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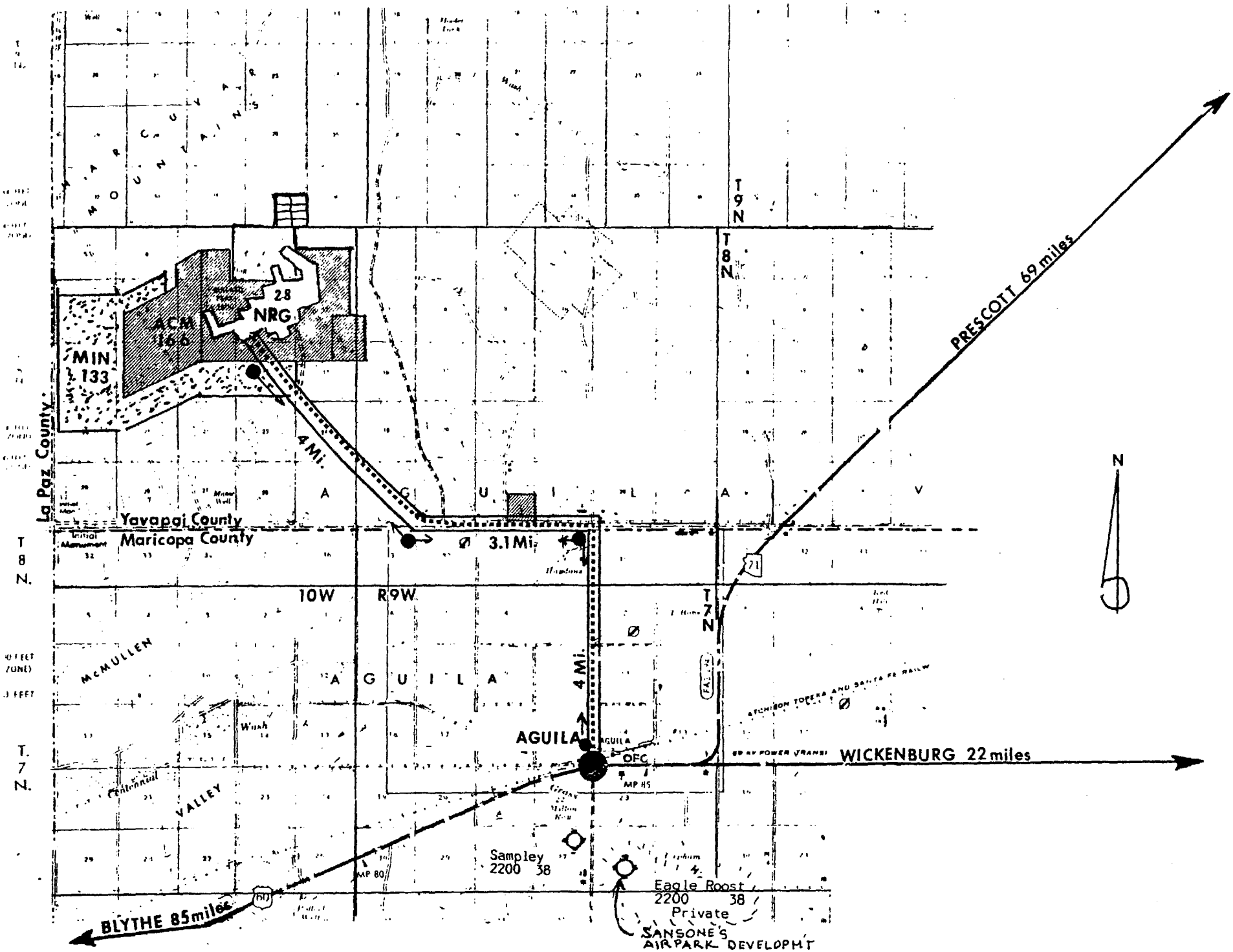
MARCUS MOUNTAINS
T 9 N
T 8 N
28
NRG
ACM 166
MIN 133
4 Mi.
La Paz County
Yavapai County
Maricopa County
3.1 Mi.
T 8 N.
10W
R9W
T 7 N
McMULLEN
AGUILA
4 Mi.
AGUILA
OFC
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VALLEY
Sampley
2200 38
Eagle Roost
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Private
SANSONE'S
AIRPARK DEVELOPMT
PRESCOTT 69 miles
WICKENBURG 22 miles
BLYTHE 85 miles
N

cc JCB PGV

~~Jim Bussman ph~~ 621-2509

~~Paul Hartberger AIME Prep Sept '75~~

~~Geo & All of U V Ext.~~

~~24p (WCK 1981 Salt Lake City, Ut~~

~~Nov 24, 1975~~

Bullard ~~Peak~~ Claims Horsemen Mts

Yavapai Co Sec 2, 11, T8N R10W

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The Northern Times, March 13, 1959 p.12

ASARCO Southwestern Exploration Division JDS

May 12, 1989

J.D. Sell

Cominco Resources Inc.
Bullard Peak Property
Yavapai County, AZ

Jim Telford, Geologist for Cominco Resources (702-355-8787) called me about their Bullard Peak Property. The property consists of approximately 5000 acres of patented and unpatented claims. They have drilled 14 rotary holes approximately 250' deep into some of the H.G. quartz, carbonate, copper vein structures exposed on the surface. Surface rock chip sampling is very favorable. However, the drilling indicated that the values and structures do not persist down dip. Mineralization occurs in the upper plate of the Bullard Peak "Detachment" in the Bullard Peak andesite. Telford also said that much of the favorable ground is under cover.

The property will probably be available for examination soon, and I told Telford that we would like to take a look when available. Incidentally, Cominco will be opening up an office in Tucson. Noel Cousins, et al.

Mark A. Miller

MAM:mek

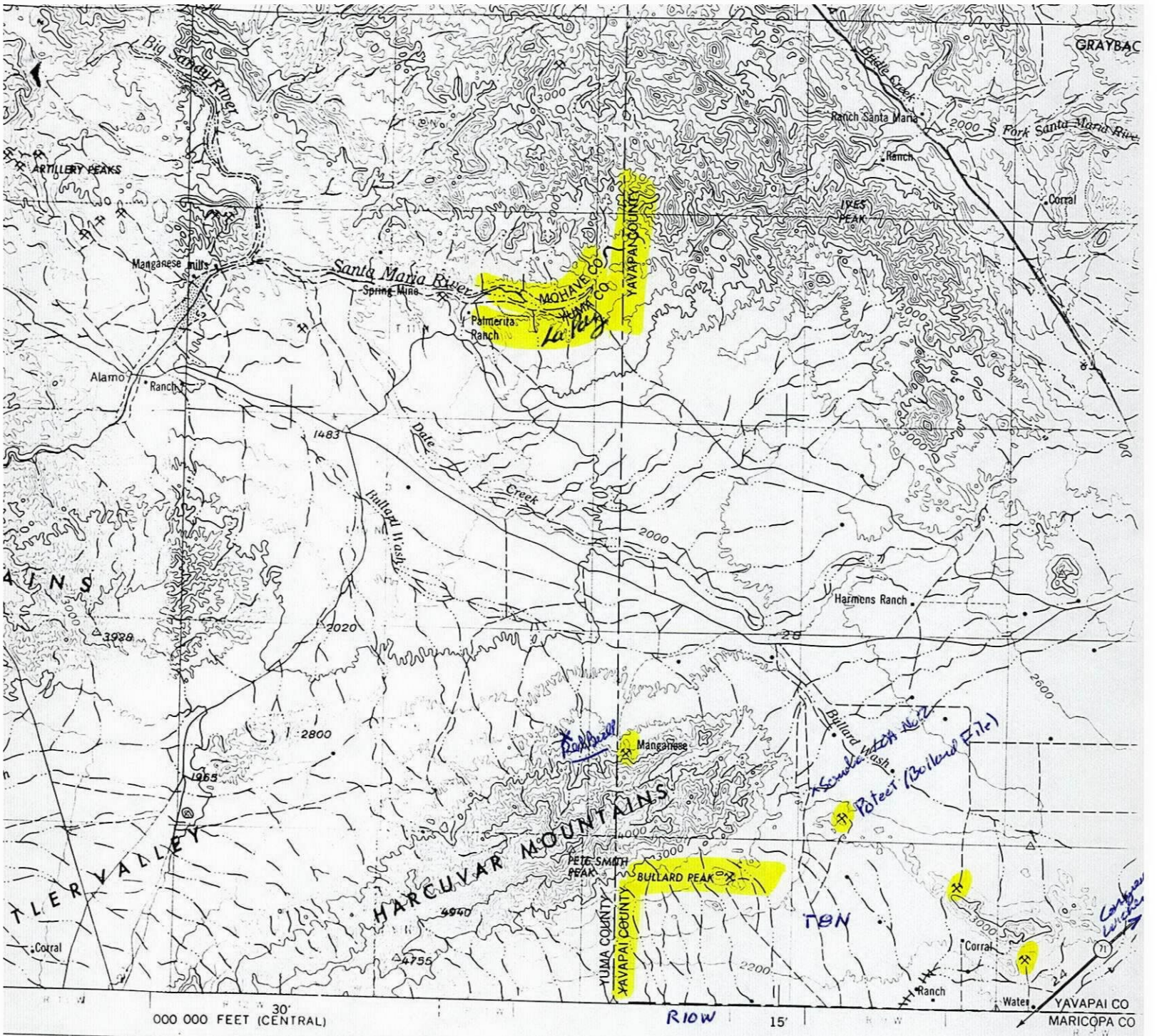
12/9/91

Michael Sansone of Phoenix.
Ballard Peak area

Comenco FMC

will bring data down.
Friday PM Dec 13

(ii) commencing Oct. 1, 19



LEGEND

ROAD DATA 1954 PARTIALLY REVISED 1962

2-11 ? See 3-10 ?

