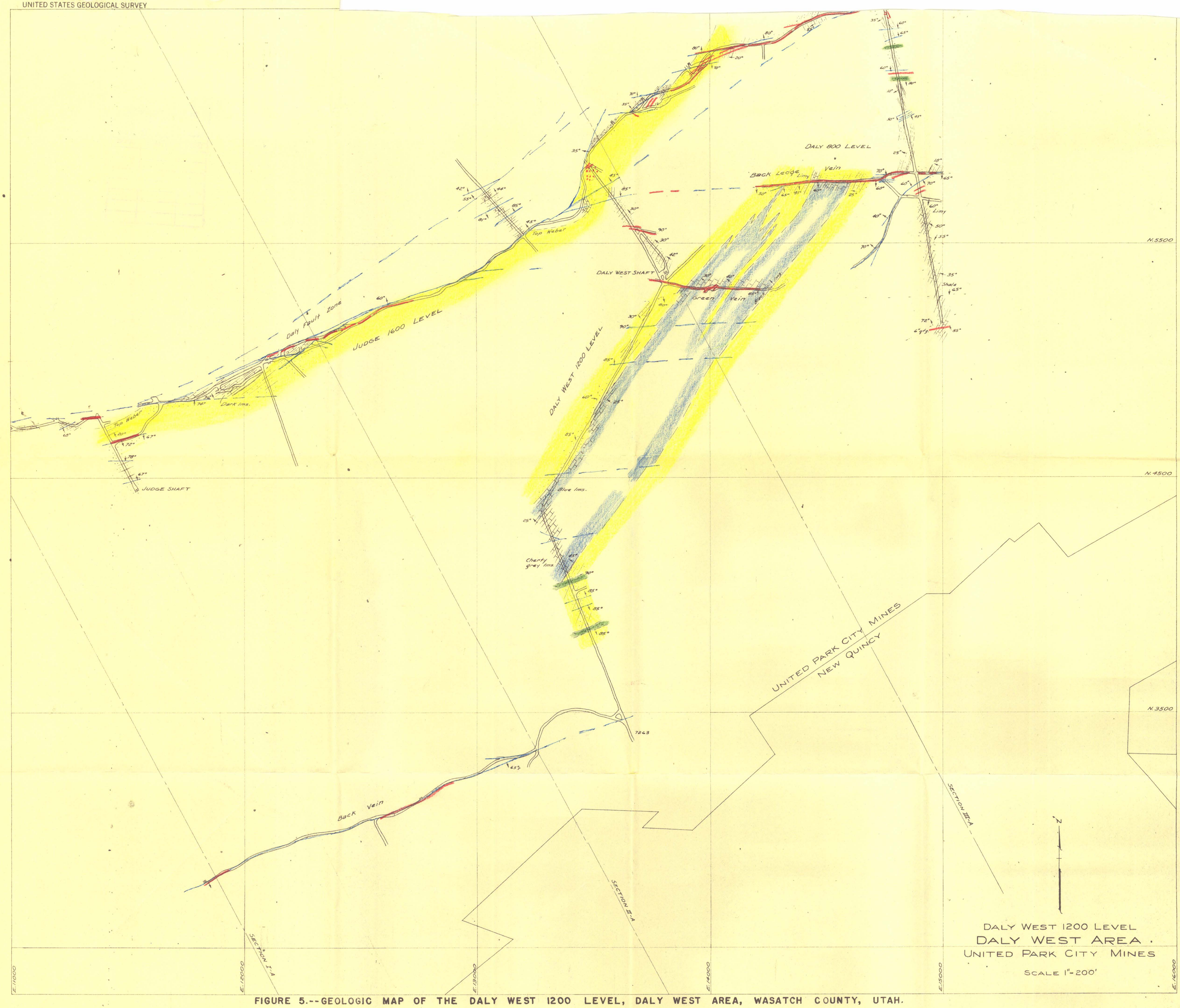
