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1435 S. 10th AVE.
P. O. BOX 1889

Jacobs Assay Office

Registered Assayers

PHONE 622-0813
TUCSON, ARIZONA 85702

Certificate No. 59406

Sept 29 1974

Sample Submitted by Mr. Essex International Inc. Mr. Dennis Temple

SAMPLE MARKED	oz/ton Au.	Cu ppm	Mo ppm	SAMPLE MARKED	oz/ton Au.	Cu ppm.	Mo ppm
RM 15	0.004	40	8	RM 21	0.002	45	<5
16	0.003	140	<5	22	Trace	25	<5
17	Trace	45	6	23	Trace	15	<5
18	Trace	60	<5	RM 25	0.005	40	7
19	Trace	35	<5	26	0.003	25	6
20	Trace	20	<5				

Triplicate - 1-A.T. Fire Assays made on above Gold assays

* Gold Figured $35.00 per oz. Troy

Charges $ 93.50

Very respectfully,

Ben P. Jacobs

REGISTERED ASSAYER
CERTIFICATE EXPIRES
1041
BENJAMIN P.
JACOBS
Dec. 31, 19 74
Arizona U. S. A.

1435 S. 10th AVE.
P. O. BOX 1889

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

Certificate No. 59410

TUCSON, ARIZONA 85702 Oct. 3rd 1974

Sample Submitted by Mr. Essex International Inc. Mr. Dennis Temple

SAMPLE MARKED	oz/ton Au	Cu ppm	Mo ppm	SAMPLE MARKED	oz/ton Au	Cu ppm	Mo ppm
RM-24	0.180	100	<5	Q 1	0.002	35	<5
P. 4	0.070	—	105	X 1	Trace	50	15
5	0.003	105	6	2	Trace	35	10
6	0.002	45	<5	3	0.010	50	6
7	0.002	65	<5				
8	Trace	80	6				
9	0.003	55	<5				
		3	1				

P.4 Cu 0.46 %

Triplicate - 1 A.T. Fire assay made on above Gold assays

* Gold Figured $35.00 per oz. Troy

Charges $ 93.50

Very respectfully,

Ben P. Jacobs

REGISTERED ASSAYER
CERTIFICATE EXPIRES
1041
BENJAMIN P.
JACOBS
Dec. 31, 1974
Arizona U. S. A.

1435 S. 10th AVE.
P. O. BOX 1889

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

Certificate No. 59407

TUCSON, ARIZONA 85702 Sept 29 1974

Sample Submitted by Mr. Essex International Inc. Mr. Dennis Temple

SAMPLE MARKED	oz/ton Au	Cu ppm	Mo ppm	SAMPLE MARKED	oz/ton Au	Cu ppm	Mo ppm
RM-27	0.002	15	7	RM-33	0.003	55	6
28	0.002	55	6	34	0.003	160	<5
29	Trace	15	6	P-1	0.005	—	8
30	Trace	30	7	2	0.004	135	<5
31	0.006	160	7	3	0.008	80	6
32	Trace	95	6				

P-1 = 0.145% Cu.

Duplicate 1-A.T. Fire Assays made on above Gold assays.

* Gold Figured $35.00 per oz. Troy

Charges $ 93.50

Very respectfully,

Ben P. Jacobs

REGISTERED ASSAYER

CERTIFICATE EXPIRES

1041

BENJAMIN P.

JACOBS

Dec. 31, 19 74

Arizona U. S. A.

9-29-74

Note

		Ag oz/ton
Nos. RM-2	Contain —	6.25
" 8.	"	3.80

1435 S. 10th AVE.
P. O. BOX 1889

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

TUCSON, ARIZONA 85702

Certificate No. 59405

Sept 28 1974

Sample Submitted by Mr. Essex International Inc. Mr. Dennis Temple

SAMPLE MARKED	oz/ton Au	Cu ppm	Mo ppm	SAMPLE MARKED	oz/ton Au	Cu ppm	Mo ppm
RM 4	0.006	75	<5	RM-10	0.004	70	<5
5	Trace	60	<5	11	0.006	90	<5
6	0.010	60	<5	12	0.008	90	<5
7	Trace	65	6	13	0.008	205	<5
8	0.040	—	7	14	0.003	85	7
9	0.006	380	6				

RM 8 - 2.75% Cu

Triplicate 1-A.T-Fire Assays made on above Gold assays.

* Gold Figured $35.00 per oz. Troy

Charges $ 93.50

Very respectfully,

Ben P. Jacobs

REGISTERED ASSAYER
CERTIFICATE EXPIRES
1041
BENJAMIN P.
JACOBS
Dec. 31, 19 74
Arizona U. S. A.

1435 S. 10th AVE.
P. O. BOX 1889

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

Certificate No. 59404

TUCSON, ARIZONA 85702 Sept 28th 1974

Sample Submitted by Mr. Essex International Inc. Mr. Dennis Temple

SAMPLE MARKED	oz/ton Au	Cu ppm	Mo ppm	SAMPLE MARKED	oz/ton Au	Cu ppm	Mo ppm
L.C.- 1	0.003	180	< 5	L.C. 7	0.002	65	< 5
2	0.030	85	7	8	Trace	65	< 5
3	0.002	75	7	RM- 1	0.005	85	6
4	0.011	50	< 5	2	0.010	90	8
5	0.002	85	< 5	3	0.002	60	7
6	0.025	60	< 5				

Triplicate - 1-A.T. Fire Assays made on above Gold assays

* Gold Figured $35.00 per oz. Troy

Charges $ 93.50

Very respectfully,

Ben P. Jacobs

REGISTERED ASSAYER
CERTIFICATE EXPIRES
1041
BENJAMIN P.
JACOBS
Dec. 31, 19 74
Arizona U. S. A.

1435 S. 10th AVE.
P. O. BOX 1889

Jacobs Assay Office

Registered Assayers

TUCSON, ARIZONA 85702

SXM
PHONE 622-0813
SEP 20 1974
RECEIVED 1974

Certificate No. 59398

Sample Submitted by Mr. Essex International, Inc. - Mr. Dennis Temple

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	COPPER ~~Per cent~~ Wet Assay	LEAD Per cent Wet Assay	MO ~~Per cent~~ Wet Assay	Per cent Wet Assay
		$		PPM		PPM	
A. 1	0.008			1450		< 5	
2	0.004			625		< 5	
3	0.006			240		< 5	
4	0.003			200		< 5	
5	0.002			200		< 5	
6	0.002			120		< 5	
7	0.004			125		< 5	
8	0.005			185		60	
9	0.005			185		54	
10	0.002			170		8	
11	0.003			160		11	

Triplicate 1-ASSAY TON FIRE ASSAYS MADE ON ABOVE Gold ASSAYS

* Gold Figured $35.00 per oz. Troy

Charges $ 93.50

Very respectfully,

Ben P. Jacobs

REGISTERED ASSAYER
CERTIFICATE EXPIRES
1041
BENJAMIN P.
JACOBS
Dec. 31, 19 74
Arizona U. S. A.

1435 S. 10th AVE.
P. O. BOX 1889

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

Certificate No. 59399 TUCSON, ARIZONA 85702 Sept 31st 1974

Sample Submitted by Mr. Essex International Inc. Mr. Dennis Temple

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore	SILVER Ozs. per ton ore	COPPER ~~Per cent~~ Wet Assay	LEAD Per cent Wet Assay	Mo Per cent Wet Assay	Per cent Wet Assay
		$		PPM		PPM	
A-12	0.002			120		< 5	
13	0.002			340		< 5	
14	0.003			97		< 5	
15	0.005			515		300	
16	0.003			100		45	
C-1	0.002			130		< 5	
2	0.003			110		< 5	
3	Trace			70		7	
4	Trace			75		< 5	
5	0.004			70		< 5	
6	0.003			65		< 5	

Triplicate - 1 - A.T. FIRE assay made on above Gold assays

* Gold Figured $35.00 per oz. Troy

Charges $ 93.50

Very respectfully,

Ben P. Jacobs

REGISTERED ASSAYER
CERTIFICATE EXPIRES
1041
BENJAMIN P.
JACOBS
Dec. 31, 19 74
Arizona U. S. A.

1435 S. 10th AVE.
P. O. BOX 1889

Jacobs Assay Office

Registered Assayers

PHONE 622-0813
TUCSON, ARIZONA 85702

DUPLICATE

Certificate No. 59404

Sept 25th 1974

Sample Submitted by Mr. Essex International Inc. Mr Dennis Temple

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	COPPER ~~Per cent~~ ~~Wet Assay~~	LEAD Per cent Wet Assay	Mo ~~Per cent~~ ~~Wet Assay~~	Per cent Wet Assay
		$		PPM		PPM	
J-10	Trace			40		< 5	
K-9-	0.002			40		< 5	
O-1	0.003			30		7	
2	Trace			50		7	
3	0.002			65		7	
4	Trace			45		< 5	
5	0.030			65		< 5	
6	Trace			40		< 5	
7	0.003			45		< 5	
8	0.002			35		< 5	
9	0.002			30		< 5	

Triplicate - 1-A-T- Fire Assays made on above Gold assays

* Gold Figured $35.00 per oz. Troy

Charges $ 93.50

Very respectfully,

Ben P. Jacobs

REGISTERED ASSAYER
CERTIFICATE EXPIRES
1041
BENJAMIN P.
JACOBS
Dec. 31, 19 74
Arizona U. S. A.

1435 S. 10th AVE.
P. O. BOX 1889

Jacobs Assay Office

Registered Assayers

PHONE 622-0813
TUCSON, ARIZONA 85702

DUPLICATE

Certificate No. 59402 Sept 24th 1974

Sample Submitted by Mr. Essex International Inc. Mr Dennis Temple

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	COPPER ~~Per cent~~ Wet Assay	LEAD Per cent Wet Assay	Mo ~~Per cent~~ Wet Assay	Per cent Wet Assay
		$		PPM		PPM	
C-7	Trace			50		< 5	
8	Trace			90		< 5	
D-1	0.003			70		< 5	
2	0.002			60		7	
3	Trace			50		6	
4	Trace			75		6	
5	0.003			90		< 5	
6	0.002			80		< 5	
7	0.002			70		< 5	
8	Trace			75		7	
9	Trace			70		< 5	

Triplicate. 1 A.T. Fire Assay made on above Gold assay

* Gold Figured $35.00 per oz. Troy

Charges $ 93.50

Very respectfully,

Ben P. Jacobs

REGISTERED ASSAYER
CERTIFICATE EXPIRES
1041
BENJAMIN P.
JACOBS
DEC. 31, 19 74
ARIZONA U. S. A.

No. 374

Note		oz/ton Ag.
Nos. P4	—	3.4
2.11	—	16.4
12	—	15.4
13	—	0.5

1435 S. 10th AVE.
P. O. BOX 1889

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

TUCSON, ARIZONA 85702

Certificate No. 59411 Oct 3rd 1974

Sample Submitted by Mr. Essex International Inc. Mr Dennis Temple

SAMPLE MARKED	oz/TON Au	Cu ppm	mo ppm	SAMPLE MARKED	oz/TON Au	Cu ppm	mo ppm
V. 4	Trace	50	< 5	Z 12	0034	—	6
Z 1	Trace	50	< 5	13	0009	—	< 5
2	0002	55	< 5				
3	0004	50	< 5	Z-11 Cu - 2.00%			
4	Trace	55	< 5	12 " 1.47%			
5	Trace	65	< 5	13 " 0.65 "			
6	Trace	65	< 5				
7	0002	215	< 5				
8	Trace	55	< 5				
9	0003	80	< 5				
10	Trace	50	< 5				
11	0065	—	7				

Triplicate - 1 A.T Fire Assays made on above Gold assays

* Gold Figured $35.00 per oz. Troy

Charges $ 119.00

Very respectfully,

Ben P. Jacobs

REGISTERED ASSAYER
CERTIFICATE EXPIRES
1041
BENJAMIN P.
JACOBS
Dec. 31, 19 74
Arizona U. S. A.

1435 S. 10th AVE.
P. O. BOX 1889

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

TUCSON, ARIZONA 85702

Certificate No. 59385 Aug. 19th 1974

Sample Submitted by Mr. Essex International, Inc. Mr. Dennis Temple

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore	SILVER Ozs. per ton ore	COPPER Per cent Wet Assay	LEAD Per cent Wet Assay	Mo. Per cent Wet Assay	Per cent Wet Assay
		$					
X-1	0.005			0.018		Trace	
2	0.005			0.004		Trace	
3	Trace			0.007		Trace	
4	Trace			0.002		0.003	
5	Trace			0.008		Trace	
6	Trace			0.006		0.002	
7	Trace			0.004		Trace	
8	0.005			0.008		Trace	
9	Trace			Trace		Trace	
W 11 ~~10~~	Trace			Trace		Trace	
11	0.005			0.004		0.002	
12	Trace			0.005		Trace	
13	Trace			0.006		Trace	
14	Trace			0.003		Trace	
15	Trace			0.002		0.003	
16	0.005			0.003		Trace	
17	Trace			0.004		Trace	
18	Trace			0.005		Trace	
19	Trace			0.003		Trace	
20	Trace			0.006		Trace	
21	0.005			0.002		0.002	
22	0.005			0.008		0.003	
23	Trace			0.005		Trace	
24	0.005			0.007		Trace	
25	Trace			0.008		Trace	
26	Trace			0.002		0.002	
27	0.005			0.008		Trace	
28	Trace			Trace		0.002	
29	Trace			0.012		0.006	
30	Trace			0.010		0.002	
X-31	0.005			0.010		Trace	

REGISTERED ASSAYER
CERTIFICATE EXPIRES
1041
BENJAMIN P.
JACOBS
Dec. 31, 19 74
Arizona U. S.