LOS ANGELES
OMAHA
GALVESTON
Laramie
Grand Coulee
Sun Valley

ROADS
Hard surface, heavy duty
More than two lanes wide — 3 LANES | 4 LANES
Two lanes wide; Federal route marker — 5
Hard surface, medium duty
More than two lanes wide — 3 LANES | 4 LANES
Two lanes wide; State, Interstate route markers — 11 — 17
Improved light duty
Unimproved dirt
Trail

Double or Multiple
Landplane airport
Landing area
Seaplane airport
Seaplane anchorage
Woods brushwood
Approximate road alinement

Landmarks: School; Church; Other
Horizontal control point Windmill
Spot elevation in feet — 221
Marsh or swamp
Intermittent or dry stream
Power line

5 0
5 0 5
5 0

Prescott Ans

WITH SUPPLEM
TRA

1960 MAGNETIC DECLINATION
EDGE TO 14°15' EASTERLY FO

FOR SALE BY U. S. GEOLOGICAL

See Bullard File

See File, Bullard Peak

Includes:

1. 1981 AZ Aeronautical Chart w/ Eagle Roost
2. REDCO, 1985 Samples/assay results.
3. Freeport McMoRan, 1986, mapping, sample, 10 drill holes, assays.
4. Cominco American, 1989-1990 Report, mapping, sampling, 42 drill holes, assays.
5. Report by T. Weiskopf, Oct 1990, on Freeport & Cominco drilling.

Report on the

Bullard Peak Prospect

6. FMC Gold, Dec. 1990, sample loc. & description but no assay values. Turned property down.
7. Amax Gold, Jan 1991, sample map & assays.
8. Noranda, Jan 1991, sample map & assays.
9. AZ Bur Geol Open-File Report 84-4.
10. M. Sansone claim map
11. Access map-sketch.

October 1990

Prepared for Michael Sansone

Box 10402
Phoenix, AZ 85064
ph 602/956-6070

by Thomas Weiskopf

Introduction

The following report briefly describes the claimblock and the general geology of the Bullard Peak prospect in western Arizona. Mineralization styles and recent exploration findings are then discussed with an emphasis on elucidating those features relevant to further exploration in the area. Finally, targets for further activity are briefly outlined.

Location

The Bullard Peak property is located off the Eastern portion of the Harcuvar Mountains, in Yavapai County, Arizona (Fig 1). It is ten miles north of the town of Aguila, and is accessible year-round via well maintained dirt roads. The elevation varies from about 2,300' to 3,100'. The area is within the Smith Peak and Date Creek Ranch SW 7.5' USGS Quadrangle maps.

Land Status

The mineralized area is contained within 308 unpatented claims, a state prospecting permit, and 28 patented claims. The former two are controlled by Mike Sansone, and the latter by NRG Resources. All parcels are contiguous and available for exploration (Fig 2).

General Geology

The Bullard Peak property is located in upper-plate rocks

above the Bullard detachment fault. This low angle normal fault outcrops along the southeast flank of the Harcuvar Mountains Metamorphic core complex. This northeast-trending fault runs along the northwest portion of the claimblock and the dip is about sixty degrees to the southeast at the Bullard property. The fault formed in an extensional regime and is interpreted to have 40 to 50 kilometers of displacement (Reynolds and Spencer, 1985) (Figs. 3 and 4).

The oldest rocks in the area consist of lower-plate Proterozoic crystalline rocks and Upper Cretaceous to lower Tertiary granitic rocks, which have been overprinted by a Tertiary mylonitic fabric (Roddy et al., 1988). Along the fault these rocks have undergone extensive reaction with hydrothermal fluids as evidenced by brecciation and alteration to a mineral assemblage including chlorite, epidote and local hematite.

The fault is characterized by intense mylonitization, variable silicification, chloritized breccias and local massive iron oxides.

The upper plate rocks consist of upper Oligocene to middle Miocene volcanic and clastic rocks. These strike from N70 E to N90 E and dip steeply to the south. The oldest unit is a sequence of ash flow tuffs. This is overlain by sediments consisting of conglomerates and a sedimentary breccia unit. Overlying the sediments is the Bullard andesite. These are flow rocks which contain interlayered sandstones (Reynolds and Spencer, 1984). These andesites host the Cu-Fe-Au veins which

were the source of all of the past production. The volcanics have undergone regional K-metasomatism whereby their mineralogy has been altered to K-feldspar, hematite and quartz (Roddy et al., 1988).

Mineralization

The Bullard district has yielded at least 610,000 pounds of copper, 3,600 ounces of gold, and 6,000 ounces of silver (Keith et al., 1983). The average grade was 1.77% copper, 2.28 opt silver, and 0.21 opt gold (Welty et al., 1985). Production has been from copper and iron bearing quartz veins occupying faults in the brittly deformed upper-plate rocks. These shallowly dipping veins, such as at the Bullard Mine, strike N 55 E and dip 15 to 20 degrees to the south. They also occur as steep faults such as the north-south trending veins at the North Hill area. Faults can be traced along the surface for as much as 2,000 feet along strike. The veins average about one to thirty inches wide, but may be as much as six feet in width as at the Bullard mine. Mineral deposits are present within these faults as lenses and pods with varying amounts of quartz, calcite, hematite, copper oxides and silicates, and manganese oxides.

Chloritic breccia zones with or without silicification also contain gold values. This author has found no record of production from this mineralization style on the Bullard Peak property.

Roddy et al., (1988) have shown that the Cu+Fe +/- Au

mineralization postdates K-metasomatism, and that both occurred during detachment faulting. These authors suggest that during K-metasomatism metals were leached from the volcanics and incorporated into the basinal brines. These fluids then ascended along the detachment fault and deposited metals where suitable structural or chemical traps were encountered. Typical traps have been described by Wilkins et al., (1986) and by Spencer and Welty (1989). These include the detachment fault itself, chemically reactive units, chloritic breccias, and a variety of fault types in the upper-plate rocks within the vicinity of the detachment surface (Fig 5). In Western Arizona alone the value of detachment-related mineralization totals over 300 million dollars (Fig 6 and Table 1).

Previous Work

Recent exploration efforts have been undertaken by Freeport-McMoRan Gold Co., in 1986 through 1988, and by Cominco American Resources Inc. in 1989 and 1990. These efforts and their findings will be briefly described. The complete data sets are available to interested parties.

The exploration program carried out by Freeport-McMoRan Gold Co. entailed the collection of about 150 surface rock samples, 10 reverse circulation drill holes, air photo interpretation, and geologic mapping (Fig 7).

Thirteen of the surface samples indicated greater than 1 ppm gold. Of these, nine are associated with high-grade quartz veins

containing copper minerals and iron oxides. The other four highly anomalous samples are of chloritic breccias associated with the detachment surface near the Broken Ladder area and to the SW along the fault.

The drilling program targeted three areas (Fig 8). Reverse circulation holes one through four concentrated on the Broken ladder area. Drilling here targeted the chloritic breccia along the detachment surface. No high grade zones were encountered. However, concentrations of gold up to 0.02 opt were detected, indicating the presence of a mineralization style distinct from the upper-plate fault controlled type. The other two targets were moderately dipping veins at the Accident Hill and Owl areas but no significant mineralization was encountered at either site.

In 1988 Cominco American Resources Inc. conducted an exploration program on the Bullard Peak property. The targets included the John Moore and the North Hill areas. Drilling confirmed high grade but narrow and isolated veins at the John Moore prospect. More encouraging were results from the North Hill area. Here, six holes outlined zones thirty to sixty feet wide with significant mineralization, including a twenty-five foot intercept of 0.197 opt gold in hole 15, a thirty-foot intercept of 0.187 opt in hole 14, and a twenty-five foot intercept of 0.078 opt. in hole 17 (Fig 9, 10 and 11). Twenty surface rock samples along the 2,000' length of this vein averaged 0.263 opt gold, and ranged from 0.002 to 0.830 opt.

An expanded reverse circulation drill program in 1990

consisted of twenty-four holes and 11,225 total footage. Two of these drill holes targeted this vein approximately 1,500' south of where the mineralization was encountered. One of these (hole 19) encountered four, five to ten foot intervals, each of about 0.02 opt, between 185' and 585'. The other hole (number 34) encountered a five foot zone of 0.04 opt at 105'depth. The intervening 1,500 remain untested as does the mineralized zone below a depth of two hundred feet. One drill hole apparently intended to intersect this structure 400 feet north of the main intercept did not encounter mineralization. An deflection in the strike of the vein of 5 degrees to the west is one explanation for the lack of an intercept.

The remaining drill holes targeted veins east of the main structure and encountered only spotty mineralization. Cominco American's objectives of "several 50'+ intercepts of .075 opt", were thus not met during the 1990 exploration phase (Telford, 1990).

Mineralization Targets

A gold bearing hydrothermal system ascended along the Bullard detachment fault and invaded structural sites at the Bullard Peak property. Two possible depositional sites occur on the property. One is the faults in the upper plate. These sites are responsible for the metals produced to date and have been the focus of recent exploration programs. Thousands of feet of strike length have gone untested. Particulary attractive are the

areas to the north, south and below the mineralization detected in drill holes fourteen through eighteen on the North Hill area.