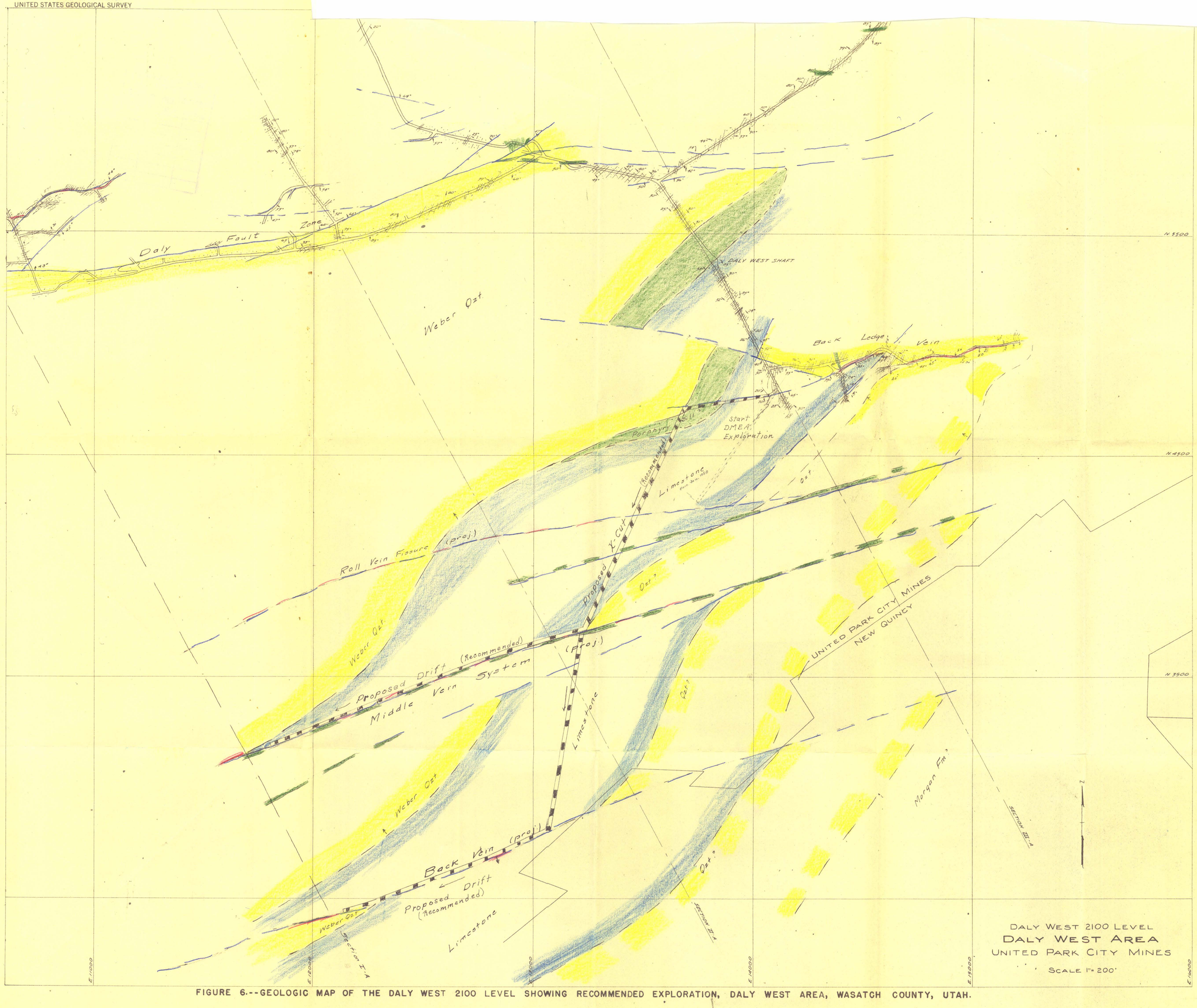