* Gold Figured $35.00 per oz. Troy

Charges $ 17.00

Very respectfully,

Ben P. Jacobs

1435 S. 10th Ave.
P. O. Box 1059

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

Certificate No. 59383 TUCSON, ARIZONA 85702 Aug 16th 1974

Sample Submitted by Mr. Essex International Inc Mr. Dennis Temple

SAMPLE MARKED	GOLD Oz. per ton	Gold Value per ton $	X	SILVER Oz. per ton	X	COPPER Per cent Weight	X	Mo Per cent Weight	X
m. 3	0.005					Trace		Trace	
4	0.010					0.014		0.002	
5	Trace					0.004		Trace	
m. 6	0.005					0.008		Trace	
W. 1	0.005					Trace		0.002	
2	Trace					Trace		0.002	
3	Trace					0.005		Trace	
4	Trace					Trace		Trace	
5	0.005					Trace		0.003	
6	Trace					Trace		Trace	
7	Trace					Trace		Trace	
8	Trace					0.010		Trace	
9	Trace					Trace		0.002	
10	0.005					0.008		Trace	
X 10 11	0.005					0.006		Trace	
12	Trace					0.005		Trace	
13	Trace					Trace		0.002	
14	0.005					0.010		0.003	
15	Trace					Trace		0.002	
16	Trace					0.005		Trace	
17	Trace					Trace		Trace	
18	Trace					Trace		Trace	
19	Trace					0.005		Trace	
20	0.005					Trace		Trace	
21	0.005					Trace		Trace	
22	Trace					0.010		0.002	
23	0.005					0.006		Trace	
24	Trace					0.008		Trace	
W-25	Trace					0.008		Trace	

REGISTERED ASSAYER
CERTIFICATE EXPIRES
1041
BENJAMIN P. JACOBS
Dec. 31, 74
Arizona U. S. A.

* Gold Figured $35.00 per oz. Troy

Very respectfully,

Ben P. Jacobs

Charges $ 20300

1435 S. 10th AVE.
P. O. BOX 1889

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

Certificate No. 59382

TUCSON, ARIZONA 85702 Aug 14th 1974

Sample Submitted by Mr. Essex International - Inc - Mr. Dennis Temple

SAMPLE MARKED	GOLD Ozs. per ton ore	~~GOLD Value per ton ore *~~	~~SILVER Ozs. per ton ore~~	COPPER Per cent Wet Assay	~~LEAD Per cent Wet Assay~~	Mo Per cent Wet Assay	/ Per cent Wet Assay
L-1	0.020	$		Trace		Trace	
2	0.180			0.026		0.002	
3	Trace			0.008		Trace	
4	Trace			0.006		Trace	
5	0.005			0.005		Trace	
6	0.005			Trace		Trace	
7	Trace			0.012		0.002	
8	Trace			Trace		Trace	
9	Trace			Trace		Trace	
10	Trace			0.008		0.003	
11	Trace			0.020		0.002	
L 12	0.005			Trace		Trace	
M-1	Trace			Trace		Trace	
M. 2	0.005			0.004		Trace	

* Gold Figured $35.00 per oz. Troy

Charges $ 98.00

Very respectfully,

Ben P. Jacobs

REGISTERED ASSAYER
CERTIFICATE EXPIRES
1041
BENJAMIN P.
JACOBS
Dec. 31, 19 74
Arizona U. S. A.

1435 S. 10th AVE.
P. O. BOX 1059

Jacobs Assay Office

Registered Assayers

XM

PHONE 622-0313

AUG 14 1974

Certificate No. 59381 TUCSON, ARIZONA RECEIVED Aug 13 1974

Sample Submitted by Mr. Essex International Inc Mr Dennis Temple

SAMPLE MARKED	GOLD Ozs. per ton	GOLD Value per ton $	SILVER Ozs. per ton	COPPER Per cent Weight	LEAD Per cent Weight	MO Per cent Weight	
		X	X		X		
J-1	0.010			0.010		Trace	
2	0.010			Trace		Trace	
3	Trace			Trace		Trace	
4	0.005			0.015		Trace	
5	Trace			Trace		0.003	
6	0.005			0.010		Trace	
7	0.005			0.020		Trace	
8	Trace			Trace		Trace	
9	Trace			Trace		Trace	
10	Trace			0.015		0.002	
11	Trace			Trace		Trace	
12	0.005			0.010		0.003	
13	Trace			Trace		Trace	
14	Trace			Trace		0.002	
15	Trace			0.015		0.002	
16	Trace			Trace		Trace	
17	Trace			Trace		Trace	
18	Trace			Trace		Trace	
J-19	Trace			Trace		Trace	
K-1	Trace			0.010		0.003	
2	Trace			0.020		0.003	
3	Trace			Trace		Trace	
4	0.005			0.015		0.002	
5	0.005			Trace		Trace	
6	Trace			Trace		Trace	
7	0.005			Trace		0.002	
K-8	Trace			Trace		Trace	

REGISTERED ASSAYER
CERTIFICATE EXPIRES
1041
BENJAMIN P.
JACOBS
Dec. 31, 1974
Arizona U. S.

* Gold Figured $35.00 per oz. Troy

Very respectfully,

Ben P. Jacobs

Charges $ 189.00

AC-016

avoid verbal orders

avo

TO Bud Temple LOCATION Tucson, Arizona

FROM R. A. Kelly LOCATION Fort Wayne

SUBJ. SILVER BELL INDUSTRIES, INC. DATE August 26, 1974

COPY TO R. Holt
K. Jones
XM

AUG 28 1974
RECEIVED

This company has interesting prospects in gold, silver, and uranium. It may have claims on copper properties also. Obviously, its claims are mineralized. The leasing companies that hold options on Silver Bell claims must certainly be doing sufficient work to determine reserves.

I feel we should evaluate generally any areas that might contain copper reserves. However, we are not primarily interested in gold, silver, or uranium, and I am certain Silver Bell directors could get better offers from companies exploring for these metal ores than we might offer because of our primary interest in copper.

Their stock value is very volatile. You told me the stock is selling at $1.50 per share with an asking price of $5.00 Yet their own directors authorized a 1974 settlement on a stockholder note at 50¢ per share. Debts and commitments are heavy and 1974 will be a critical year for them. Unless they have a discovery by April or May of 1975, they may lose many of their claims and options.

I feel you should watch their properties closely and maintain a good relationship with Mr. Sanders. If you feel any properties hold interest for us as copper properties, or if you feel the properties might have investment values as good R.O.I. potentials, then I feel we should have serious discussions with their directors regarding our interests and their corporate valuations.

Dick

Dick Kelly

RAK:cb

Attach.

SOUTHERN COLORADO PORPHYRY COPPER RECONNAISSANCE PROJECT

PROGRESS REPORT FOR AUGUST 1974

During the month 22 man-days were spent in the field following up on seven altered areas noted last year. Samples were collected, an outline of the alteration mapped and discussions held with property owners. Partial geochemical results have been returned from samples taken at two of the areas.

1. Anvil Mountain

Two targets are present within this altered area and a larger alteration zone adjoins it to the west. One target is centered at the south side of Anvil Mountain and the second at Ohio Peak. The larger alteration zone to the west has not been mapped or sampled. Partial geochemical results have been returned for the twenty-five samples collected. The results are erratic and low values, similar to those from areas sampled in July. At present this property is tentatively under lease to Douglas Oil Co., but should be available next year.

2. Capitol City

This altered area is centered on an old incorperated town with complicated and diverse property ownerships. The amount of effort required to gain control of the area prohibits further work. Twelve samples were collected.

3. Carson

This alteration area surrounds the vent of one of the older volcanoes in the San Juan Mountains. Numerous patented mining claims are present in this area. In the event geological considerations prompt further effort, property ownership will be determined. Thirteen samples were collected.

4. Ophir

An area of approximately one square mile in the center of a four square mile alteration zone is nearly under the complete control of Silver Bell Industries, Inc. Reportedly complete control can be achieved within 60 days after Essex negotiates an option agreement.

Reasonable terms are available and complete control will be a prerequisite. Thirty-one samples were collected, which consistently contain higher metal values than the other areas for which partial geochemical results are available. In terms of both geology and land position this area is the most attractive yet examined in the San Juan Mountains.

5. Red Mountain

Baumgartner Enterprises would like to sell 50% interest in their property. At the present time they are drilling on Red Mountain No. 3, and Kerr-McGee is drilling in Corkscrew Gulch. The bright colors at Red Mountain are due to the present surface being very near the original surface at the time of alteration. A porphyry copper, if present, would be relatively deep, when compared with other alteration zones. Thirty-four samples were collected and will be analyzed during the next month.

6. Silver Creek

Two altered areas are present adjoining this drainage. One is in Cooper Creek and the other on Red Cloud Peak. The land is controlled by the B.L.M. and is being considered for wilderness classification. Although these areas are available for claim location it is felt that the inaccessibility and governmental difficulties make it unwise to expend effort on these areas at this time. One sample was collected.

At the present time it is recommended that effort be expended to obtain options on three areas: Ophir; Anvil Mountain; and Red Mountain. The remainder of those visited this year appear to be of lesser interest.

Dennis C. Temple

DCT:td

No.	Color	Texture	Rock Type.
A1	white, w. wk. to mod. brown-red stain	Vol. Porphyry Phen. ≤ 1/8", ± 20%	st. silic. Rhyolite? Mafics gone.
A2	DK gray	Dense, Bare ≤ 1/8" phen	Diabase?
A3	Lt. green gray	Porph. phen ≤ 1/8", ± 60% Dense GM.	Mafics absent. st. clay & silic. alt. Monz. Porph.
A4	white, w. wk. brown Stain	Vol. Porph. ~~Phen~~ Same as A1 Few qtz. phen.	Mafic ghosts present Rhyolite? st. silic.
A5	white, w. wk. brown stain	Same as A4	st. silic. Rhyolite?
A6	Lt. cream	Gneiss Med. gr.	Gneiss
A7	Gray	Fine gr.	Fresh Diorite
A8	Lt. gray, w. wk. brown Stain	Gneiss	Sev. thin qtz. strings w. Py.
A9	Lt. cream	Gneiss	Mod. to st. argil. of feld. Mafics Ox.
A10.	Lt. gray to cream	Gneiss	wk. to mod. argil of feld. Mafics Ox.
A11	Lt. gray	Gneiss ≤ 5% Py	Silic. & qtz. strings. Gneiss.
A12	white to lt. gray	Porph. Phen. ≤ 1/8", ± 30% Nom. Qtz. eyes, GM uphan.	st. silic. Latite porph?
A13	white	Fine grain marble	Bleached Lms.
A14	Lt. gray & cream	Porph. Same as A12	st. silic & argil. alt. Latite Porph? Mafics Ox.

Southern Colorado Porphyry Copper Exploration, 1974

A program of field work has been established for the summer of 1974 in order to advance the southern Colorado porphyry copper reconnaissance project.

During last season, 42 altered areas, at least one square mile in area, were observed in the San Juan and southern Sawatch Mountains of Colorado (see attached map). After a search of county records it was determined that 20 of these areas are controlled by various companies and individuals. At the present time, preliminary discussions are being held with 6 companies and individuals.

On the attached list and map are 26 areas that have been selected for reconnaissance mapping and sampling during the 1974 field season. A ranking of geologic favorability will be developed during this work. There is a mix of areas available for claim location and others where a claim ownership position exists.

A schedule has been prepared, involving three geologists. The order of examination is determined by melting of the winter's snow. Those to be examined first are at lower elevations and in more gentle terrain. Those scheduled for July and August are significantly covered by snow until then. One geologist is scheduled for three and one half months in the field. Another should spend two months and the third one month.

The 13 field trips are planned for ten days duration, two of which will be spent traveling (see attached schedule). As an average rate, two areas

should be examined during each trip. Mapping will be on a scale of 1" = 2000' and should delineate major rock types, the area and type of alteration, and major structural features. Approximately 20 samples will be collected from each area for geochemical analysis and optical studies. Assays for gold, silver, copper and molybdenum will be used for comparison of base and precious metals present in the various hydrothermal systems.

Each geologist will require a four wheel drive vehicle in order to reach the areas. At least one should be a short wheel base, Bronco type. Very few roads exist within the areas, consequently all of the work will be done on foot.

Based on actual expenditures during field work last season it is estimated that $380.00 will cover the travel expenses for each trip. During the entire project $4,640.00 in expense accounts will develop. Sample sacks, maps and other incidentals should cost $230.00. Geochemical assays of the above mentioned samples will cost $5,200.00. A conservative estimate of the direct expenses to perform this work with three geologists working alone is $10,070.00. The above does not include the costs of salaries, vehicles, petrologic studies, reports, or supervision.

Several factors may cause changes to be made in this work schedule. In the event property discussions currently underway are successful increased emphasis will have to be placed on one or more properties. This factor is related to the overall availability of staff for this project. The timing of staff availability is important due to the short field season at most of these areas. Work may be continued later in the year if necessary, but weather conditions may end the season any time after Labor Day. The time allowed

for each area may vary depending upon the geologic conditions discovered and the real difficulties of operating on terrain with often 4,000 feet of elevation change, at altitudes up to 14,000 feet. In the event some of these areas do not take as long to examine as scheduled or are unavailable due to property positions, others that are presently considered less attractive are available for selection.

During this program the areas will be ranked as to geologic potential. The next phase will consist of claim location or option and intensified work on those areas considered worthy of exploration project status.