A second possible site of mineralizing are the porous sedimentary rocks, especially the sedimentary breccia unit. This target has never been explored. A variably dipping fault has been traced from the John Moore prospect, and through the Unity prospect before terminating at the intersection of the sedimentary breccia unit and the Bullard detachment fault. This area warrants detailed mapping and sampling. It should be noted that at Cyprus Copperstone, where 510,000 ounces of gold have been outlined, mineralization occurs within virtually identical sedimentary breccias that are also directly above a detachment fault.

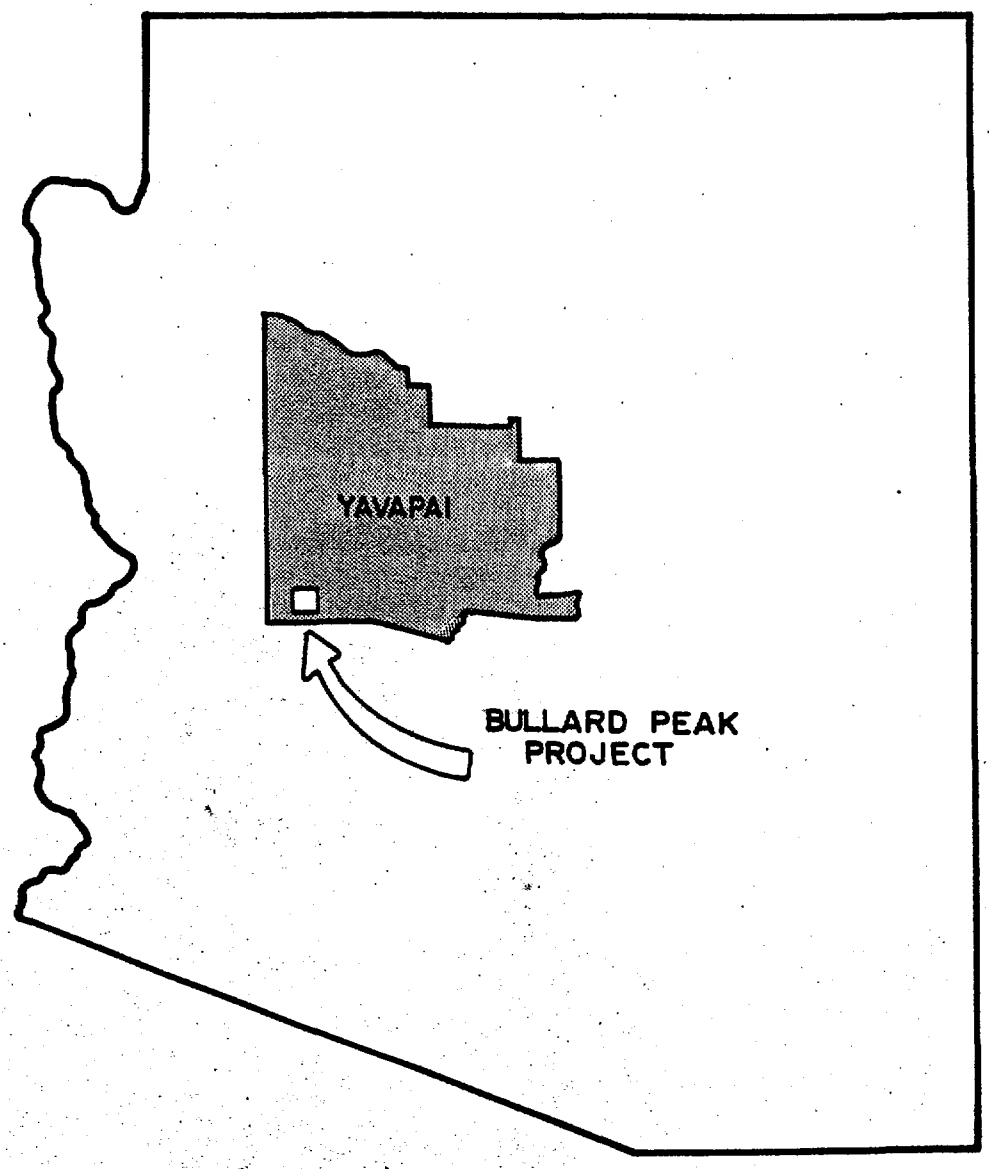
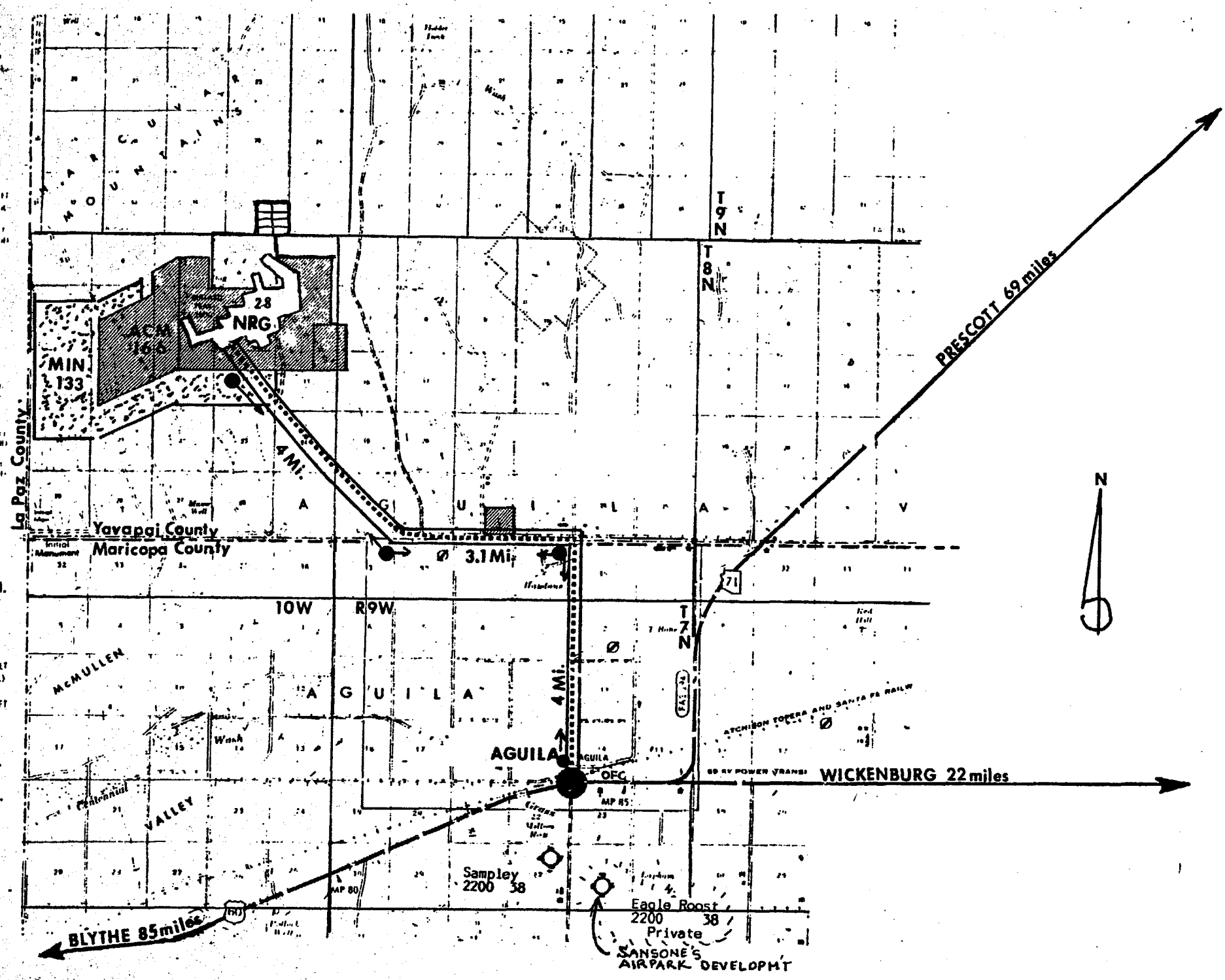
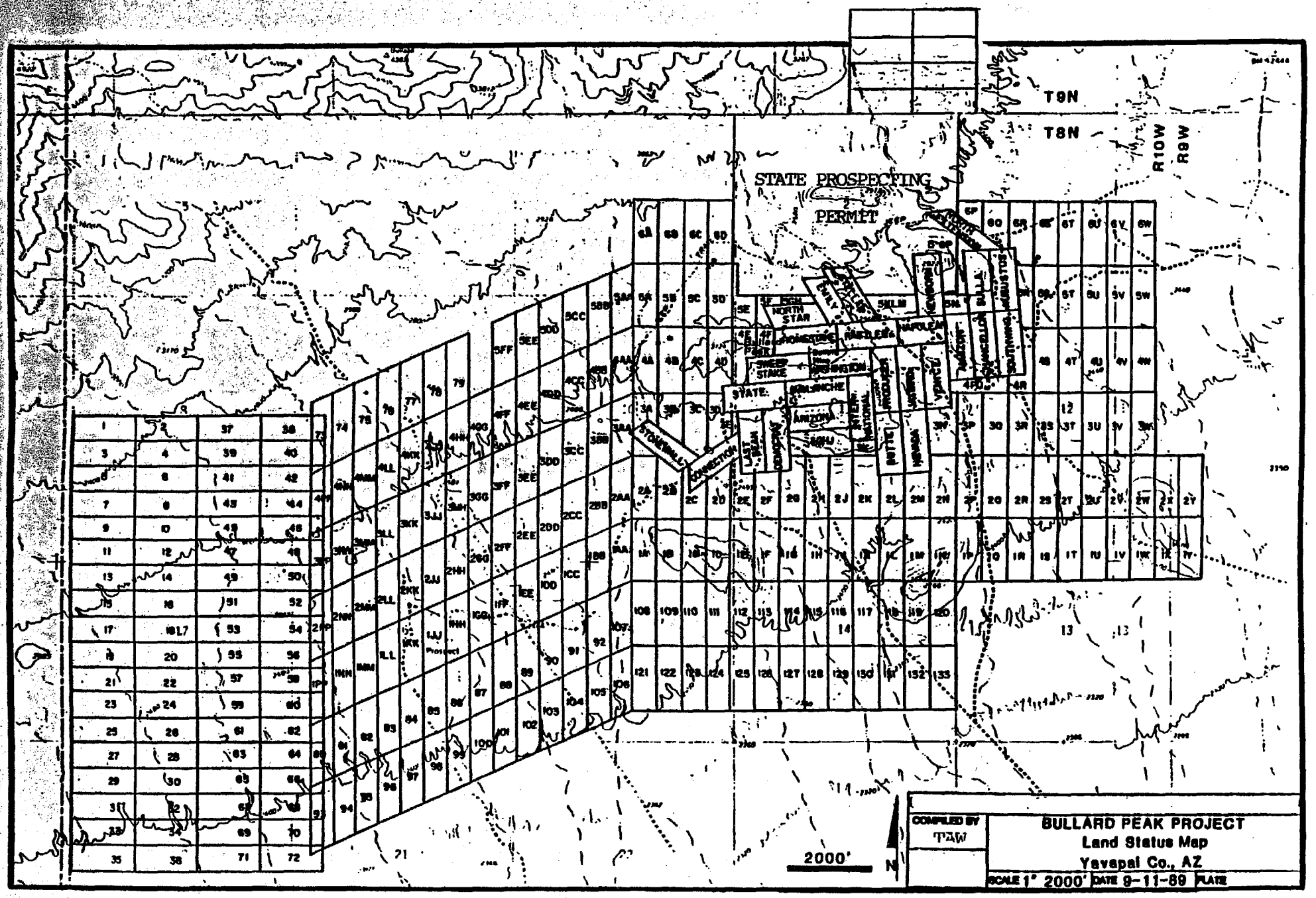