FIGURE 5.--GEOLOGIC MAP OF THE DALY WEST 1200 LEVEL, DALY WEST AREA, WASATCH COUNTY, UTAH.

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY




DALY WEST 2100 LEVEL
DALY WEST AREA
UNITED PARK CITY MINES
SCALE 1" = 200'

FIGURE 6.--GEOLOGIC MAP OF THE DALY WEST 2100 LEVEL SHOWING RECOMMENDED EXPLORATION, DALY WEST AREA, WASATCH COUNTY, UTAH.

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

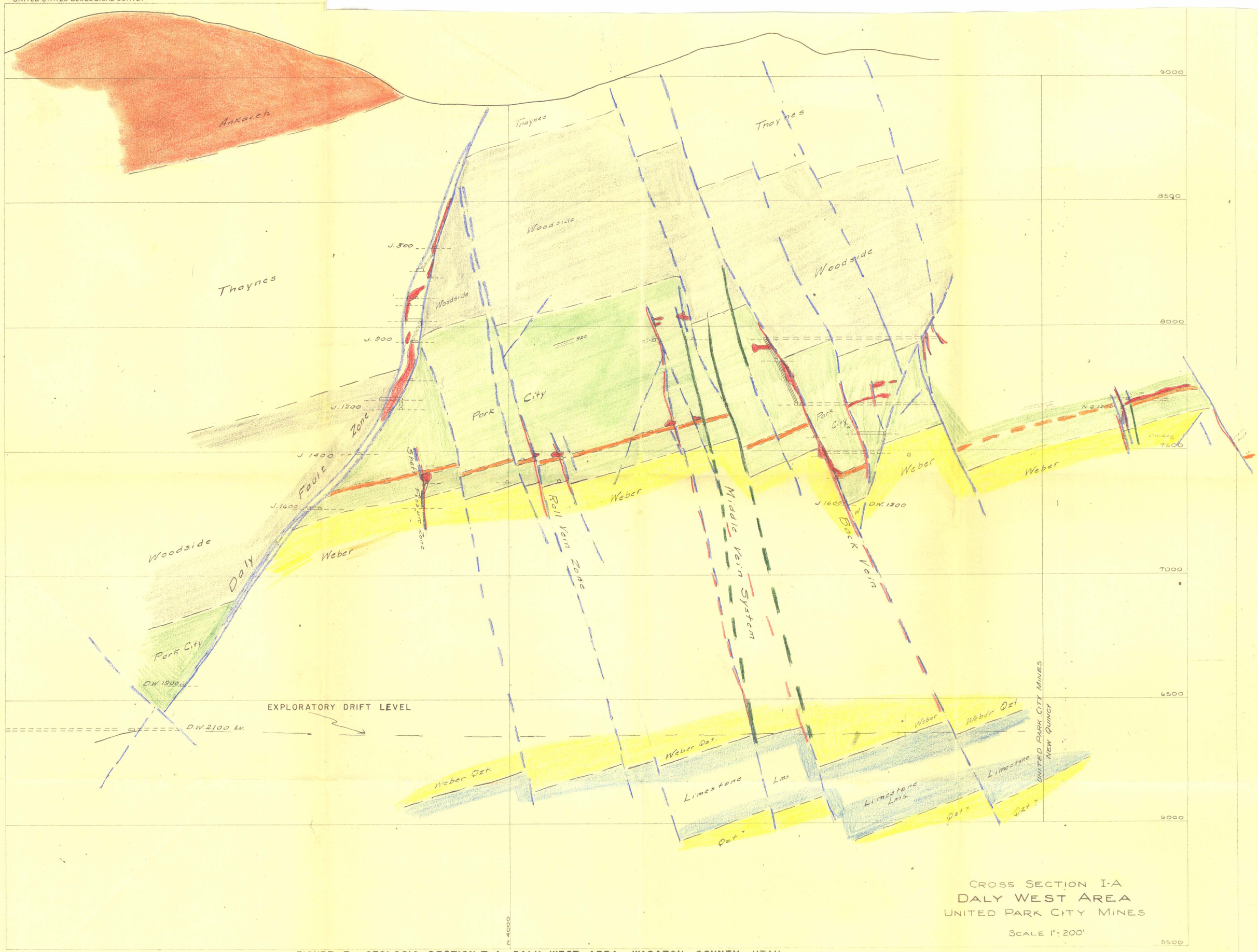



FIGURE 7.--GEOLOGIC SECTION I-A, DALY WEST AREA, WASATCH COUNTY, UTAH.