Southern Colorado Porphyry Copper Exploration, 1974

Areas to be Mapped and Sampled

A Cumberland Pass ✓

B St. Elmo

C Calico Mountain ✓

D Tomichi

E Porphyry Peak

F Bonanza

G Findley Gulch ✓

H Baughman Creek ✓

I Pinos Creek ✓

J Jasper ✓

K Alum Creek ✓

L Summitville ✓

M Park Creek ✓

N Powder Horn —

O Slumgullion Gulch ✓

P Capitol City ✓

Q Silver Creek ✓

R Sunshine Peak ✓

S Gravel Mountain

T Houghton Mountain

U California Mountain

V Sheep Mountain ✓

W Anvil Mountain ✓

X Ophir ✓

Y La Plata

Z Carson ✓

Southern Colorado Porphyry Copper Exploration, 1974

Field Schedule

Dates	Areas	Nearest Town
Geol. #1		
May 15-24	H & I	Del Norte
June 3-12	F & G	Saguache
June 17-26	N & O	Lake City
July 8-17	J & K	Del Norte
July 22-31	L & M	Del Norte
Aug. 5-14	W & X	Telluride & Silverton
Aug. 19-28	A & D	Gunnison
Geol. #2		
July 8-17	B & C	Salida
July 22-31	E & P	Saguache & Lake City
Aug. 5-14	S & T	Lake City & Silverton
Aug. 19-28	U & Y	Silverton & Durango
Geol. #3		
Aug. 5-14	V & Z	Lake City & Silverton
Aug. 19-28	Q & R	Lake City

A15	Lt. gray	Fine gr.	Diorite to Qtz.
		±5% Py, Nom.	Monz.
		Qtz. strings, w. st. MoS_2	
A16	Lt. cream	Gneiss.	st. argil. of
			fold. Mafics Ox

No.	Color	Texture	Rock Type.
C1	Lt. gray, w. wk. brown stain	Porph. Phen ≤ 1mm ± 60%. Dense G.M.	St. silic Vol.
C2.	Green, w. wk. brown stain.	Vol Porph. Same as C1	St. chlorite & wk. to mod. argil. alt. Vol.
C3	Lt. gray, w. wk. to mod. brown to yellow stain	Vol. Porph. Same as C1	Intense argil. alt. Vol.
C4	Dk. gray	Vol. Porph. Phen. ≤ 1mm, ± 30% Dense GM	wk. to mod. argil. of feld. Chlorite of mafics And-Latite Porph
C5	white, w. wk. to mod. brown stain	Vol. Porph Same as C4	Intense Silic. & argil. alt. Vol.
C6	Lt. tan to lt. gray & green	Fine Gr.	Qtz. Monz.? St. chlorite of Mafics & wk. to mod. argil. of feld.
C7	Red & brown, w. lt. gray cont.	Vol. Porph. Same as C1	Intense argil. alt. Vol.
C8	Lt. gray & Green	Fine Gr. Same as C6	St. argil. & silic. G.M. Mafics Ox.

No.	Color	Texture	Rock Type.
G1	Gray to dk. gray	Vol. Porph. Phen ±1mm, ±20% G.M. dense	wk. to mod. argil. alt. Mafics Ox.
G2	white, w. mod. brown to red stain.	Vol. Porph. Same as G1	Intense silic. & argil. alt. Vol.
G3	white, w. mod. brown Stain.	Vol. Porph. Same as G1	Same as G2
G4	Dk Gray	Aphanitic	Fresh diabase
G5	Gray to tan	Same as G1	Wk. argil. of fed. Mafics Ox. Lalite Porph.?
G6	white, w. wk. brown stain	Same as G1	Intense argil. alt. Vol.
G7.	white, w. wk. brown stain	Same as G1	Same as G6
G8.	white, w. mod. Red + brown stain	Same as G1	Intense argil. & silic. alt. Vol.
G9	white, w. wk. to mod. brown + red stain	Same as G1	Same as G6
G10	white, w. mod. brown to red stain.	Same as G1	Same as G8

No.	Color	Texture	Rock Type
01	white, w. wk. brown stain	Vol. Porphy. ± 30%, ≤ 1mm Phen.	Intense argil. alt. Vol.
02	white, w. mod. brown stain	Same as 01	Same as 01
03	white, w. wk. brown stain	Same as 01	Same as 01
	Gray	Brecciated Vol. ± 30%, ≤ 1mm Phen ± 10% Py.	Mod. silic. & num. Qtz strings. Mod. argil. of Feld. And. or Latite ?
04	white, w. wk. brown stain	Same as 01	Same 01
	Dk. gray, w. Std. brown-red stain.	Same as 03 Gray	st. argil of Feld. And. or Latite ?
05	Gray	Same as 01 ± 10% Py	st. argil. or ser. alt. Vol.
06	Lt. gray, w. wk. yellow stain.	Same as 01	st. to mod. argil. alt. Vol.
07	Lt. gray, w. wk. to mod. brown stain	Same as 01 ± 5% Py.	Same as 06
08	white to lt. gray, w. mod. red stain	Same as 01	Same as 06
09	Gray to white, w. wk. brown stain	Banded Vol. Num Qtz. strings	st. silic & loc. st. argil alt. Vol.

No.	Color	Texture	Rock Type
LC1	white, w. mod. brown stain	Vol. Porph. Phen ≤ 1mm.	Intense argil. alt. + silic Vol.
LC2	white to yellow	Same as LC1	Same as LC1
LC3	white, w. st. brown + black stain	Same as LC1	Same as LC1
LC4	white, w. mod. orange-red stain	Same as LC1	Same as LC1
LC5	Purple to lt. gray	Vol. Porph. ± 15% Phen, ≤ 1mm.	Bleached, mod. to st. argil. of feld. Mafics absent
LC6	Lt. gray, w. mod. brown to red. stain	Vol. Porph, Phen. ≤ 1/8", ± 30%	Rhyolite? st. argil. of feld. + mod of G.M. Mafics absent, Rhy?
LC7	white, w. mod. brown stain.	Same as LC1	Same as LC1
LC8	Brown	Same as LC6 v. st. brown FeOx stain.	Intense argil. alt. Vol.

No.	Color	Texture	Rock Type
BM1	Gray	Porph. Phen. ≤ 1/2", ± 30%	Fresh QMP.
BM2	Gray	Porph. Phen ≤ 1 mm ± 20%	Silic. Vol. Mafics absent
BM3	Pale tan, w. wk. brown stain	Same as BM2	Intense Silic. & argil. alt. Vol.
BM4	White & lt. gray, w. wk. brown to yellow stain	Same as BM2	v. st. argil. of Phen; Intense argil. alt. & Silic. Vol.
BM5	white, w. wk. to mod. brown & red stain.	Same as BM2	Same as BM4
BM6	White, w. mod. brown stain.	Same as BM2	Same as BM3
BM7	white, w. mod. red. stain	Same as BM2	Intense argil. alt. Vol.
BM8	Dk. Gray	Massive Sulfide	± 65% Py ± 35% Enargite
BM9	Gray, w. wk. brown stain	Same as BM2 ± 10% Py.	st. silic & argil. alt. Vol.
BM10	Lt. gray & white, w. wk. brown to yellow stain	Same as BM2, w. ± 10% Phenocrysts, ≤ 1/4"	Same as BM4
BM11	White, w. mod. to st. brown to red stain.	Same as BM2	Same as BM7
BM12	Lt. gray, w. mod. brown stain.	Same as BM2	St. argil. alt. Vol.
BM13	Green, w. mod. Dk. brown stain.	Same as BM2	Intense chlorite alt. Vol.
BM14	Greenish gray, w. mod. brown stain	Same as BM2	St. chlorite & argil. alt. Vol.
BM15	Lt. gray, w. mod. brown to yellow stain	Same as BM2	Same as BM9

BM16	Lt. gray to gray,	Same as BM2 ±2% Py	st. chlorite & argil. alt. Vol.
BM17	Lt. gray, w. mod. brown stain.	Same as BM2 ±5% Py.	st. silic. & argil. alt. Vol.
BM18	Gray, w. mod. brown stain	Same as BM2	st. silic. Vol.
BM19	Cream, w. mod. Red to brown stain.	Same as BM2	Same as BM18
BM20	white, w. st. red. stain	Same as BM2	Intense argil. alt. Vol.
BM21	Dk. gray	Porph. Phen. ≤1/4", ±60%	st. to wk. argil. of feld. st. chlorite of Mafics. Q.M.P.
BM22	white to lt. gray, w. wk. brown stain	Same as BM2	Same as BM17
BM23	Lt. gray, w. wk. brown stain	Same as BM2	St. to intense, argil alt. Vol.
BM24	Dk. gray	Vol.-Porph. Phen ≤ 1mm, ± 30%	st. chlorite of Mafics. And.?
BM25	Lt. green	Same as BM21, w. I 30% Phen.	Same as BM16
BM26	Lt. gray, w. wk. yellow stain	Same as BM2	st. argil. alt. Vol.
BM27	Lt. gray to white, w. wk. Red. to brown stain.	Same as BM2	Same as BM23
BM28	Green, w. mod. brown stain	Same as BM2	Same as BM16
BM29	Lt. gray, w. mod. brown stain	Same as BM2	Same as BM20
BM30	Lt. gray, w. wk. brown stain	Same as BM2	Same as BM3
BM31	Lt. green gray, w. mod. brown stain	Same as BM2.	Same as BM16

BM 32	Green Gray	Same as BM 2	St. chlorite alt. Vol.
BM 33	Lt. gray to white, w. wk. to mod. brown stain	Same as BM 2	Same as BM 3
BM 34	Dk gray, w. wk brown stain	Same as BM 24	Same as BM 24

No	Color	Texture	Rock type
J1	Green Gray	Porph. Phen. ≤ 1/8" GM - Aphanitic	Vol. Feld-Biot. porph.
J2	orange-red coating: white interior.	Porph. Porph.	Intense, argil. alt. Vol. Intense argil. alt. Vol.
J3	Brown & white		
J4	Dk. brown coating Green-gray interior	Porph. Same as J1	Vol. St. argil alt. feld. & Biot. to FeOx
J5	Purple to white	Porph - Phen ≤ 1mm GM. glassy	st. silic. Vol.
J6	white to pink & loc. brown stain	Same as J5	St. Silic. Vol.
J7	Brown	Same as J5	V. st. argil alt. Vol.
J8	Brown to Pink stain & white interior	Porph. Phen ≤ 1/8" GM. ?	Intense argil alt. Vol.
J9	Lt. brown & white	Same as J8	St. argil alt. Vol.
J10	Green - gray	Same as J1	st. argil of feld. & FeOx after Biot.
J11	Yellow stain on Lt. gray	Same as J5	St. argil. alt. & silic. Vol.
J12	Green & gray	Fine grained. ≤ 10% GM.	Diorite Intrusive
	Brown & white	Same as J1	st. argil. alt. Vol.
J13	Lt. gray, w. brown stain	Same as J5	st. argil. alt. Vol.
J14	Lt. gray, w. brown stain	Breccia, frags ≤ 1" Same as J1 + J5	st. argil alt. & silic. Vol.
J15	Brown	Same as J1 V. st. brown FeOx stain	St. argil. alt. Vol.
J16	Lt. gray, w. brown to yellow stain	Same as J1	st. argil. alt of feld. Biotite gone

J17	Lt. gray, w. st. bright red stain.	Same as J5 st. diss. Py	st. argil. alt. Feld. Mafics absent.
J18	Lt. gray, w. brown & yellow stain	Same as J1 + J5 ± 5% Py, diss.	st. argil. of Feld. & st. silic. of GM.
J19	Lt. gray, w. red & yellow stain	Same as J5	st. argil. alt. Vol.

K1	Green, lt. grey & Pink	Fine gr. porph GM ≤ 20%	Qtz mouz. Porph 2-5% Py. Loc. st. ser. alt. st. chlorite of mafics.
K2	Brown & lt. gray	Granitic	st. argil alt. Diorite
K3	Lt. gray, w. brown stain	Porph. f.g. Same as K1?	St. argil. alt. QMP?
	Green, gray & Pink	QM porph. Same as K1	St. chlorite of mafics. QMP.
K4	Yellow & lt. gray	Fine gr. Porph ± 40% feld Phen.	st. argil. alt. Vol.
K5	Lt. gray, w. loc. red stain	Loc. Breccia 5-10% Py, diss.	st. argil. alt. Vol. Same as K4
K6	Gray, w. yellow to red stain	Porph. Same as K4	st. silic. Vol.
K7	Lt. gray, w. bright red stain.	Same as K4	st. argil. & loc. st. silic. Vol.
K8	Gray	Vol. porph. Phen. ≤ 1/8", ± 30%	Rhyolite Glassy GM
K9	Brown to yellow	Vol. Porph. Phen ≤ 1/8" ± 60%	Intense argill alt. ± 10% Py.

L1	Yellow	Porph. qtz. phen ≤ 1/8", ± 20%	st. silic.? Rhyolite
	Gray	Feld. phen ≤ 1/2", ± 20% ± 10% Py, diss.	st. silic. Rhyolite
L2	Lt. gray, w. brown + yellow stain	Same as L1 gray ± 5% Py, blebs + diss.	st. argil. alt. Rhyolite
	Gray, w. brown stain	Porph. phen. ≤ 1/4", ± 30% GM glassy	st. argil. of Feld. phen, Mafics absent. Rhyolite
L3	Tan, w. brown stain	Porph, Same as L1 gray Feld. phen ± 1/2" long	st. argil. alt. Rhyolite
L4	Bright Red, w. Lt. gray + black	Porph. Phen ≤ 1/4", ± 40%	st. argil. alt., mafics absent. Vol.
L5	Lt. gray	Same as L1 gray	st. argil. alt. Sev. phen. remain.
L6	Gray	Same as L1 gray	Fresh Vol.
L7	Bright red to Lt. gray	Same as L6	st. argil. alt. + silic.? Vol. Sev. fresh phen.
L8	white + lt. gray	Same as L6	st. argil. alt. + silic. Vol.
L9	Brown to dk. red	Same as L6	st. silic. (Jasper?) Vol.
L10	Lt. gray to white, w. yellow + redish brown stain	Same as L6	st. argil. alt. Vol. + silic.
L11	Red, orange, yellow + lt. gray to white	Same as L6? Brecciated	st. argil. alt. + silic. Vol.
L12	Lt. gray, w. brown + yellow stain	Same as L6	st. argil. alt. Vol.