Figure 1
BULLARD PEAK PROJECT
YAVAPAI COUNTY, AZ



MARCUVAR MOUNTAINS
T 9 N
T 8 N
PRESCOTT 69 miles
28
NRG
ACM 166
MIN 133
La Paz County
4 Mi.
A G U I L A V
Yavapai County
Maricopa County
3.1 Mi.
T 8 N.
10W
R9W
T 7 N
71
McMULLEN
A G U I L A
4 Mi.
ATCHISON TOPEKA AND SANTA FE RAILW
AGUILA
OFC
MP 85
WICKENBURG 22 miles
T. 7 N.
VALLEY
Sampley
2200 38
MP 80
Eagle Roost
2200 38
Private
SANSONE'S AIRPARK DEVELOPM'T
BLYTHE 85 miles
60
N



Date Creek Ranch SW, Smith Peak 7.5 minute quads

T8N,R9-10W G & SR Meridian

FIGURE 2

(after Telford 1990)

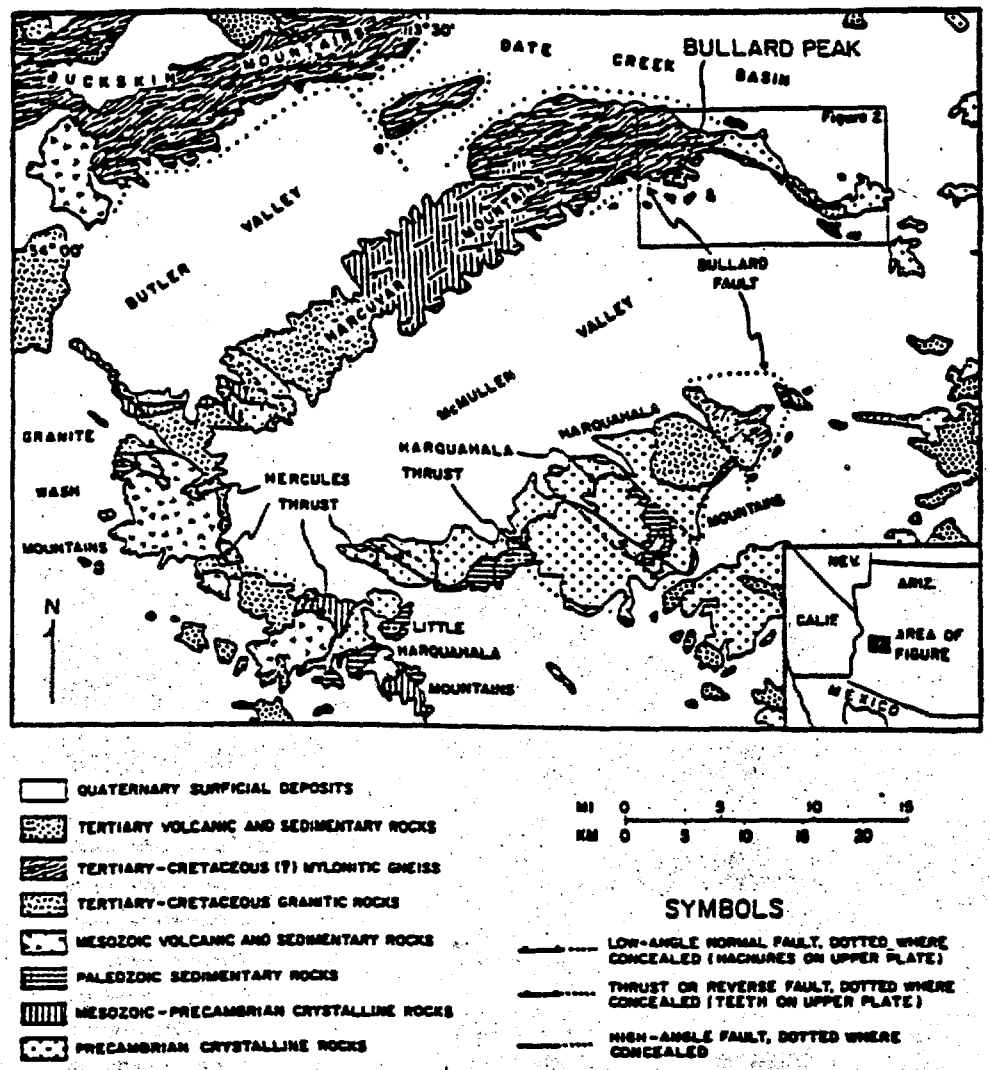


Figure 3 .Simplified geologic map of McMullen Valley area. Sources of data include Rehrig and Reynolds (1980), Reynolds (1982), Reynolds and Spencer (1984), and unpublished mapping by S. J. Reynolds, S. M. Richard, and J. E. Spencer.

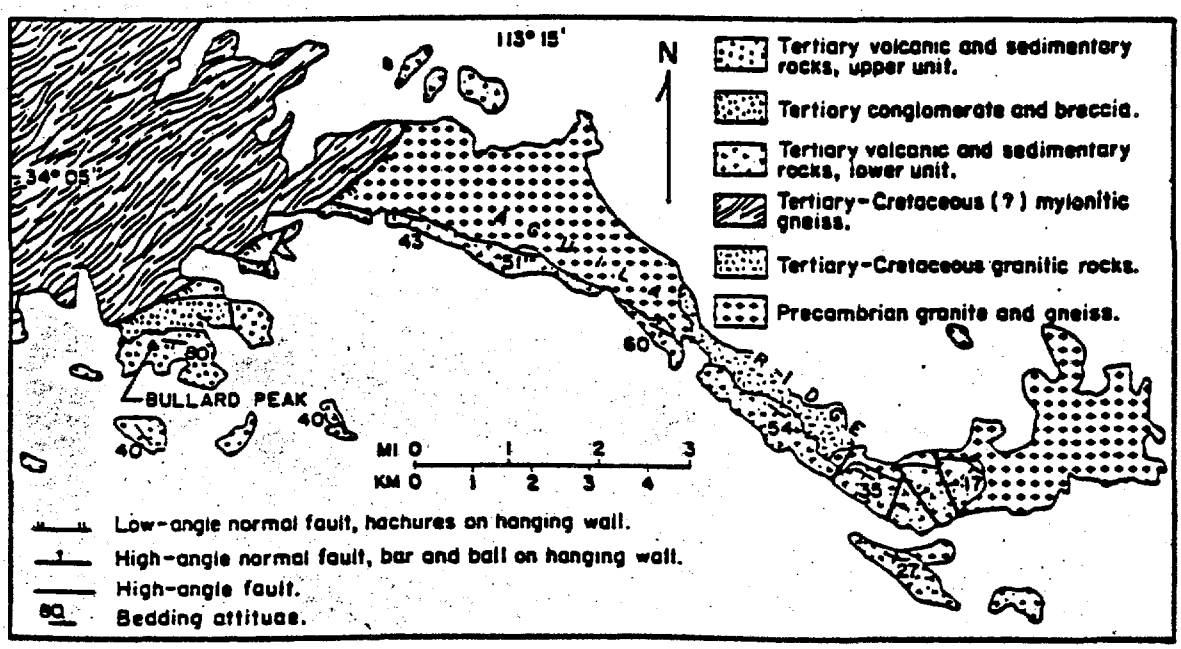


Figure 4. Simplified geologic map of Aguila Ridge, Bullard Peak area, and easternmost Harcuvar Mountains. Areas without pattern are Quaternary surficial deposits. See Figure 1 for location of map area.