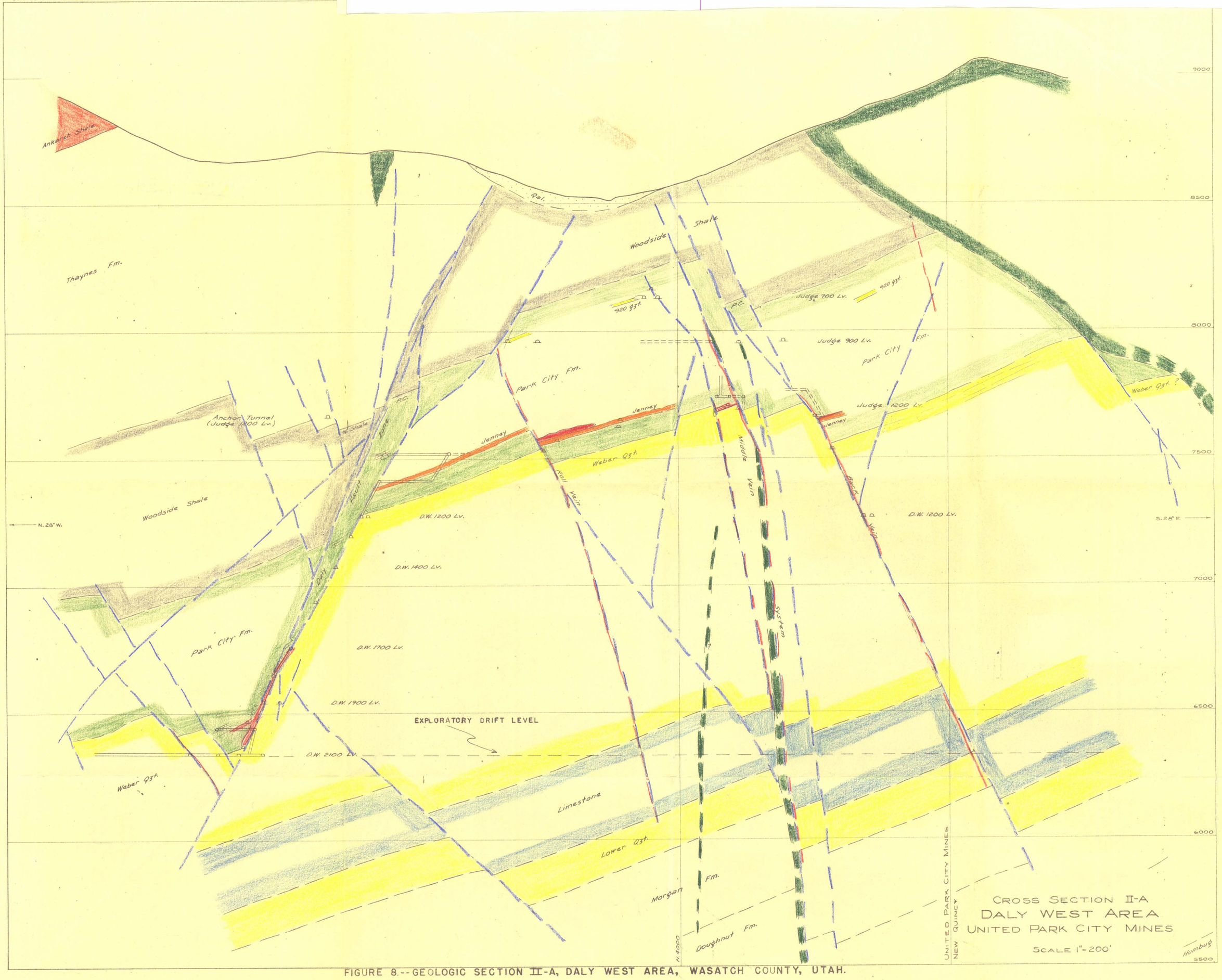



FIGURE 8.--GEOLOGIC SECTION II-A, DALY WEST AREA, WASATCH COUNTY, UTAH.