M1	Dk. gray	Vitroplex Phen ≤ 1/8", ± 40%	Black glassy base of Iguimbrite
M2	Lt. + dk. gray, w. brown stain	F. gr., crystal, welded Tuff.	Tr to wk. argil. alt. Iguim.
M3.	Dk. green gray	Porph. Phen. ≤ 1/8", ± 30%	St. argil. of feld. phen, mafics absent. Chlor. of G.M.
M4	Lt. gray, w. brown stain, Gray, w. red-brown stain	Crystal, lithic Tuff Welded Tuff	wk. argil. alt. Tuff. Mafics absent. wk. argil. of feld.
M5	Lt. gray, w. wk. brown stain	Crystal Tuff	Mod. to wk. argil. alt. Tuff.
M6	Lt. gray, w. brown to black stain	Crystal tuff	Mod. to wk. argil. alt. Tuff.

W1	Green Gray	Porph. Phen ≤ 1/4", ± 40% G.M. glassy ± 5% Py, diss.	Vol.-wk. to mod. argil. alt. feld. Mafics to chlorite
W2	Lt. gray, w. bright red stain	Same as W1	st. argil. alt. Vol.
W3	Dk. gray, w. wk. brown stain	Same as W1	Vol. wk. argil. of feld st. FeOx of mafics.
W4	Lt. gray	Same as W1	st. argil alt. & silic. Vol.
W5	Gray	Same as W1 Breccia - frags ≤ 1"	st. silic. Vol
W6	Lt. gray	Same as W1 Breccia?	Intense silic. Vol. Qtz only min. present
W7	Gray to white, w. wk. brown stain	Porph. Phen. ≤ 1/8", ± 20% dense G.M.	st. argil. alt. & silic. Vol. Num black specks.
W8	Gray, w brown stain	Same as W1	Mod. to wk. argil. alt. of feld, st. FeOx of mafics.
W9	Lt. gray, w. wk. yellow stain	Same as W1	st. argil. alt. & silic. Vol.
W10	Dk. green Gray	Same as W1 Green G.M.	wk. argil. alt. of feld. wk. FeOx & chlorite of Mafics.
W11	Lt. gray to yellow, w. brown stain	Breccia ± 10% Py, diss. & Ox	Intense argil. alt. & silic. Vol.
W12	Dk. green gray	Same as W1 Green G.M. No Py.	wk. argil. alt. feld. wk. FeOx + chlorite of Mafics. Vol.
W13	Brown & green interior	Same as W12	st. chlorite & argil. alt. Vol.
W14	Brown & yellow	Same as W12	Mod. to st. argil. & chlorite alt. Vol.
W15	Lt. gray, w. brown to yellow stain	Same as W12	st. argil. alt. feld. Mafics absent. Vol.

W16	Lt. gray, w. brown stain.	Same as W12? Text. destroyed	Intense silic. Vol. ±1% chlorite vein.
W17	Lt. gray, w. brown stain	Same as W16	Intense argil. alt. Vol.
W.18	Lt. gray, w. brown to yellow stain	Same as W12	st. argil. alt. of feld Mafics absent
W19	Lt. gray, w orange to yellow stain	Same as W12	st. argil. alt. Vol. & st. argil. alt. & silic. Vol., w. ±5% Py, diss.
W20	Pink, gray & green	Porph. Intrusive Phen. ±1/4", ±30% Pink aphanitic G.M.	st. chlorite of mafics & tr. argil. of feld. Q.M.P.
W21	Pink, gray & green	Same as W20 ±5% Py, diss.	st. chlorite of Mafics
W22	Lt. gray, w. brown to yellow stain	Same as W1 or W12 5-10% Py, diss.	Intense silic. & argil. alt. Vol.
W23	Lt. gray, w. yellow to brown stain.	Porph., phen ≤1mm. Text. gen. destroyed ±10% Py, diss.	Intense argil. alt. & silic. Vol.
	Dk. green gray	F.g. Vol as above.	Vol. st. chlorite alt. st. FeOx of mafics. & st. argil. of feld.
W24	Green gray	Same as W23	Vol. st. chlorite alt. & wk. argil. of feld.
W25	Pink gray	F.g. quartz monz. Porphyritic	Fresh. QM.

X1	Yellow to brown, w. green interior	Porph. Phen. ≤1mm, ± 20%. ±5% Py, diss	st. chlorite alt. Vol.
X2	Brown	F.g. Diorite	Mod. to st. argil. alt. of feld. & st. chlorite alt. of mafics
	Dk. green gray	Porph. Phen ≤1mm. ±20% aphanitic G.M.	Mod. to st. chlorite alt. & argil. alt. of feld.
X3	Lt. gray	Porph. Phen. ≤ 1/8", ± 30%. dense G.M.	Tr. to wk. argil. alt. & silic., crystal Tuff?
X4	Lt. gray, w. wk. brown stain	Same as X1 + X2	Intense argil. alt. & silic. Vol. Mafics absent.
X5	Dk. green gray	Same as X1 + X2	St. chlorite alt. Vol. f.g.
X6	Lt. gray + green	F.g. diorite	Mod. to st. chlorite alt. of mafics.
X7	Lt. green, w. st. brown stain	Porph. Phen ≤1mm, ±60% grainy GM	st. chlorite alt. Vol. FeOx after mafics?
X8	Lt. gray to gray, w. brown to yellow stain	Same as X3 Brecciated & Ox + ±10% Py, diss.	St. silic. & argil. alt. Vol.
X9	Yellow to brown, w. lt. gray interiors	Fine gr. Vol. Phen ≤1mm, ±60%	St. silic.? Vol. May be arkosic sand.
X10	Black to dk. green gray.	F.g. Vol. Same as X1 + X2	Wk. to mod. chlorite alt. Vol.
X11	Lt. gray	Same as X3	St. silic. Vol. Mafics absent.
X12	Lt. gray, w. brown stain	Same as X3	St. silic. & argil. alt. Vol.
X13	Green gray, w. wk. brown stain	Same as X3	St. chlorite alt. FeOx after mafics
X14	Green, w. white & black	Cryst. lithic tuff? frags ≤ 1/4"	Intense chlorite alt. & mod. argil. of feld.

X 15	Yellow to brown	Same as X3 Breccia	Intense argil. alt. Vol.
X16	Yellow + brown to lt. gray	Same as X3?	Vuggy, st. argil. alt. Vol.
X17	Yellow brown to loc. green	Same as X1	st. argil. + chlorite alt. Vol.
X18	Dk. gray, w. yellow to brown stain	Same as X3 ± 20% phen.	St. silic. Vol. Mafics absent.
X19	Gray, w. brown stain	QMP. Phen ≤ 1/8", ± 30% Aphanitic gm. ± 5% black specks.	wk. to mod. argil. alt. of feld. phen. + chlorite of mafics.
X20	Dk gray, w. redish brown stain.	Same as X1	wk. argil. alt. of feld. + chlorite alt. Vol.
X21	Lt. gray, w. brown stain	Same as X1 Breccia, vuggy	Intense Argil. alt. + loc. silic. Vol.
X22	Yellow to brown, w. lt. gray interiors.	Same as X1	St. argil. alt. Vol. Mafics absent.
X23	Lt. gray, w. wk. yellow stain.	Same as X1 ± 30% phen. ± 10% Py	St. silic. + argil. alt. Vol.
X24	Gray, w. brown stain	Same as X1 ± 5% Py, stringe + diss.	St. silic. + argil. alt. Vol. Mafics absent.
X25	Gray to red	Same as X1? ± 20% Py, diss.	f.g., st. silic. Vol. ± 30% phen.
X26	Brown to lt. gray	Cong. Feld. are euhedral	Arkosic. cong. Silic.
X27	Lt. gray, w. st. brown stain.	fine gr. QM intrusive or arkose?	wk. to mod. silic.
X28.	Brown, w. lt. gray to yellow interior	Same as X27	Tr. to wk. silic.
X29	Gray, green + pink.	Q.M.P. Phen. ≤ 1/4", ± 60% Aphanitic GM.	Mod. argil. alt. of feld. + mod. to st. chlorite of mf.
X30	Gray	v. fine gr. QM laminar ≤ 5% Py., diss.	Felx after mafics. could be arkose.
X31	Same as X29; X26?; X30;		

Southern Colorado Porphyry Copper Exploration, 1974

Field Schedule Chart

Geologists	Dates, Areas and Nearest Towns						
	May 15-24	June 3-12	June 17-26	July 8-17	July 22-31	Aug 5-14	Aug. 19-28
D.C. Temple	Baughman Creek Pinos Creek Del Norte	Bonanza Findley Gulch Saguache	Powder Horn Slumgullion Gulch Lake City	Jasper Alum Creek Del Norte	Sumitville Park Creek Del Norte	Anvil Mtn. Ophir Silverton Telluride	Cumberland Pass Tomichi Gunnison
J.R. Wilson				St. Elmo Calico Mtn. Salida	Porphyry Peak Capitol City Saguache Lake City	Gravel Mtn. Houghton Mtn. Lake City Silverton	California Mtn. La Plata Silverton Durango
J.K. Jones						Sheep Mtn. Carson Silverton Lake City	Silver Creek Sunshine Peak Lake City

Southern Colorado Porphyry Copper Exploration, 1974

Field Schedule Chart

Geologists	Dates and Areas						
	May 15-24	June 3-12	June 17-26	July 8-17	July 22-31	Aug. 5-14	Aug. 19-28
D.C. Temple	H + I	F + G	N + O	J + K	L + M	W + X	A + D
J.R. Wilson				B + C	E + P	S + T	U + Y
J.K. Jones						V + Z	Q + R

Southern Colorado Porphyry Copper Exploration, 1974

In order to map and sample the open alteration areas seen plus a limited number of located properties, it is estimated that 13, ten day trips will be required.

Expenses per trip

Meals and motel	$250.00
Truck	30.00
Round trip air fare	100.00
	$380.00

Expenses for 13 Trips =	$4640.00
Maps and supplies	230.00
Assays	5200.00
Total for project	$10,070.00

A Rent Center
930 E. Ft. Lowel Rd. 624 6601
$225/mo vacation Trailer

Little Dealer - Little Prices
Trailer Sales
2149 S. Alvernon Way 325-3307
$75/wk Tent Trailer

300

16
20
320

14.00 Per night in trailer

16)225
16
65
64

Southern Colorado Porphyry Copper Exploration, 1974

Field Schedule Chart

Geologists	Dates and Areas						
	May 15-24	June 3-12	June 17-26	July 8-17	July 22-31	Aug. 5-14	Aug. 19-28
D.C. Temple	H+I	F+G	N+O	J+K	L+M	W+X	A+D
J.R. Wilson				B+C	E+P	S+T	U+Y
J.K. Jones						V+Z	Q+R

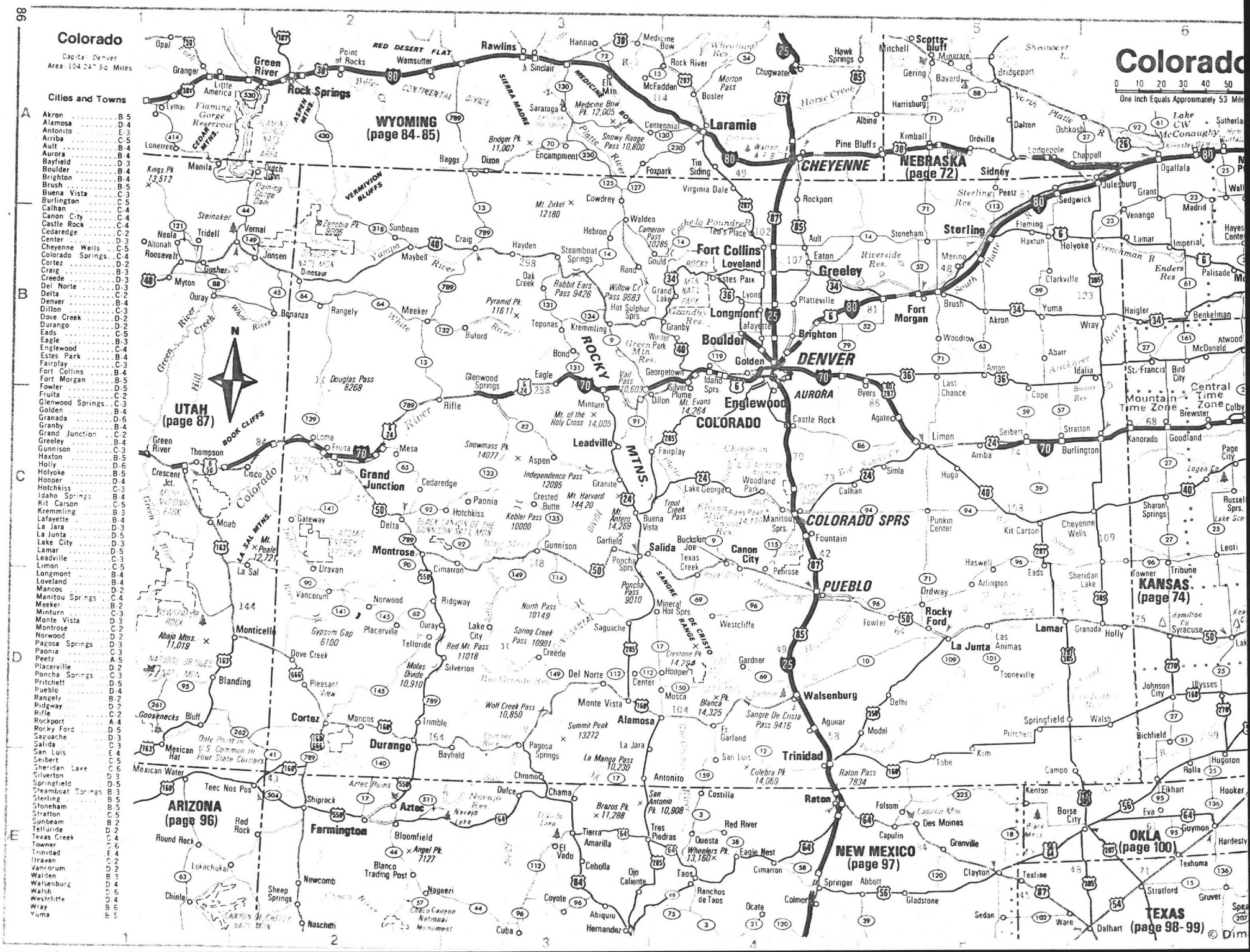
Southern Colorado Porphyry Copper Exploration, 1974

A program of field work has been established for the summer of 1974 in southern Colorado.