REYNOLDS and SPENCER, 1987

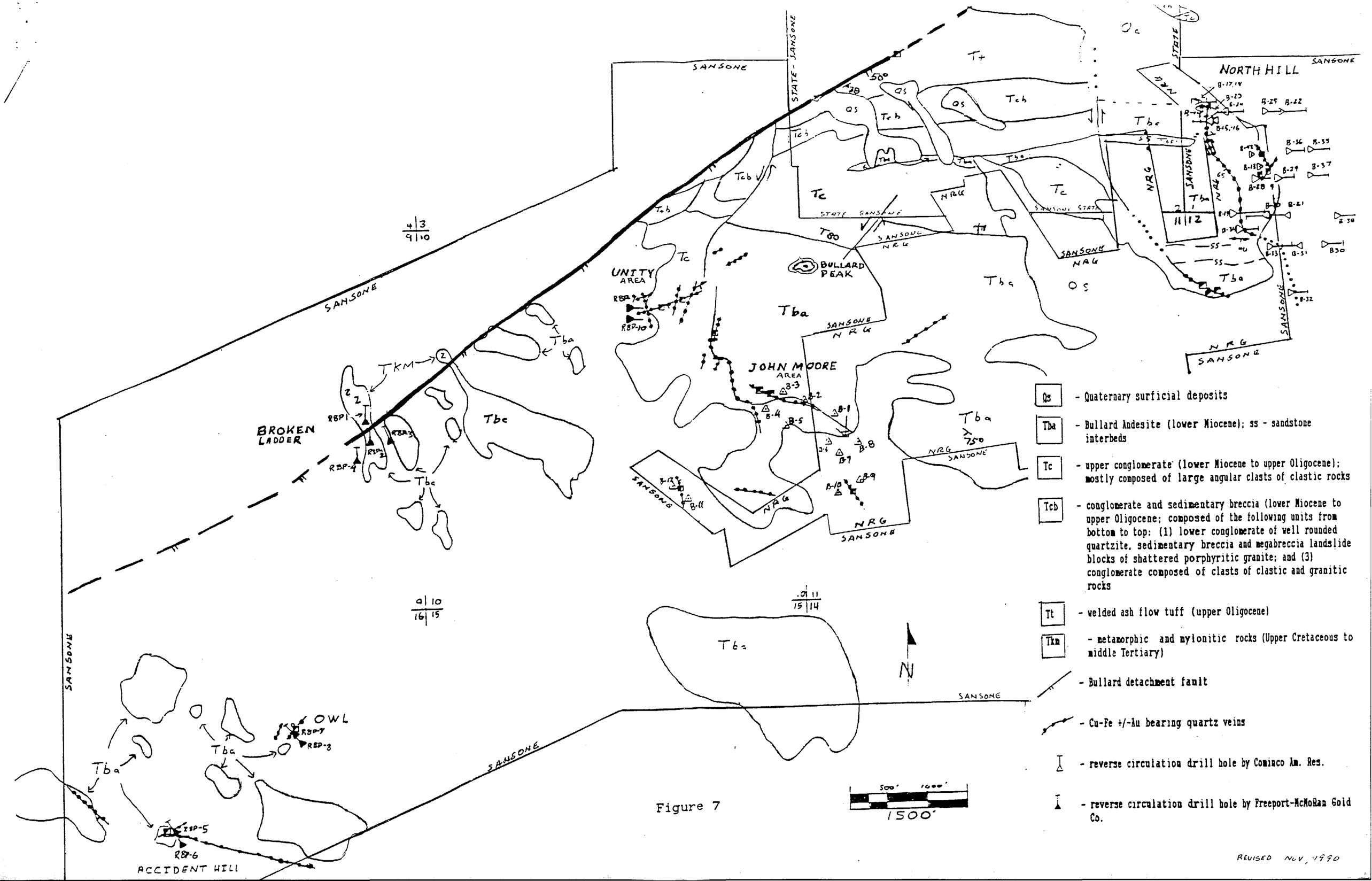

NORTH HILL
UNITY AREA
BULLARD PEAK
JOHN MOORE AREA
BROKEN LADDER
OWL
ACCIDENT HILL
SANSONE
STATE - SANSONE
NRG
Qs - Quaternary surficial deposits
Tba - Bullard Andesite (lower Miocene); ss - sandstone interbeds
Tc - upper conglomerate (lower Miocene to upper Oligocene); mostly composed of large angular clasts of clastic rocks
Tcb - conglomerate and sedimentary breccia (lower Miocene to upper Oligocene; composed of the following units from bottom to top: (1) lower conglomerate of well rounded quartzite, sedimentary breccia and megabreccia landslide blocks of shattered porphyritic granite; and (3) conglomerate composed of clasts of clastic and granitic rocks
Tt - welded ash flow tuff (upper Oligocene)
Tkm - metamorphic and mylonitic rocks (Upper Cretaceous to middle Tertiary)
- Bullard detachment fault
- Cu-Fe +/-Au bearing quartz veins
- reverse circulation drill hole by Cominco Am. Res.
- reverse circulation drill hole by Freeport-McMoRan Gold Co.
N
500'
1000'
1500'
REVISED NOV, 1990

Figure 7

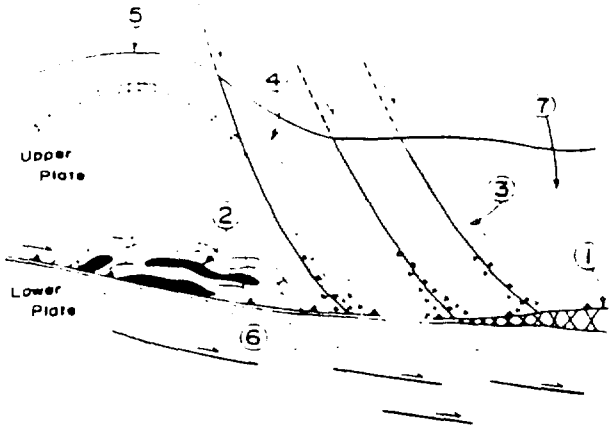


Figure 5. Diagrammatic model of mineralization loci in detachment fault-related deposits. 1. Along fault zones; 2. replacing reactive units; 3. in gash veins; 4. listric fault breccia; 5. fold-axis veins; 6. chlorite breccia; 7. tear faults. After Wilkins and Heidrick, 1982. (from Wilkins et al., 1986)

Table 1. Value of production for commodities from mineral districts in west central Arizona that are known or suspected to be related to detachment faults. Manganese mineral deposits (although not clearly understood) are suspected to be related to detachment faults. District locations are shown on Figure 1

District	Commodities*	1986 Value**
1. Copperstone	Au (reserves)	$189,306,900
2. Alamo	Cu, Pb, Ag, Au	72,303
3. Cienega	Cu, Ag, Au	5,571,167
4. Clara	Cu, Ag, Au	3,066,661
5. Lincoln Ranch	Mn	18,960,000
6. Mammon	Cu, Ag, Au	93,913
7. Midway	Cu, Ag, Au	43,743
8. Planet	Cu, Ag, Au	12,771,828
9. Pride	Cu, Ag, Au	37,679
10. Swansea	Cu, Ag, Au	17,471,085
11. Black Burro	Mn	261,490
12. Cleopatra	Cu, Pb, Ag, Au	1,118,459
13. Lead Pill	Cu, Pb, Ag, Au	303,365
14. Mesa	Mn	47,400
15. Owen	Cu, Pb, Zn, Ag	107,561
16. Rawhide	Cu, Pb, Zn, Ag	116,573
17. Bullard	Cu, Ag, Au	1,763,481
18. Burnt Well	(unknown)	(minor)
19. Harris	Mn	79,395
20. Northern Plomosa	Cu, Pb, Ag, Au	2,123,413
21. Artillery	Mn	75,135,320
22. Whipple	Cu, Pb, Zn, Ag, Au	683,550
TOTAL		$329,135,287

* Ag = silver; Au = gold; Cu = copper; Mn = manganese; Pb = lead; Zn = zinc.

** Values do not add to total because of rounding.

(From Spencer et al., 1988)