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

DMEA 4990

DEFENSE MINERALS EXPLORATION ADMINISTRATION

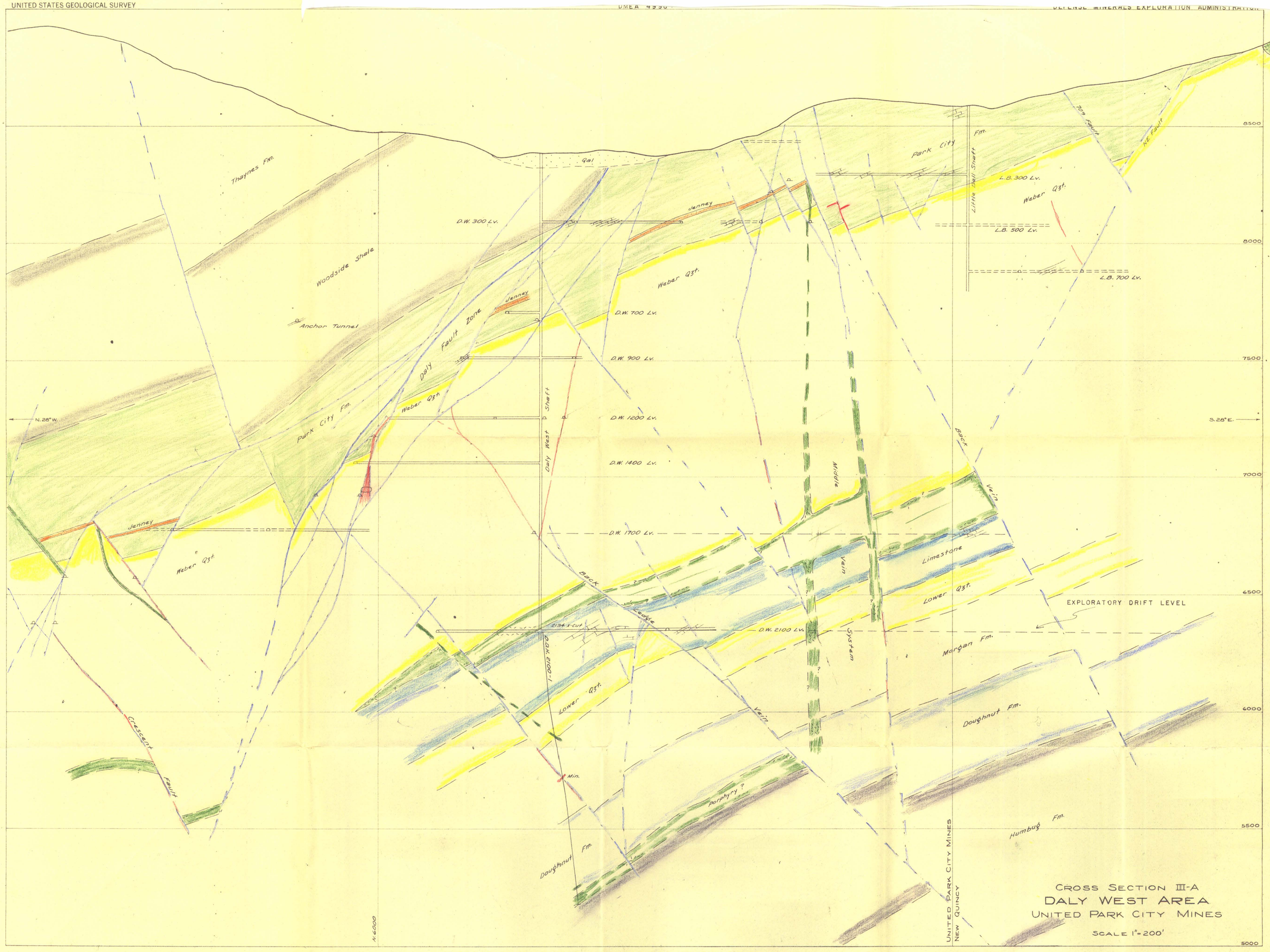



FIGURE 9.--GEOLOGIC SECTION III-A, DALY WEST AREA, WASATCH COUNTY, UTAH