On the attached list and map are 26 areas that have been selected for reconnaissance mapping and sampling. A ranking of geologic favorability will be developed during this work. There is a mix of areas available for claim location and others where claim ownership positions exist.

A schedule has been prepared, starting with those areas at lower elevation and proceeding higher as the snow melts. Since most of the areas are in the high mountains, a large part of the work is scheduled late in the season. Below is a list of personnel and planned dates of field work.

Name	Dates
Dennis C. Temple	May 15 - August 28
John Wilson	July 8 - August 28
J.K. Jones	August 5 - August 28


Colorado
Capital: Denver
Area: 104,247 Sq. Miles
Cities and Towns
Akron B-5
Alamosa D-4
Antonito E-3
Arriba C-5
Ault B-4
Aurora B-4
Bayfield D-3
Boulder B-4
Brighton B-4
Brush B-5
Buena Vista C-3
Burlington C-5
Calhan C-4
Canon City C-4
Castle Rock C-4
Cedaredge C-2
Center D-3
Cheyenne Wells C-5
Colorado Springs C-4
Cortez D-2
Craig B-3
Creede D-3
Del Norte D-3
Delta C-2
Denver B-4
Dillon C-3
Dove Creek D-2
Durango D-2
Eads C-5
Eagle B-3
Englewood C-4
Estes Park B-4
Fairplay C-3
Fort Collins B-4
Fort Morgan B-5
Fowler D-5
Fruita C-2
Glenwood Springs C-3
Golden B-4
Granada D-6
Granby B-4
Grand Junction C-2
Greeley B-4
Gunnison C-3
Haxton B-5
Holly D-6
Holyoke B-5
Hooper D-4
Hotchkiss C-3
Idaho Springs B-4
Kit Carson C-5
Kremmling B-3
Lafayette B-4
La Jara D-3
La Junta D-5
Lake City D-3
Lamar D-5
Leadville C-3
Limon C-5
Longmont B-4
Loveland B-4
Mancos D-2
Manitou Springs C-4
Meeker B-2
Minturn C-3
Monte Vista D-3
Montrose C-2
Norwood D-2
Pagosa Springs D-3
Paonia C-3
Peetz A-5
Placerville D-2
Poncha Springs C-3
Pritchett D-5
Pueblo D-4
Rangely B-2
Ridgway D-2
Rifle C-2
Rockport A-4
Rocky Ford D-5
Saguache D-3
Salida C-3
San Luis E-4
Seibert C-5
Sheridan Lake C-6
Silverton D-3
Springfield D-5
Steamboat Springs B-3
Sterling B-5
Stoneham B-5
Stratton C-5
Sunbeam B-2
Telluride D-2
Texas Creek C-4
Towner C-6
Trinidad E-4
Uravan D-2
Vancorum D-2
Walden B-3
Walsenburg D-4
Walsh D-6
Westcliffe D-4
Wray B-6
Yuma B-5
WYOMING (page 84-85)
NEBRASKA (page 72)
KANSAS (page 74)
OKLA (page 100)
TEXAS (page 98-99)
ARIZONA (page 96)
NEW MEXICO (page 97)
UTAH (page 87)
COLORADO
DENVER
AURORA
CHEYENNE
Colorado Springs
Pueblo
Grand Junction
Durango
Cortez
Farmington
Aztec
Alamosa
Trinidad
Raton
Walsenburg
Salida
Canon City
Leadville
Glenwood Springs
Steamboat Springs
Fort Collins
Loveland
Greeley
Longmont
Boulder
Golden
Englewood
Brighton
Fort Morgan
Sterling
Julesburg
Sidney
Laramie
Rawlins
Rock Springs
Green River
Craig
Meeker
Rangely
Montrose
Gunnison
Ouray
Durango
Monticello
Blanding
Moab
Vernal
Dinosaur
Lamar
La Junta
Rocky Ford
Holyoke
Burlington
Limon
Hugo
Kit Carson
Cheyenne Wells
Springfield
Walsh
Eads
Tribune
Mountain Time Zone
Central Time Zone
One inch Equals Approximately 53 Miles
© Dim

Colorado

Capital: Denver
Area: 104,247 Sq. Miles

Cities and Towns

- Akron B-5
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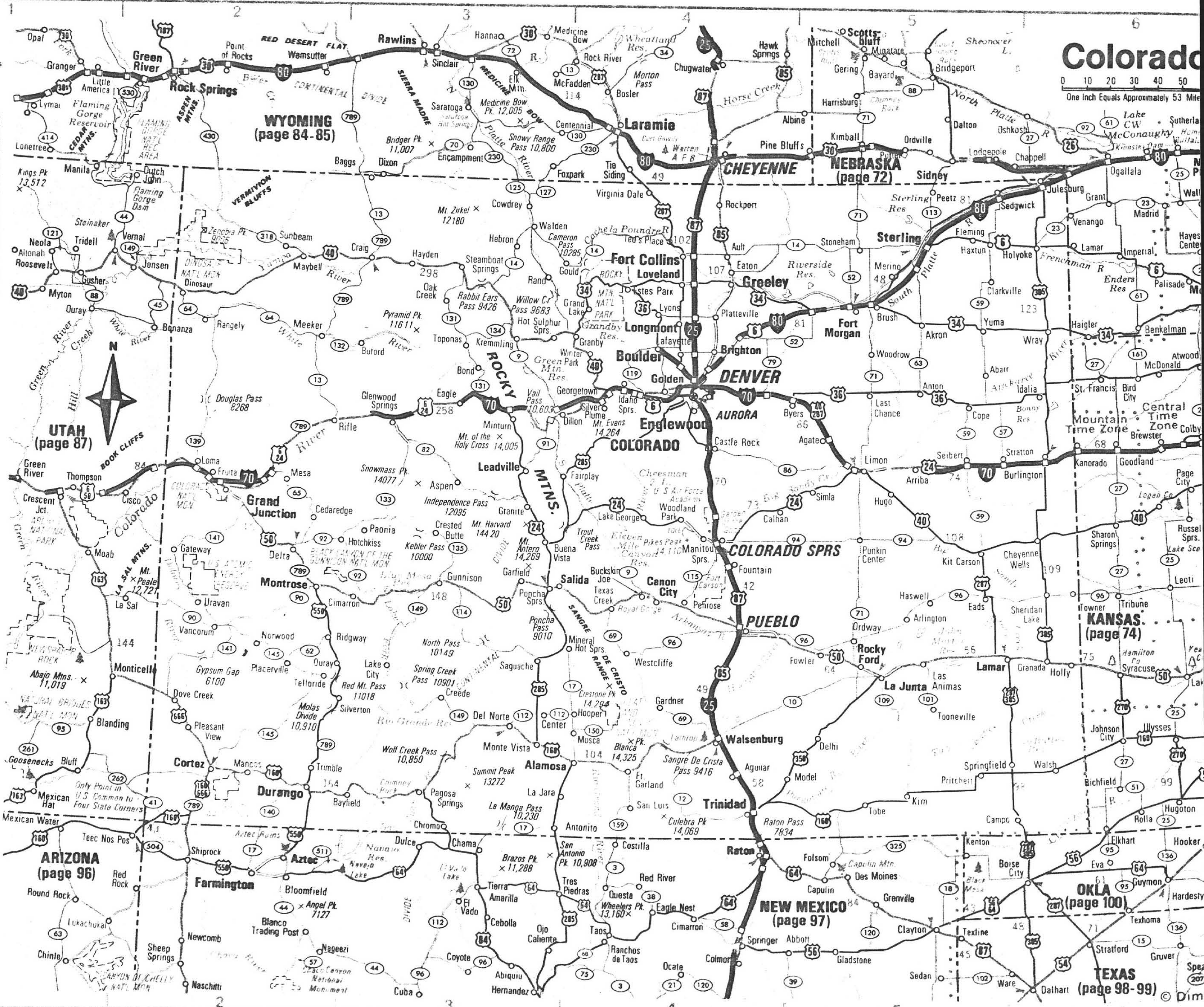
- Bayfield D-3
- Boulder B-4
- Brighton B-4
- Brush B-5
- Buena Vista C-3
- Burlington C-5
- Calhan C-4
- Canon City C-4
- Castle Rock C-4
- Cedaredge C-2
- Center D-3
- Cheyenne Wells C-5
- Colorado Springs C-4
- Cortez D-2
- Craig B-3
- Creede D-3
- Del Norte D-3
- Delta C-2
- Denver B-4
- Dillon C-3
- Dove Creek D-2
- Durango D-2
- Eads C-5
- Eagle B-3
- Englewood C-4
- Estes Park B-4
- Fairplay C-3
- Fort Collins B-4
- Fort Morgan B-5
- Fowler D-5
- Fruita C-2
- Glenwood Springs C-3
- Golden B-4
- Granada D-6
- Granby B-4
- Grand Junction C-2
- Greeley B-4
- Gunnison C-3
- Haxton B-5
- Holly D-6
- Holyoke B-5
- Hooper D-4
- Hotchkiss C-3
- Idaho Springs B-4
- Kit Carson C-5
- Kremmling B-3
- Lafayette B-4
- La Jara D-3
- La Junta D-5
- Lake City D-3
- Lamar D-5
- Leadville C-3
- Limon C-5
- Longmont B-4
- Loveland B-4
- Mancos D-2
- Manitou Springs C-4
- Meeker B-2
- Minturn C-3
- Monte Vista D-3
- Montrose C-2
- Norwood D-2
- Pagosa Springs D-3
- Paonia C-3
- Peetz A-5
- Placerville D-2
- Poncha Springs C-3
- Pritchett D-5
- Pueblo D-4
- Rangely B-2
- Ridgway D-2
- Rifle C-2
- Rockport A-4
- Rocky Ford D-5
- Saguache D-3
- Salida C-3
- San Luis E-4
- Seibert C-5
- Sheridan Lake C-6
- Silverton D-3
- Springfield D-5
- Steamboat Springs B-3
- Sterling B-5
- Stoneham B-5
- Stratton C-5
- Sunbeam B-2
- Telluride D-2
- Texas Creek C-4
- Towner C-6
- Trinidad E-4
- Uravan D-2
- Vancorum D-2
- Walden B-3
- Walsenburg D-4
- Walsh D-6
- Westcliffe D-4
- Wray B-6
- Yuma B-5