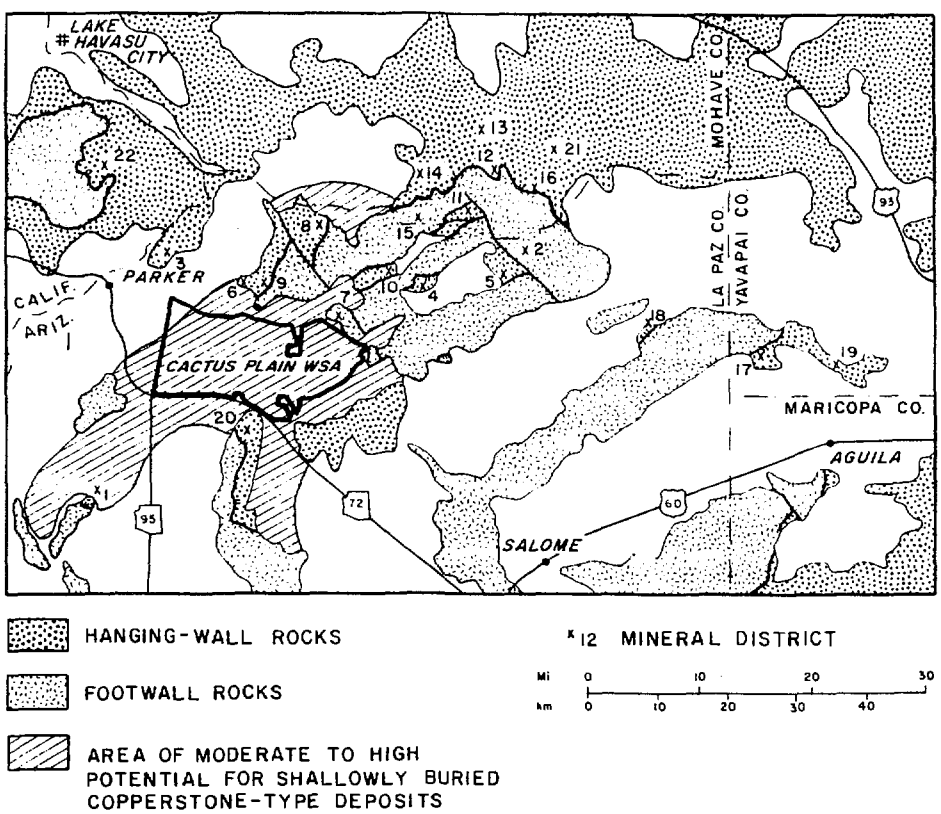
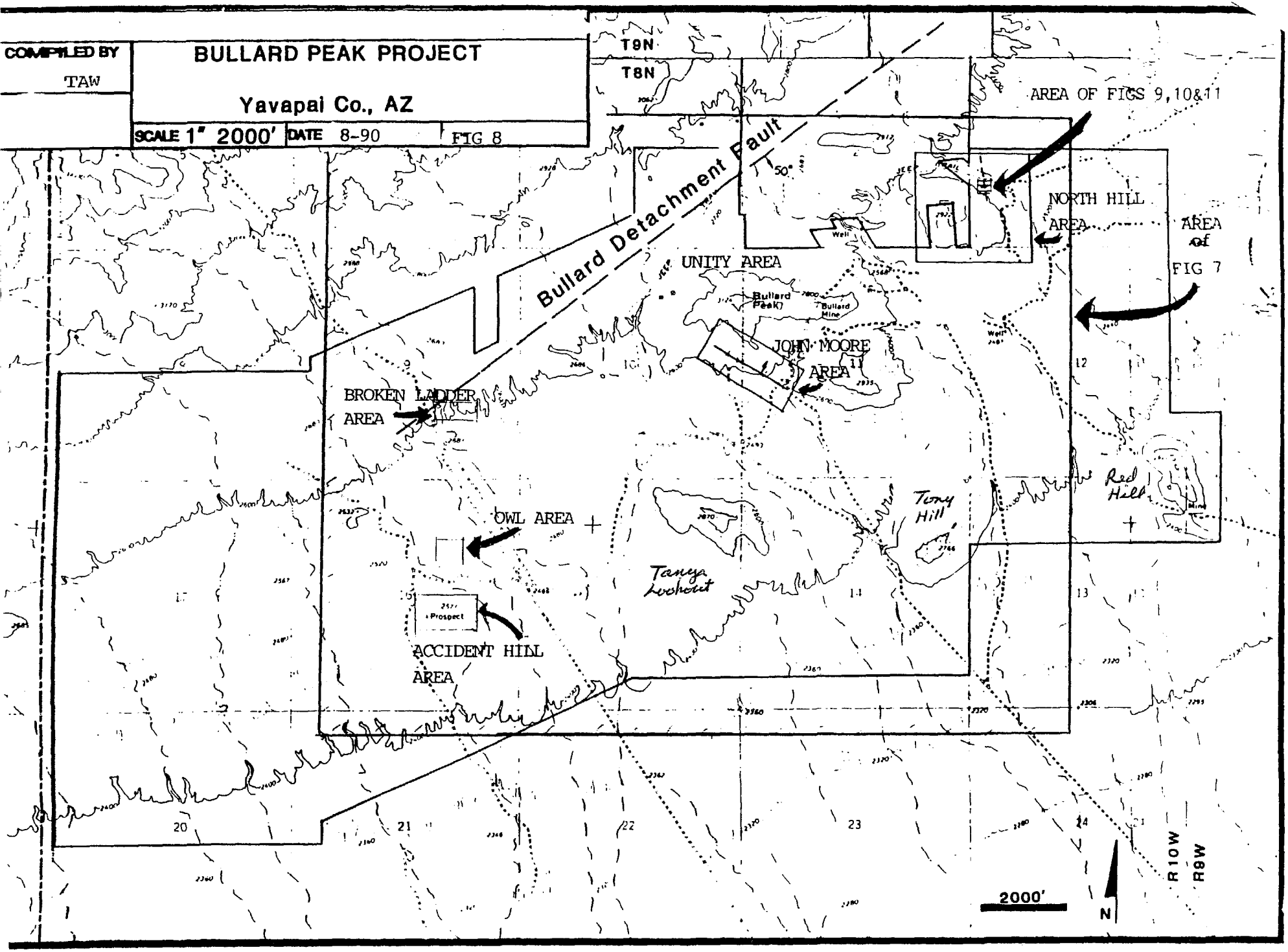


Figure 6. Map of part of west-central Arizona showing mineral districts where mineral deposits are known or suspected to be related to detachment faults. Middle Tertiary and older rocks are divided into hanging wall and footwall rocks, which lie above and below, respectively, regionally northeast-dipping detachment faults. Also shown is the outline of the Cactus Plain and Cactus Plain East Wilderness Study Areas. Numbers refer to mineral districts listed in Table 1.

(From Spencer et al. 1988)



Date Creek Ranch SW, Smith Peak 7.5 minute quads

T8N,R10W G&SR Meridian

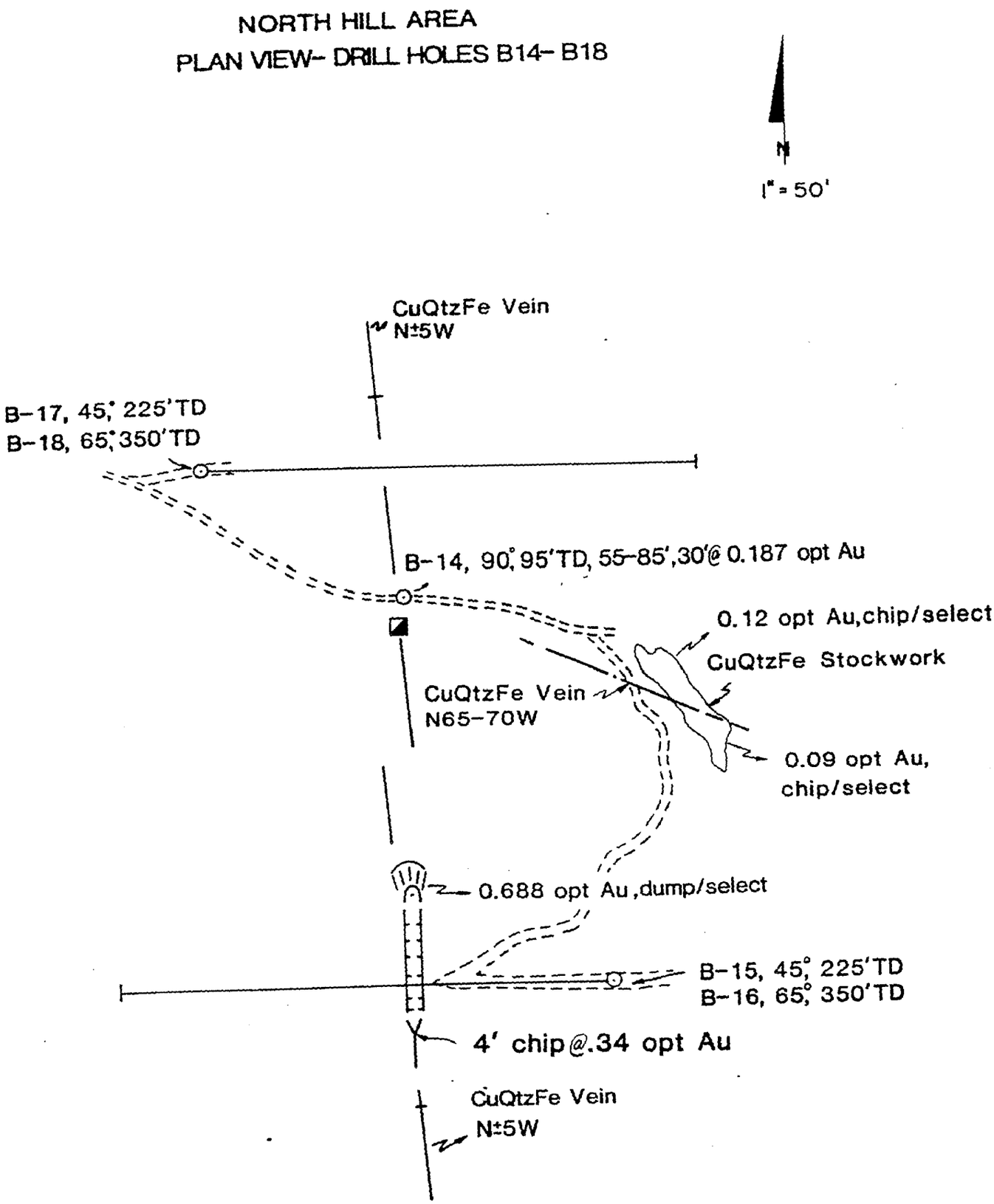


Figure 9. From Telford 1990. See fig 8 for location.