Colorado

Capital: Denver
Area: 104,247 Sq. Miles

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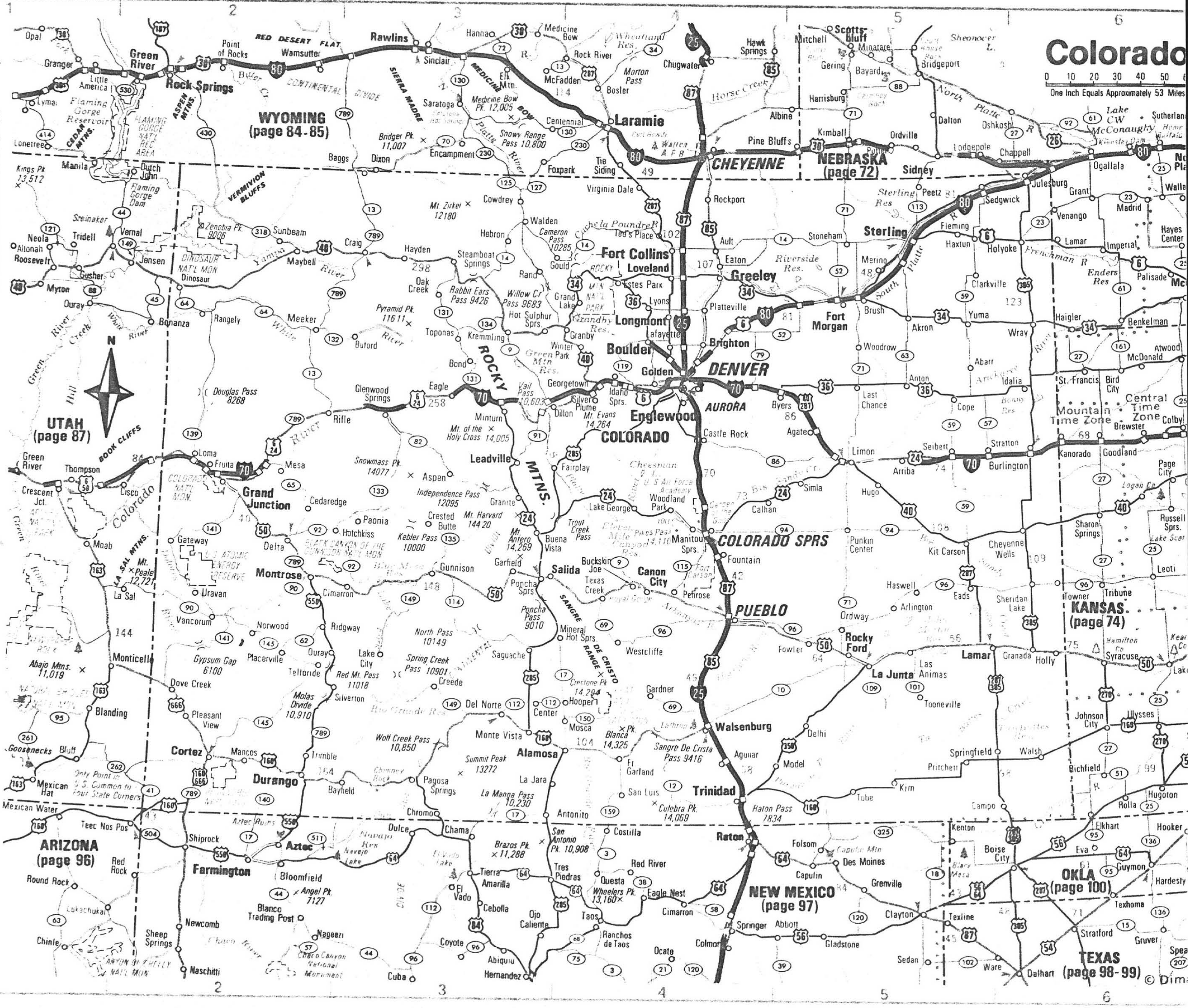
Aurora	B-4
Bayfield	D-3
Boulder	B-4
Brighton	B-4
Brush	B-5
Buena Vista	C-3
Burlington	C-5
Calhan	C-4
Canon City	C-4
Castle Rock	C-4
Cedaredge	C-2
Center	D-3
Cheyenne Wells	C-5
Colorado Springs	C-4
Cortez	D-2
Craig	B-3
Creede	D-3
Del Norte	D-3
Delta	C-2
Denver	B-4
Dillon	C-3
Dove Creek	D-2
Durango	D-2
Eads	C-5
Eagle	B-3
Englewood	C-4
Estes Park	B-4
Fairplay	C-3
Fort Collins	B-4
Fort Morgan	B-5
Fowler	D-5
Fruita	C-2
Glenwood Springs	C-3
Golden	B-4
Granada	D-6
Granby	B-4
Grand Junction	C-2
Greeley	B-4
Gunnison	C-3
Haxton	B-5
Holly	D-6
Holyoke	B-5
Hooper	D-4
Hotchkiss	C-3
Idaho Springs	B-4
Kit Carson	C-5
Kremmling	B-3
Lafayette	B-4
La Jara	D-3
La Junta	D-5
Lake City	D-3
Lamar	D-5
Leadville	C-3
Limon	C-5
Longmont	B-4
Loveland	B-4
Mancos	D-2
Manitou Springs	C-4
Meeker	B-2
Minturn	C-3
Monte Vista	D-3
Montrose	C-2
Norwood	D-2
Pagosa Springs	D-3
Paonia	C-3
Peetz	A-5
Placerville	D-2
Poncha Springs	C-3
Pritchett	D-5
Pueblo	D-4
Rangely	B-2
Ridgway	D-2
Rifle	C-2
Rockport	A-4
Rocky Ford	D-5
Saguache	D-3
Salida	C-3
San Luis	E-4
Seibert	C-5
Sheridan Lake	C-6
Silverton	D-3
Springfield	D-5
Steamboat Springs	B-3
Sterling	B-5
Stoneham	B-5
Stratton	C-5
Sunbeam	B-2
Telluride	D-2
Texas Creek	C-4
Towner	C-6
Trinidad	E-4
Uravan	C-2
Vancorum	D-2
Walden	B-3
Walsenburg	D-4
Walsh	D-6
Westcliffe	D-4
Wray	B-6
Yuma	B-5



FRO
SY
1 WIND CAVE SOUTH DAKOTA
2 YELLOWSTONE WYOMING
3 GRAND TETON WYOMING
1 Badlands
2 Mount Rushmore
3 Jewel Cave
4 Custer Battlefield
5 Dinosaur
6 Colorado
7 Arches
8 Black Canyon of The Gunnison
9 Great Sand Dunes
10 Natural Bridges
Eastern Terminal of the Pony Express
CHEVENNE
DENVER
Rock Springs
Steamboat Springs
Hayden-Craig
Vernal
GRAND JUNCTION
Gunnison
Montrose
Moab
Colorado Springs
Pueblo
Durango
Cortez
FARMINGTON
Alamosa
McCook
Burlington
Limon
Lamar
La Junta
Springfield
Walsenburg
Boise City
Clayton
Sterling
Wray
Enders Res
Swanson Lake
Big Sandy River
John Martin Reservoir
Purgatoire River
Canadian Re
Platte
Yampa River
White River
Colorado River
San Juan River
Rio Grande
El Vado Res
MOUNTAIN STANDARD TIME
CENTRAL STANDARD TIME

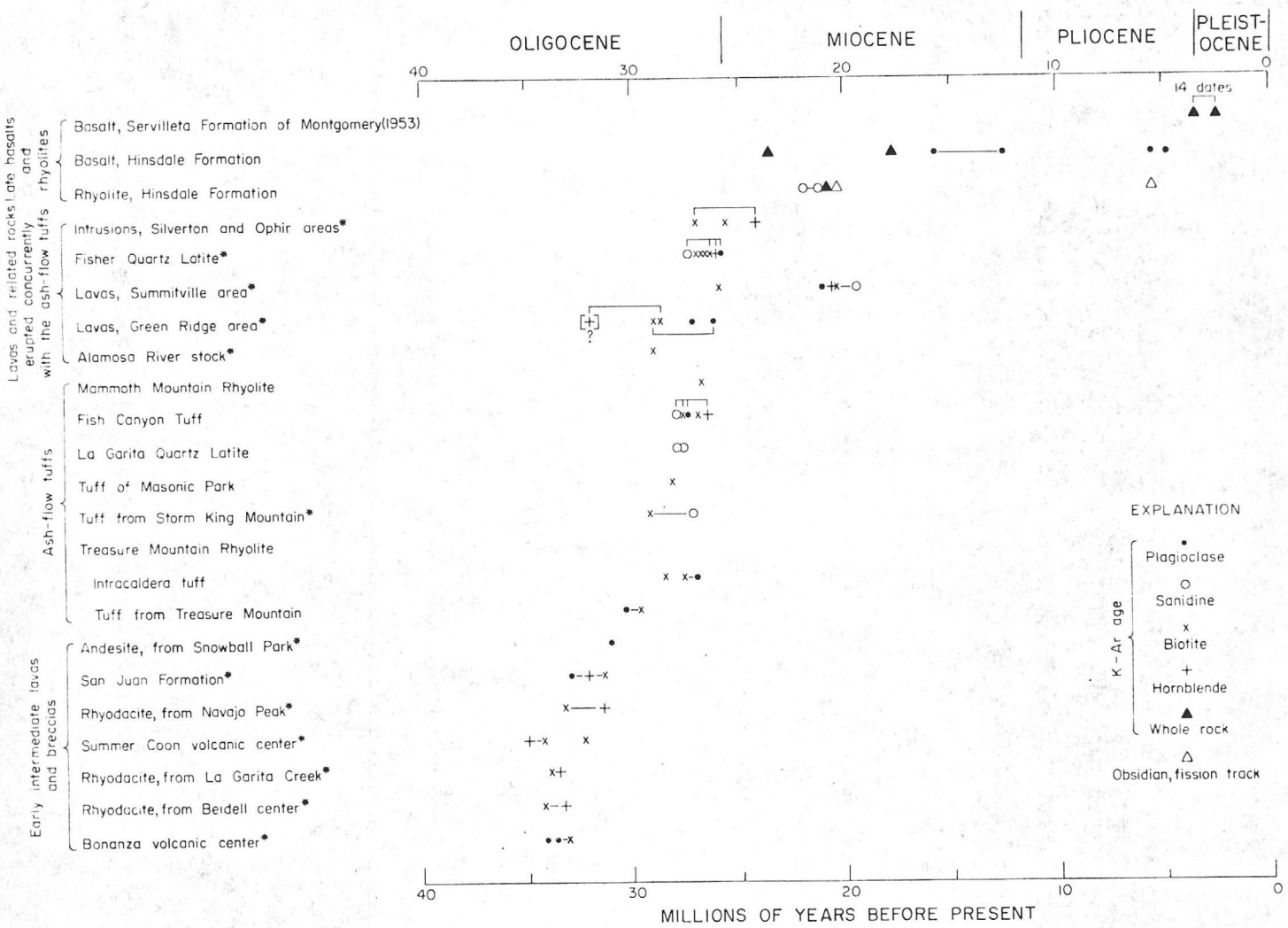
Rock Springs
CHEYENNE
DENVER
Englewood
Colorado Springs
Pueblo
Steamboat Springs-Hayden-Craig
Vernal
GRAND JUNCTION
Montrose
Gunnison
Moab
Cortez
Durango
FARMINGTON
Alamosa
Walsenburg
Trinidad
La Junta
Lamar
Limon
Burlington
Sterling
Wray
McCook
Imperial
Greeley
Boise City
Clayton
Springfield
Cañon City
San Luis
CONTINENTAL DIVIDE
MEDICINE BOW PK 12005
BRIDGER PK 11007
MT ZIRKEL 12220
NORTH MAM PK 10973
GUNNISON PK
MT PEALE
UNCOMPAHGRE PK 14309
MT SNEFFELS 14150
MT WILSON 14246
ABAJO PK 11445
SUMMIT PK 13272
BLANCA PK 14317
PURGATORY 13720
BRAZOS PK 11403
ANGEL PK 7127
PASTORA PK 9420
Big Sandy River
Purgatoire River
Canadian River
John Martin Reservoir
Enders Res
Swanson Lake
South Platte
El Vado Res
SOUTH PARK
SAN JUAN
San Juan River
Colorado River
Yampa River
White River
SANGRE DE CRISTO MTS
MOUNTAIN STANDARD TIME
CENTRAL STANDARD TIME
COLORADO
FRO
SY
1 WIND CAVE SOUTH DAKOTA
2 YELLOWSTONE WYOMING
3 GRAND TETON WYOMING
1 Badlands
2 Mount Rushmore
3 Jewel Cave
4 Custer Battlefield
5 Dinosaur
6 Colorado
7 Arches
8 Black Canyon of The Gunnison
9 Great Sand Dunes
10 Natural Bridges
Eastern Terminal of the Pony Express

Maps with forest overlay 33 maps

	Number	Quad
15'	1	Bonanza
	1	Bristol Head
	1	Creede
	1	Garfield
	1	Pitkin
	1	Spar City
7½'	1	Beaver Creek Reservoir
	1	Canibal Plateau
	1	Del Norte Peak
	1	Elwood Pass
	1	Finger Mesa
	1	Handies Peak
	1	Horseshoe Mtn
	1	Howardsville
	1	Indian Head
	1	Jasper
	1	Klondike Mine
	1	La Plata
	1	Lake City
	1	Lake San Cristobal
	1	Mineral Mtn
	1	Mount Wilson
	1	Ophir
	1	Platoro
	1	Pole Creek Mtn
	1	Powderhorn
	1	Red Cloud Peak
	1	Silverton
	1	Summitville
	1	Telluride
	1	Twin Mountains
	1	Uncompahgre Peak
	1	Workman Creek

Maps with NO forest overlay 65 maps

	Number	Quad.
15'	1	Bonanza
	1	Bristol Head
	1	Creede
	1	Garfield
	1	Pitkin
	1	Spar City
7½'	2	Beaver Creek Reservoir
	2	Canibal Plateau
	2	Del Norte Peak
	2	Elwood Pass
	2	Finger Mesa
	4	Handies Peak
	2	Horseshoe Mtn
	2	Howardsville
	2	Indian Head
	2	Jasper
	2	Klondike Mine
	2	La Plata
	2	Lake City
	2	Lake San Cristobal
	2	Mineral Mtn
	2	Mount Wilson
	2	Ophir
	2	Platoro
	2	Pole Creek Mtn
	2	Powderhorn
	4	Red Cloud Peak
	2	Silverton
	3	Sommitville
	2	Telluride
	2	Twin Mountains
	2	Uncompahgre Peak
	2	Workman Creek


OLIGOCENE
MIOCENE
PLIOCENE
PLEIST-OCENE
40
30
20
10
0
14 dates
Late basalts and rhyolites
Basalt, Servilleta Formation of Montgomery(1953)
Basalt, Hinsdale Formation
Rhyolite, Hinsdale Formation
Lavas and related rocks erupted concurrently with the ash-flow tuffs
Intrusions, Silverton and Ophir areas*
Fisher Quartz Latite*
Lavas, Summitville area*
Lavas, Green Ridge area*
Alamosa River stock*
Ash-flow tuffs
Mammoth Mountain Rhyolite
Fish Canyon Tuff
La Garita Quartz Latite
Tuff of Masonic Park
Tuff from Storm King Mountain*
Treasure Mountain Rhyolite
Intracaldera tuff
Tuff from Treasure Mountain
Early intermediate lavas and breccias
Andesite, from Snowball Park*
San Juan Formation*
Rhyodacite, from Navajo Peak*
Summer Coon volcanic center*
Rhyodacite, from La Garita Creek*
Rhyodacite, from Beidell center*
Bonanza volcanic center*
EXPLANATION
K-Ar age
Plagioclase
Sanidine
Biotite
Hornblende
Whole rock
Obsidian, fission track
MILLIONS OF YEARS BEFORE PRESENT

OPTION AGREEMENT

THIS AGREEMENT made and entered into on this _____ day of August, 19 73, by and between

, an Arizona corporation, whose address is

, hereinafter called "Optionor", and

, a Michigan corporation, with headquarter offices at

hereinafter called "Optionee",

WITNESSETH:

RECITALS

A. Optionor represents and warrants that it is the owner of the entire 100% interest in and to the following described unpatented lode mining claims and mill site claims situated in Sections ,

County, Arizona, to wit:

GROUP 1

Name of Claim	Date of Location	Notice of Location Recorded in the Records of Yavapai County, Arizona In Book	at Page

Optionor further represents and warrants that the above described unpatented lode mining claims and mill site claims are not burdened with the payment of any royalties, overriding royalties, or any other payments on mine or mill production. Optionor further represents and warrants that said unpatented lode mining claims and mill site claims are valid and subsisting and that there are no conflicting or adverse claims to the right to mine the minerals and/or ores which are upon or within said lode mining claims and which are subject to the mining laws of the United States.