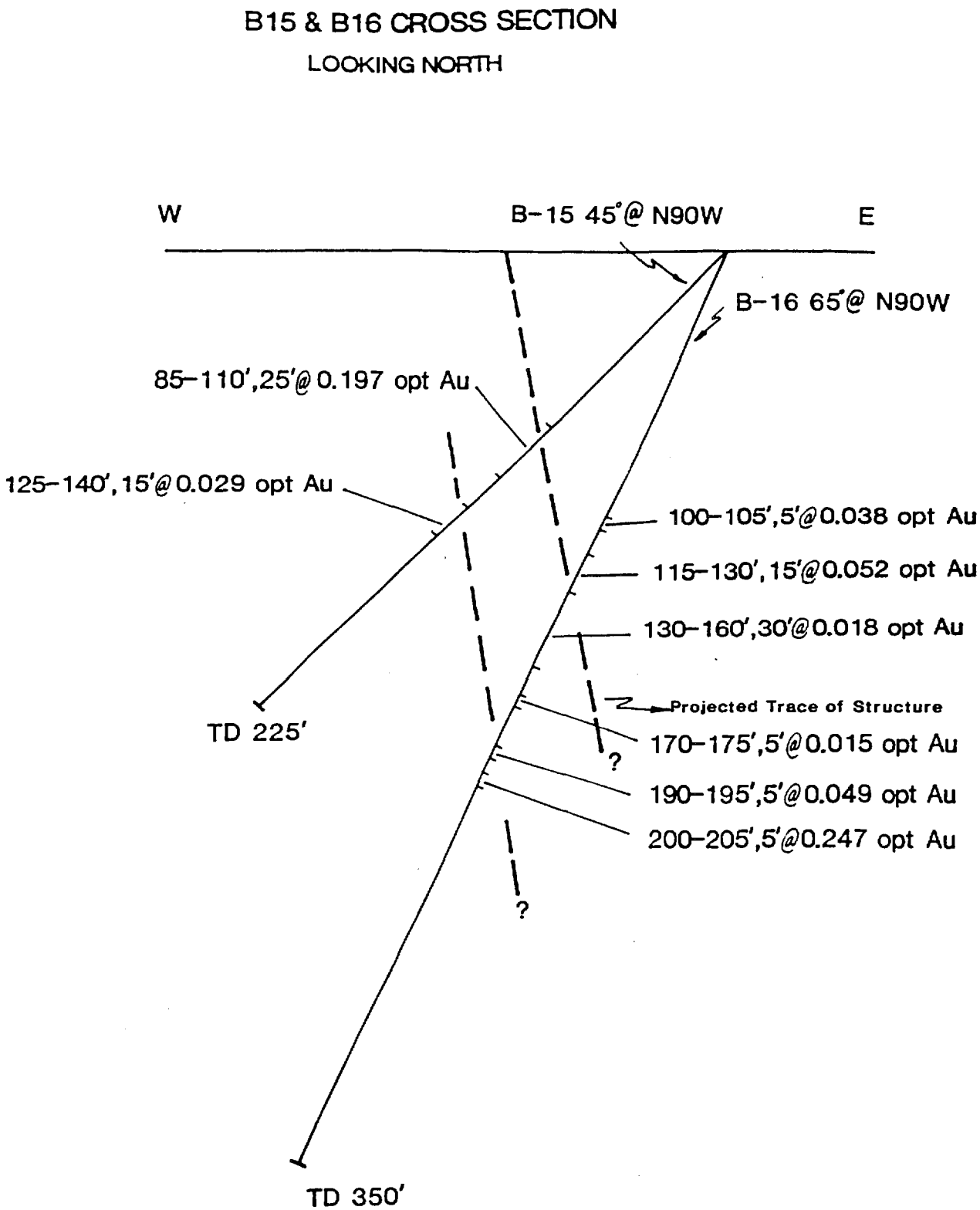


Figure 10. From Telford 1990. See figs 8 & 9 for location.

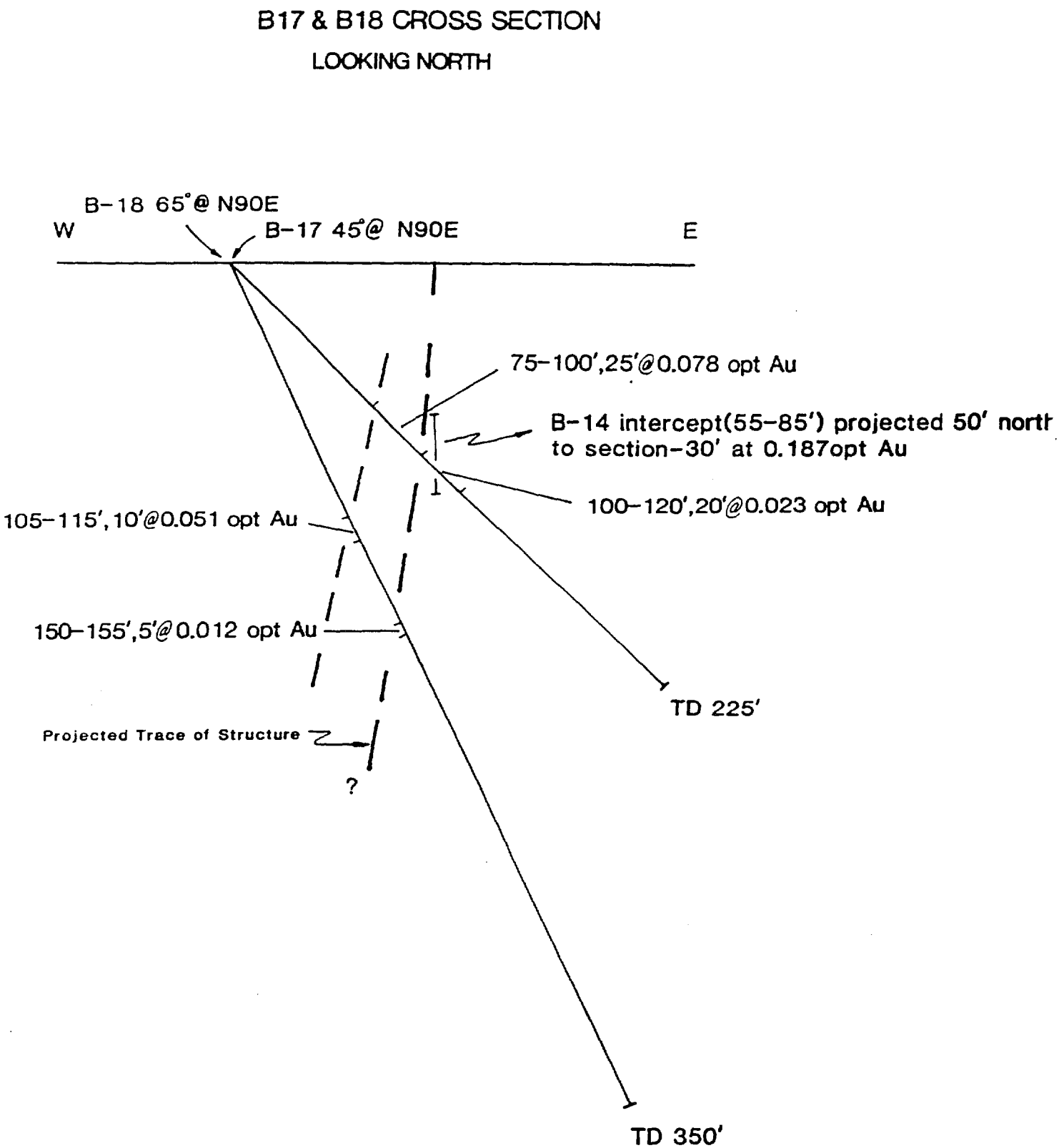


Figure 11. From Telford 1990. See figs 8 & 9 for location.

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PROFESSIONAL RESUME **THOMAS WEISKOPF**

Home Address: 2621 E. Elm St., Tucson, Arizona 85716
Phone: (602) 881-6683

EDUCATION

1988-Present: Currently enrolled in the M.S. Economic Geology program at the University of Arizona.

1981-1984: University of Alaska, Fairbanks. B.S. Geology

1978-1980: Beloit College, Beloit Wisconsin

WORK EXPERIENCE

1989 June-August — Associate Geologist, Freeport-McMoRan Gold Co.
Presently investigating the mineral potential of an old precious and base metal district in southeastern Arizona. This work includes an examination of the district wide zoning in terms of chemical signatures, temperatures of formation, and structural controls. Techniques include statistical analysis of trace element data, fluid inclusion studies, petrographic work, air photo interpretation, and a limited amount of detailed mapping. This work is the basis for my masters thesis.

1988 May-August — Geologist, Nerco Minerals
Duties consisted primarily of the logging and sampling of rotary chips during an extensive, development phase, drilling program in a precious metal epithermal system in southwestern Idaho. Lesser duties included surveying, soil sampling and land reclamation.

1987 May-December — Geologist, RAA/Nerco Minerals. Pre-season activities included a literature search and assisting in organizing the logistics of a 100 day, 7 person field season. Field work consisted of helicopter supported regional reconnaissance mapping and sampling as well as more detailed property evaluation. Post-season activities included assisting in preparation of final report and land status research.

1986 June-October — Junior Geologist, RAA/Nerco Minerals. The majority of the field season was spent on a four geologist, helicopter supported crew, performing regional mapping and sampling in an attempt to locate precious metal mineralization in the Alaska Range. Lesser duties included soil sampling and surveying. I also participated in the preparation of the final report.

1985 July-August — Drillers Helper, Wink Brothers Drilling. Duties included assisting the driller during a 1,500' diamond drilling program using a Longyear Hydra-Core 28.

1985 June-July — Geologic field assistant, Discovery Gold Exploration. Duties included assisting in the collection and correlation of surficial geologic data, drilling results, and literature, in assessing the potential of a shale hosted gold vein deposit. Lesser duties included claim staking and the preparation of drill pads.