B. Optionor is desirous of selling to Optionee the _____ interest in and to the above described lode mining claims and mill site claims and Optionee is agreeable to purchasing from Optionor the _____ interest in and to said unpatented lode mining claims and mill site claims upon the terms and conditions and for the considerations hereinafter set forth.

NOW, THEREFORE, in consideration of the sum of _____ Dollars _____ paid by Optionee to Optionor, the receipt and sufficiency of which is hereby acknowledged, and of the mutual covenants and agreements hereinafter set forth, the parties hereto agree as follows:

1. Optionor does hereby give and grant unto Optionee for a term of _____ years from and after the date hereof, unless sooner terminated as hereinafter provided, the exclusive right and option to purchase the _____ interest in and to the above described unpatented lode mining claims and mill site claims upon the terms and conditions set out below. The principal amount of the total purchase price shall be _____ and if Optionee elects to exercise its right and option to purchase as herein provided, the principal amount of the purchase price shall be paid in installments in accordance with Paragraph No. 4 below; in addition, and commencing with the second installment, Optionee shall pay interest with each such installment computed at the rate of _____ per annum on the unpaid balance thereof.

2. Optionor hereby grants exclusively unto Optionee during the term hereof the sole and exclusive right at any time and from time to time to enter upon all or any portion or portions of the above described unpatented lode mining claims and mill site claims for the purposes of investigating

for, prospecting for, exploring for, and developing any and all minerals of whatsoever kind which may be subject to the mining laws of the United States together with the right to use so much of the surface of said claims as may be necessary to perform such operations.

3. No ore may be shipped from the herein described property prior to exercise of the option except for testing and metallurgical purposes. Such ore for testing and metallurgical purposes not to exceed tons per month.

4. Optionee may exercise the option to purchase herein granted by giving written notice to Optionor, and such notice shall be deemed properly and timely given if deposited in the United States mail or with Western Union Telegraph Company at any time within the term hereof and addressed to Optionor at the address set forth above. Upon receipt of such notice, Optionor shall within days execute, acknowledge and deliver to Optionee a good and sufficient mining deed conveying unto Optionee the interest in and to the above described unpatented lode mining claims and mill site claims (other than any claims in Group 2 concerning which Optionee has elected to discontinue assessment work as provided in Paragraph 7 below), which conveyance shall be in the form acceptable to Optionee and its legal counsel. Upon receipt of the conveyance provided for above, Optionee shall pay to Optionor as the first installment payment of the purchase price the sum of _____ without interest. The balance of the purchase price shall be paid on an installment basis together with interest as provided in Paragraph No. 1 above in accordance with the following schedule:

Amount of Payment

5. During the year term hereof, unless sooner terminated as hereinafter provided, or unless Optionee has sooner elected to purchase as above provided, Optionee agrees to pay to Optionor the payments set out below:

Amount of Payment	Due Date of Payment

6. During the year term hereof, unless sooner terminated as hereinafter provided or unless Optionee has sooner elected to purchase as above provided, Optionee agrees to expend in conducting investigation, prospecting, exploration, development and/or other related work in, on or for the benefit of the above described unpatented lode mining claims the minimum amount specified below for the annual period set out below opposite said specified amount.

Amount of Minimum Expenditures	Minimum Expenditure To Be Made During the Period of:

7. During the term hereof Optionee shall have the right at any time to surrender and relinquish unto Optionor all of its rights and interests

hereunder by giving written notice to Optionor. Such surrender and relinquishment shall be deemed effective as of the date such notice is deposited in the United States mail or with Western Union Telegraph Company. It is understood that if Optionee shall have given such notice of surrender and relinquishment as provided above, Optionee shall thereupon be relieved of all further obligations, express or implied, thereafter accruing hereunder including the obligations to make any further annual payments which are due and payable to Optionor on or after the effective date of such surrender and relinquishment and to make the minimum annual expenditures for any annual period which commences on or after the effective date of such surrender and relinquishment. During the term of this agreement Optionee, has the exclusive right, at its sole discretion to elect not to perform the annual assessment work on any or all unpatented mining claims in Group 2. In which event Optionor shall have no further obligations to maintain such claims in good standing as provided in Paragraph 8 below.

8. As long as this Agreement is in effect Optionor agrees to not voluntarily abandon any of the mining claims and mill site claims subject to this Agreement, and will, at its sole cost, do all things required to keep said mining claims and mill site claims in good standing. It is understood, however, that the work performed hereunder by Optionee on any unpatented lode mining claims subject to this agreement shall be done in such a manner as would reasonably be expected to satisfy the Laws and Regulations pertaining to the performance of annual assessment work on such unpatented lode mining claims.

9. Except as herein specifically provided, Optionee shall have no duty whatsoever, express or implied, to investigate, prospect, explore or develop all or any portion of the above described unpatented lode mining claims and mill site claims.

10. Optionee shall not be responsible to Optionor for the safekeeping or maintenance of any property, real, personal or mixed, which is located in or upon the above described unpatented lode mining claims and mill site claims.

11. If Optionee does not exercise its right to purchase within the time and in the manner specified herein, then and thereupon this agreement shall terminate in its entirety without further liability on the part of either party and Optionee shall have no further rights or interests in the above described unpatented lode mining claims and mill site claims.

12. Optionor shall have the right at its sole risk and expense to inspect the work conducted hereunder by Optionee. Should Optionee not exercise its right to purchase as above provided, Optionee agrees to allow Optionor to inspect and copy the geological data which Optionee has prepared and which relates to the work conducted by Optionee hereunder.

13. Optionee shall have the right to amend or relocate in the name of Optionor, any of the unpatented lode mining claims and mill site claims which Optionee, in its sole discretion, deems advisable to so amend or relocate. In the event of any such amendment or relocation, Optionee agrees that it shall use its best efforts to complete the same in compliance with the applicable statutes and regulations but shall not be liable to Optionor for any act (or failure to act) by it or any of its agents in connection with the amendment or relocation of claims as long as such act (or omission) is not made in bad faith. Upon request by Optionee, Optionor shall join in an application for a patent to any of the unpatented mining claims so designated by Optionee and shall execute all necessary applications and documents in connection therewith and shall cooperate fully with Optionee in securing such patents. All expenses incurred or authorized by Optionee in connection with such amendment, relocation and patent proceedings shall be borne by

Optionee. The rights of Optionee under this agreement shall extend to any of the amended, relocated or patented mining claims.

14. If (i) in the opinion of counsel for Optionee, Optionor's title to any of the unpatented lode mining claims and mill site claims is defective or less than as represented in Recital A, or (ii) Optionor's title is contested or questioned by any person, entity or governmental agency--and if Optionor is unable or unwilling to promptly correct the defects or alleged defects in title, Optionee may attempt to perfect, defend or initiate litigation to protect such title. In that event, Optionor shall execute all documents and shall take such other actions as are reasonably necessary to assist Optionee in its efforts to perfect, defend or protect such title. If the title granted hereunder is less than an undivided 100% title and interest in and to the unpatented lode mining claims and mill site claims described in Group 1, Optionee shall have the right to elect to accept such lesser title by giving notice of such election to Optionor, in which event all payments to be made to Optionor hereunder (including the total purchase price) shall be reduced to the same proportion thereof as the undivided interest owned by Optionor bears to the 100% undivided title granted hereunder and to the same proportion thereof as the acreage owned by Optionor bear to the total acreage of the claim described in Group 1. Nothing herein contained and no notice or action which may be taken under this Paragraph, shall limit or detract from the right of Optionee to terminate this agreement in the manner set forth in Paragraph No. 7 at any time prior to exercise by Optionee of its option to purchase.

15. This agreement, and the rights and obligations of the parties hereunder, shall be governed by the laws of the State of Arizona. Optionee and Optionors shall join in the execution of a memorandum in a recordable

Notes on D.C.T., Colo. trip, 2/4 to 10/74

1. Western National Mining Conference of Colorado Mining Association

Paid registration and attended inorder to contact property owners. Saved one day by advancing meetings.

Papers by industry claimed hinderance by ecologists.

Government agencies reacting to public demand. No planning.

Reports on several properties, none of present interest.

2. Discussions were held with 6 property owners. One is not intrested at present; others desire us to take some action.

A. Russel Kuhn property at Silverton. Wants us to submit a proposed contract. Wants job or enough to live on and assesment work.

B. Silver Bell Mining Co. at Ophir. Wants us to submit a contract. They will then come to Tucson and prepare a final draft and sign

so that we can forward to Essex. Says they have control of required land.

C. Baumgartner Industries at Red Mountain near Ouray. Will drill for diss. silver next summer. Will entertain proposals.

D. Coronado Silver ~~[illegible]~~ Corp. at Platoro. They have ± 27,000,000 tons of 4 oz Ag and .15 oz Au reserves. Will entertain offer. They want $600,000. bank loans covered or $4,500,000 over next two years to build mill for operating control of property.

E. Napoleon Mines at Cumberland pass. Property now being examined by Phelps Dodge. Wants stock trade deal if property not taken.

Grand Junction Newspaper
Week of Feb. 1, 1974

By Wildwood children

Same old song, umpteenth verse

[redacted]

Carry the Ball in your Area
Cancell a 18 yppy vote
Randy

A Pitkin & Garfield
B Garfield
C Garfield
D Garfield
E Bonanza
F Bonanza
G Klondike Mine
H Twin Mtns & Indian Head
I Horseshoe Mtn. & Del Norte Peak
J Jasper
K Platoro & Summitville
L Summitville
M Elwood Pass & Beaver Creek Reservoir
N Powderhorn
O Lake City, Cariba Plateau, Lake San Cristobal, Bristol Head
P Uncompahgre Peak & Redcloud Peak
Q Redcloud Peak
R Redcloud Peak
S Handies Peak
T Handies Peak
U Handies Peak
V Howardsville
W Silverton
X Ophir & Telluride
Y La Plata
Z Finger Mesa & Pole Creek Mtn.

37 maps

Maps needed 43 maps

15'

1 Pitkin
4 Garfield
2 Bonanza
2 Bristol Head

7½'

1 Klondike Mine
1 Twin Mountains
1 Indian Head
1 Horseshoe Mountain
1 Del Norte Peak
1 Jasper
1 Platoro
2 Summitville
1 Elwood Pass
1 Beaver Creek Reservoir
1 Powderhorn
1 Lake City
1 Canibal Plateau
1 Lake San Cristobal
1 Uncompahgre Peak
3 Redcloud Peak
3 Handies Peak
1 Howards ville
1 Silverton
1 Ophir
1 Telluride
1 La Plata
1 Finger Mesa
1 Pole Creek Mountain

15' 1 Spar City 1 Creede

7½' 1 Workman Creek 1 Mineral Mountain

1 Mount Wilson

A

Ownership: Napoleon Mines Inc.

B

check for patents

C

Ownership: Thomas E. Richards

D

Ownership: Cyprus Mines Inc.

E

Liturature:

38. Stratigraphic Relations Between Bonanza Center and Adjacent Parts of the San Juan Volcanic Field, South-Central Colorado

Dennis L. Bruns, Rudy C. Epis, Robert S. Weimer and Thomas A. Steven, 1971

39. Geophysical Evidence of a Caldera at Bonanza, Colorado

Daniel E. Karig, Geological Survey Research, 1965

40. Geology and Ore Deposits of the Bonanza District, Saguache County, Colorado

Horace B. Patton, 1915

41. Geology and Ore Deposits of the Bonanza Mining District, Colorado

W. S. Burbank, 1932

11. Geologic Development of the Bonanza-San Louis Valley-Sangre De Cristo Range Area, South-central Colorado

Daniel H. Knepper, Jr. and Ronald W. Marrs, 1971

F

Same as E

G

Same as E

H

Ownership: James B. Beigaley

I

Litvature:

69. Reconnaissance Geology and Economic Significance of the Platoro Caldera, Southeastern San Juan Mountains, Colorado

Peter W. Lipman and Thomas A. Steven, 1970

J

Ownership: Earth Sciences Inc.

K

Ownership: Coronado Silver Mining Co.

L

Ownership: Tice-Mathews Oil Co.

M

Liturature:

69. Reconnaissance Geology and Economic Significance of the Platoro Caldera, South-eastern San Juan Mountains, Colorado

Peter W. Lipman and Thomas A. Steven, 1970

N

0

Liturature:

25. Movement of the Slumgullion Earth Flow Near Lake City, Colorado

Dwight B. Crandell and D.J. Varnes

P

Look for Patents

Liturature:

55. Age of the Lake City Caldera and Related Sunshine Peak Tuff, Western San Juan Mountains, Colorado

Harold H. Mehnert, Peter W. Lipman and Thomas A. Steven, 1973

56. Geology and Ore Deposits Near Lake City, Colorado

John D. Irving and Howland Bancroft, 1917

Q

Liturature:

55. Age of the Lake City Caldera and Belated Sunshine Peak Tuff, western San Juan Mountains, Colorado
Harold H. Mehnert, Peter W. Lipman and Thomas A. Steven, 1973

57. Contributions to Economic Geology, 1906 Lake Fork Extension of the Silverton Mining Area, Colorado
L.H. Woolsey

R

Same as Q

5

Liturature:

89. Geology and Ore Deposits of the Eureka and Adjoining Districts, San Juan Mountains, Colorado

Wilbur S. Burbank and Robert G. Luedke, 1969

T

Look for Patents

Same as S

U

Look for Patents

Same as S

X

W

Ownership: Russel S. Kuhn

X

Ownership: Silver Bell Mines Inc.

Y

Ownership. Hesperus Mining Co.
Exxon Co.

Z

The Carson volcano is grouped with the pre caldera central cones. Significant alteration may be covered by pyroclastics.

Russel J. Kohn
Silverton 303- No phone

Feb. 11 Betty Marie Dyatt 10:12 2:23P
Vice Pres.
Napoleon Mines 303-473-8100

Feb. 6 Alfred G. Hoyl lunch Hilton Hotel
Pres.
Coronado Silver Corp. 303-258-3354

Kerr-McGee Corp
P.O Box 2070
Tucson Ariz 85702
c/o Don McCorell

325-4408

GENERAL DOZER WORK
D6 CAT

DICK ZANETT

4 J TRAILER PARK
OURAY, COLORADO 81427

Conejos Co.

Coronado Silver Corp.

Los Lagos Office

Bollinsville, Colo. 80474

Saguache — Saguache Co. 655-2512

James B. Keighley 342-12

J.B. Rogowski — Inst. returned to this man. J. Peter in El Paso

P.O. Box 98

South Fork, Colo. 81156

Salida — Chaffee Co. 538-4004 538-6813

Thomas E. Richards 366-33

501 North Spruce

Gunnison, Colo. 81230

Gunnison — Gunnison Co. 641-0070

Napolean Mines Inc. 445-241

John H. Lewis - agent

Betty Marie Pyatt (Sent to)

105 E. Colorado Ave

Colorado Springs, Colo.

Ti Inc. 389-358

Warren L. Taylor - agent

Box 556

Littleton, Colo.

Silverton — San Juan Co. 387-5671

Russel J. Kuhn 198-56 or 57

Silverton, Colo. 81433

Telluride — San Miguel Co. 728-3954 — Ammended 1973

Delsie M. Crowley 345-561

Box 1135

Grand Junction, Colo. 81501

Southern Colorado Porphyry Copper

Reconnaissance Project

The following is a summary of ideas developed during the first season of exploration effort in southern Colorado. Base and precious metal mines have operated in this region for 100 years, although no large porphyry copper or molybdenum systems have been developed. Mining has been confined to veins and bedded replacements surrounding known intrusive centers.

Many of these centers exhibit an appearance predicted by recently developed models of porphyry copper deposits. ~~Shallow erosion results in variation from the outcrops of deposits in other regions~~. Due to the shallow erosion of these mountains, the outcrops differ from those found at porphyry deposits in other regions. The top of economic copper mineralization should be near depths of 4000 feet. To date, only two of these centers have been drilled ~~at depth~~ and both are reportedly successful.

Field investigations during the summer revealed 42 intensely altered and mineralized centers at least one square mile in area. The literature indicates there may be in excess of sixty present. Since 1967 effort has been directed toward the centers and a search for porphyry copper type deposits by several major mining corporations and numerous individuals. A search of county records revealed sizeable new claim groups located on 20 of the altered areas. Presently effort is being made to determine the availability of the 10 groups controlled by small companies and individuals.

The unclaimed areas should be examined next season and a selection made for further work. This effort combined with negotiations on existing properties should be followed by more detailed geology and drilling of targets. Property considerations due to private ownership and governmental controls related to scenic areas will influence the order in which the centers are tested.

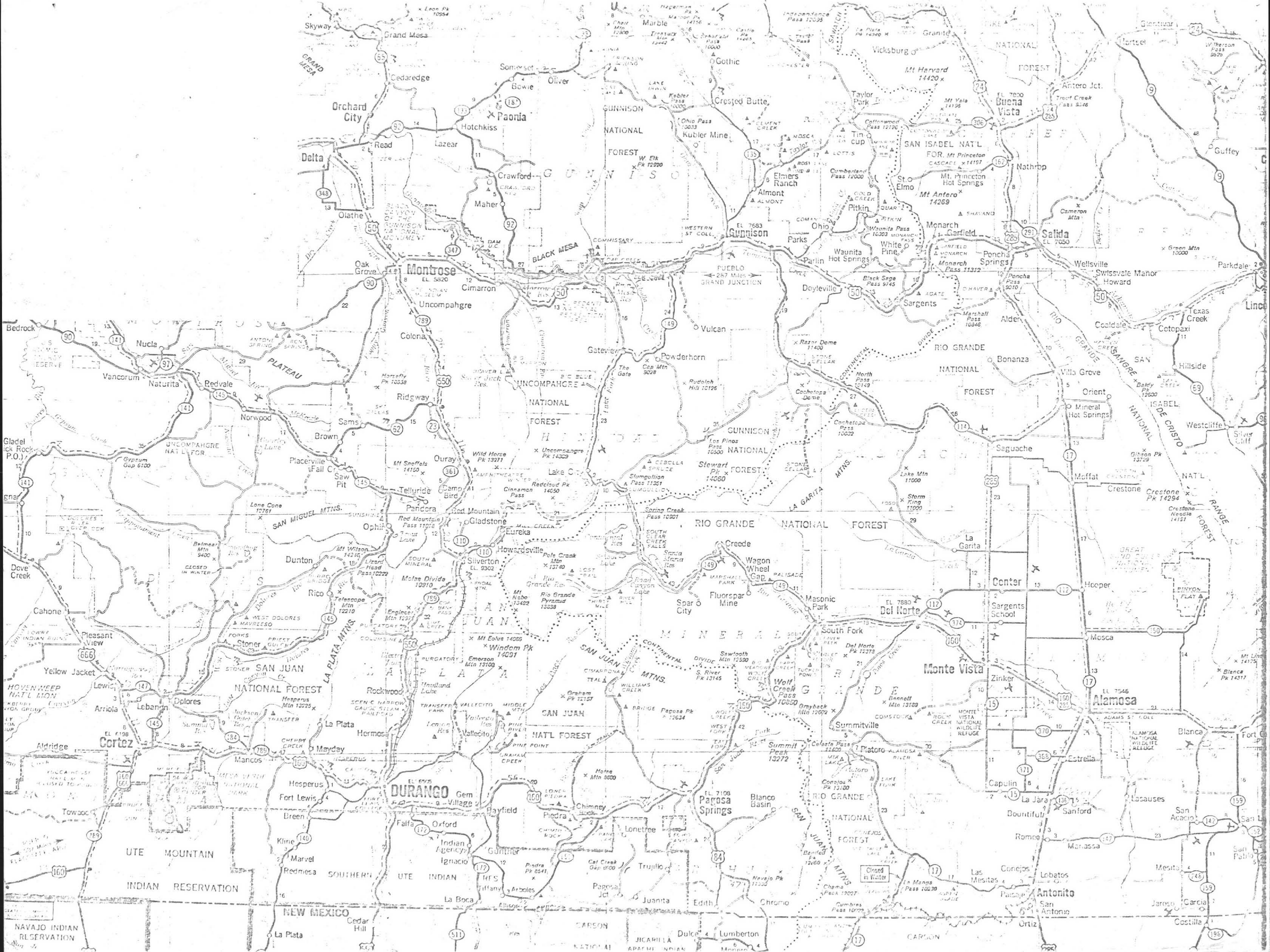
It seems unlikely that all of the centers contain economic mineralization. Several areas should be tested before favorable results are expected. An expenditure of approximately $500,000 per area can be expected in order to obtain factual confirmation of economic grade deposits. This effort may result in the discovery of major porphyry copper deposits.

So. Colo. Porph. Co. Exp. Proj.

During the month two weeks were spent in the field, examining county records, obtaining property maps and geologic liturature of the area. Posting of property positions and liturature research continues in the office.

Contact has been made with Baumgartner Enterprises, who control Red Mountain in Ouray County and Silver Bell Industries Inc., who control the Ophir district in San Miguel County. Further discussions are planned with these companies inorder to determine the availability of their properties.

Dennis C. Temple
11/1/73



Skyway
Grand Mesa
GRAND MESA
Cedaredge
Orchard City
Delta
Read
Lazear
Hotchkiss
Paonia
Bowie
Somerset
Oliver
Marble
Gothic
Crested Butte
Kubler Mine
Crawford
Maher
Olathe
GUNNISON NATIONAL FOREST
W. Elk Pk 12920
BLACK MESA
Gunnison
Almont
Elmers Ranch
Parks
Ohio
Pitkin
Parlin
Waunita Hot Springs
White Pine
Taylor Park
Tin cup
St. Elmo
Mt Antero 14269
Mt Harvard 14420
Vicksburg
NATIONAL FOREST
SAN ISABEL NAT'L FOR.
Buena Vista
Antero Jct.
Nathrop
Guffey
Salida
Poncha Springs
Garfield
Monarch
Monarch Pass 11312
Wellsville
Swissvale Manor
Howard
Parkdale
Oak Grove
Montrose
Cimarron
Uncompahgre
Colona
PUEBLO 267 Miles GRAND JUNCTION
Doyleville
Sargents
Vulcan
Bedrock
Nucla
Naturita
Vancorum
Redvale
Norwood
PLATEAU
Sams
Brown
Ridgway
Ouray
Placerville
Fall Cr.
Saw Pit
Telluride
Camp Bird
Pandora
Red Mountain
Gladstone
Eureka
Ophir
Howardsville
Silverton
UNCOMPAHGRE NATIONAL FOREST
Lake City
Gateview
Powderhorn
Uncompahgre Pk 14309
Wild Horse Pk 13271
Mt Sneffels 14150
GUNNISON NATIONAL FOREST
Stewart Pk 14060
LA GARITA MTNS.
RIO GRANDE NATIONAL FOREST
Bonanza
Villa Grove
Orient
Mineral Hot Springs
Saguache
Moffat
Crestone
Crestone Pk 14294
SANGRE DE CRISTO
Coaldale
Cotopaxi
Texas Creek
Hillside
Westcliffe
Lone Cone 12761
SAN MIGUEL MTNS.
Mt Wilson 14246
Dunton
Rico
Dove Creek
Cahone
Pleasant View
Yellow Jacket
Lewis
Arriola
Lebanon
Dolores
Stoner
SAN JUAN NATIONAL FOREST
LA PLATA MTNS.
Cortez
Aldridge
Mancos
Rockwood
Hermosa
La Plata
Mayday
Hesperus
Fort Lewis
Breen
Kline
Marvel
Redmesa
DURANGO
Gem Village
Bayfield
Falfa
Oxford
Indian Agency
Ignacio
Tiffany
Arboles
La Boca
Vallecito
SAN JUAN NAT'L FOREST
Mt Eolus 14085
Windom Pk 14091
Creede
Wagon Wheel Gap
Spar City
Fluorspar Mine
Masonic Park
South Fork
Del Norte
Center
Hooper
Sargents School
Mosca
Monte Vista
Alamosa
Zinker
Wolf Creek Pass 10850
Summitville
Platoro
Summit Peak 13272
Pagosa Springs
Blanco Basin
Chimney Rock
Piedra
Lonetree
Trujillo
Pagosa Jct.
Juanita
Edith
Chromo
RIO GRANDE NATIONAL FOREST
SAN JUAN MTNS
Capulin
La Jara
Sanford
Estrella
Blanca
Lasauses
San Acacio
Romeo
Manassa
Las Mesitas
Conejos
Lobatos
Antonito
San Antonio
Mesita
Jaroso
Garcia
Costilla
Ortiz
Closed in Winter
UTE MOUNTAIN INDIAN RESERVATION
SOUTHERN UTE INDIAN RES
NEW MEXICO
Cedar Hill
La Plata
NAVAJO INDIAN RESERVATION
CARSON
JICARILLA APACHE INDIAN
Dulce
Lumberton
Monero

San Juan Mtn's.

The area of interest is bounded by Cortez, Durango, Gunnison & Salida. Erossion is deeper in the west and potential porphyry's should be exposed in the rims of cauldeas. East of the Silverton cauldera the late volcanic cover has not been removed, therefore a search should be made for alteration areas and volcanic necks.

The Colo. mineral belt projects into the San Juan Mtns. and should be the axis of igneous activity. Two periods of eruption are noted 1. Late Cretaceous to Eocene and 2. Miocene. The Miocene event is probably in respouce to Basin & Range stress and most likely to be exposed. The earlier event is Laramide and may be related to Ariz. mineralization. The distance from coast batholiths seems too great for a major subduction to be the cause. Perhaps minor down warp caused by movement of the Colo. Plateau in response to coast batholith development?

Miocene mineral belt is ±60° to S. Utah lineament and may be tear opened when Basin and Range started.

One month is proposed to look at this area and locate alteration and porphyry zones. After 2-3 weeks

in the field Ken could review results. Property ownership & ecology would occupy most of next winter and work on selected targets could start the following summer.

July through Sept. is all that can be expected for dry ground in the mountains.

2/1/73
D.L.T.