1984 May-December	Junior Geologist, Mohawk Resources Alaska, Inc. Duties included planning and implementing a detailed geological mapping, sampling and survey program analyzing the mineral potential of an old gold producing property. Responsibilities included locating and logging diamond drill holes, trench mapping, overseeing soil sampling crews, and integration of geology, geochemistry, and geophysics into a geologic model.
1984 October-May	Student Intern, Alaska Department of Geology and Geophysical Surveys, K-Ar Geochronology laboratory. Duties included upkeep of a "clean" lab and separation of K-bearing mineral phases, using petrographic analysis combined with crushing and sieving, as well as heavy liquid and magnetic methods.
1982, 1983 Summers	Junior Geologist, Mohawk Resources Alaska Inc. Duties included performing geochemical, magnetometer and VLF surveys, as well as claimstaking and sample preparation, in an attempt to define a precious metal vein system. The 1983 season primarily involved placer evaluation.

REFERENCES

Ben Porterfield
Senior Geologist

Nerco Exploration Company
8100 N.E. Parkway Drive
Vancouver, Washington 98668
Telephone 208-583-2511

Bruce Cox
Consulting Geologist (Formerly Senior Geologist with Nerco)

601 Main, Suite 200
Vancouver, Washington 98660
Telephone 206-687-3055

Chris Puchner
Chief Geologist

Caithness Alaska Mining Co.
2173 University Ave. South
Fairbanks, Alaska 99709
Telephone: 907-479-9623

Allan Moran
District Exploration Manager

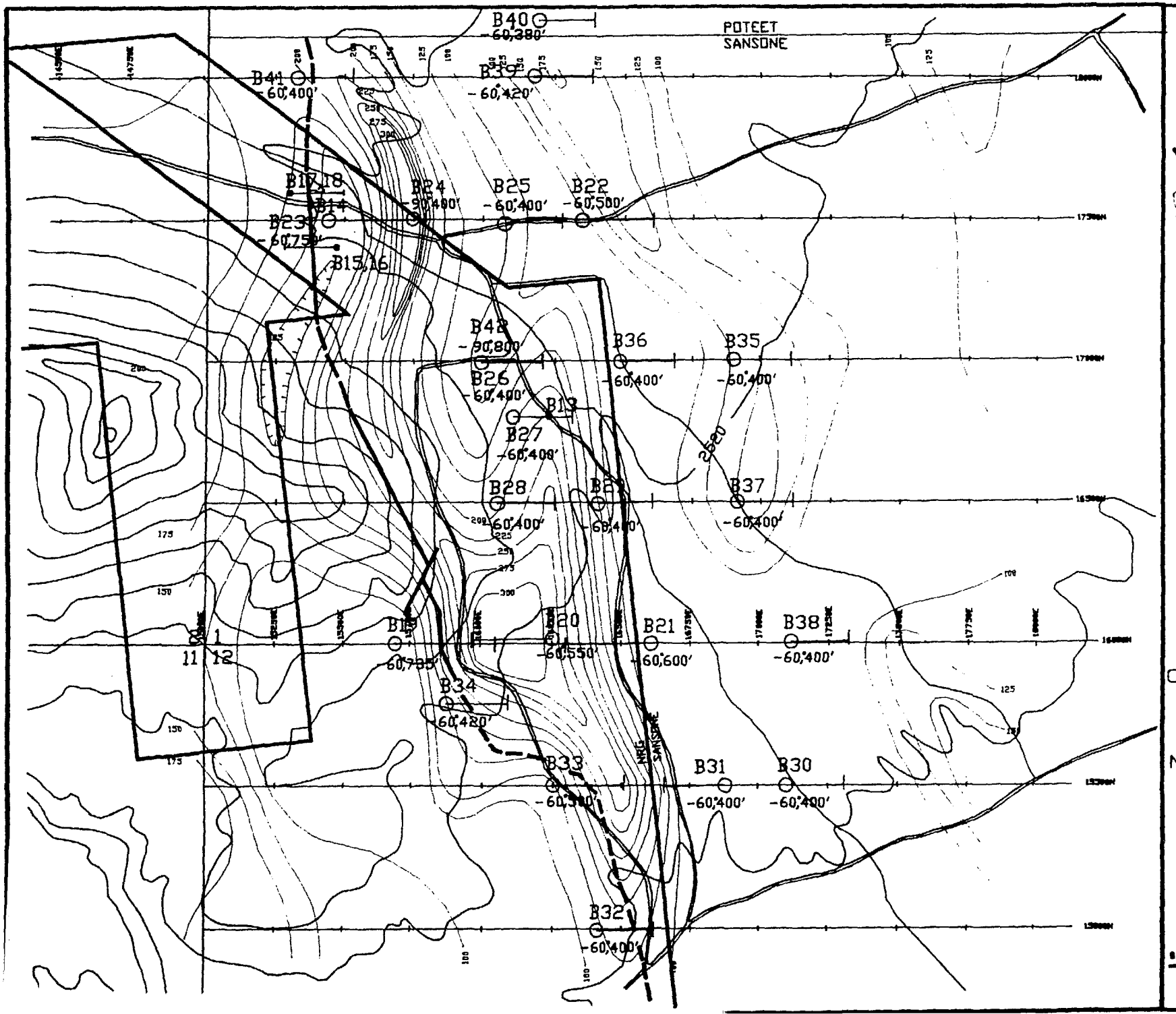
Freeport-McMoRan Gold Company
7400 North Oracle Road
Suite 272
Tucson, Arizona 95704
Telephone 602-797-1393

More references available upon request.

Cominco American
Resources Incorporated

BULLARD PEAK PROJECT
YAVAPAI COUNTY, ARIZONA
1989–1990 FINAL PROJECT REPORT

Reno Exploration Office



EXPLANATIO

O1990 Drilling

• 1989 Drilling

N. Hill Fault

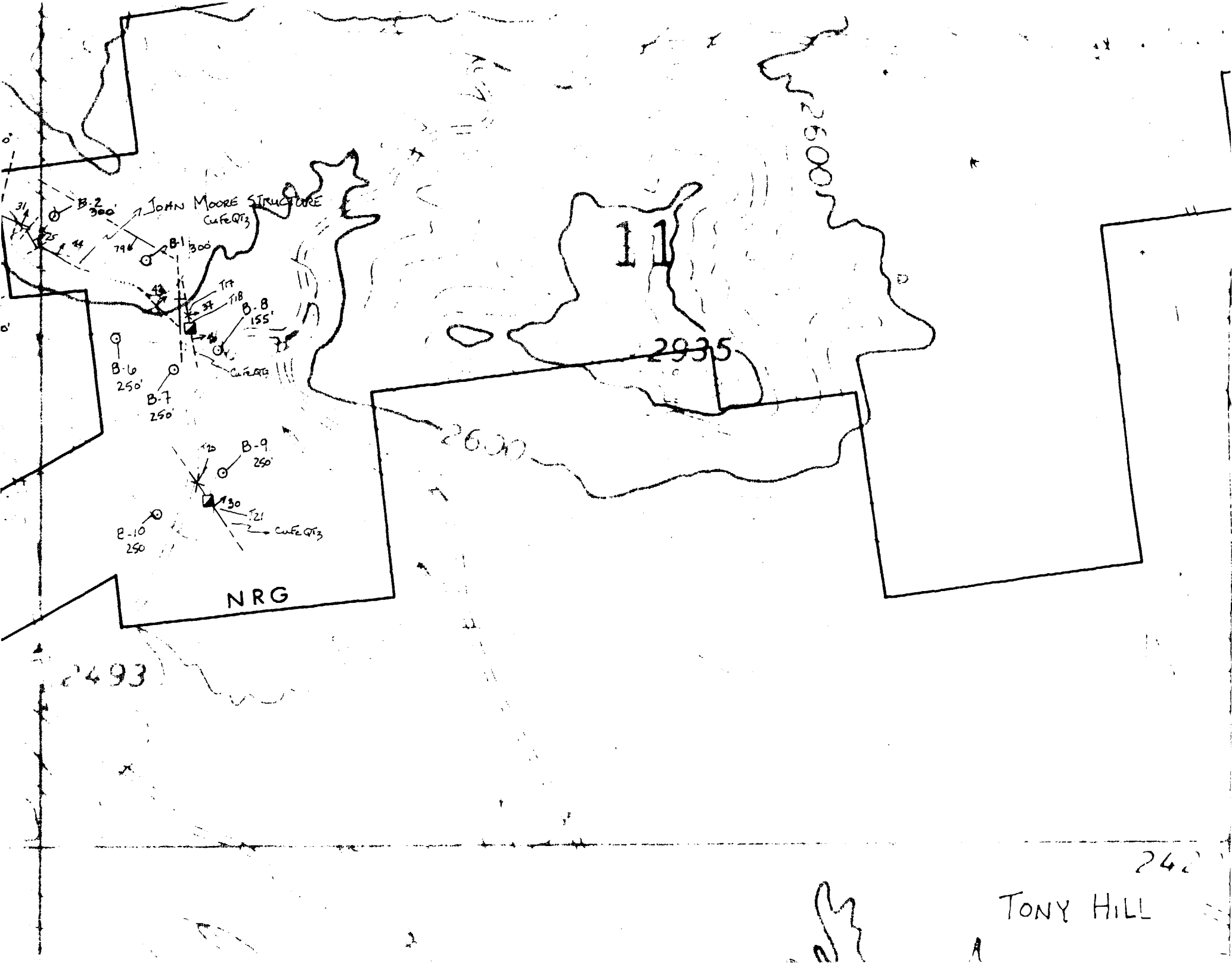
512 Hz contour

Figure 13
BULLARD PEAK
CS-AMT Contour
Map @ 512 Hz
and 1990
Drilling
North Hill Area

Yavapai Co. AZ
T8N, R10W

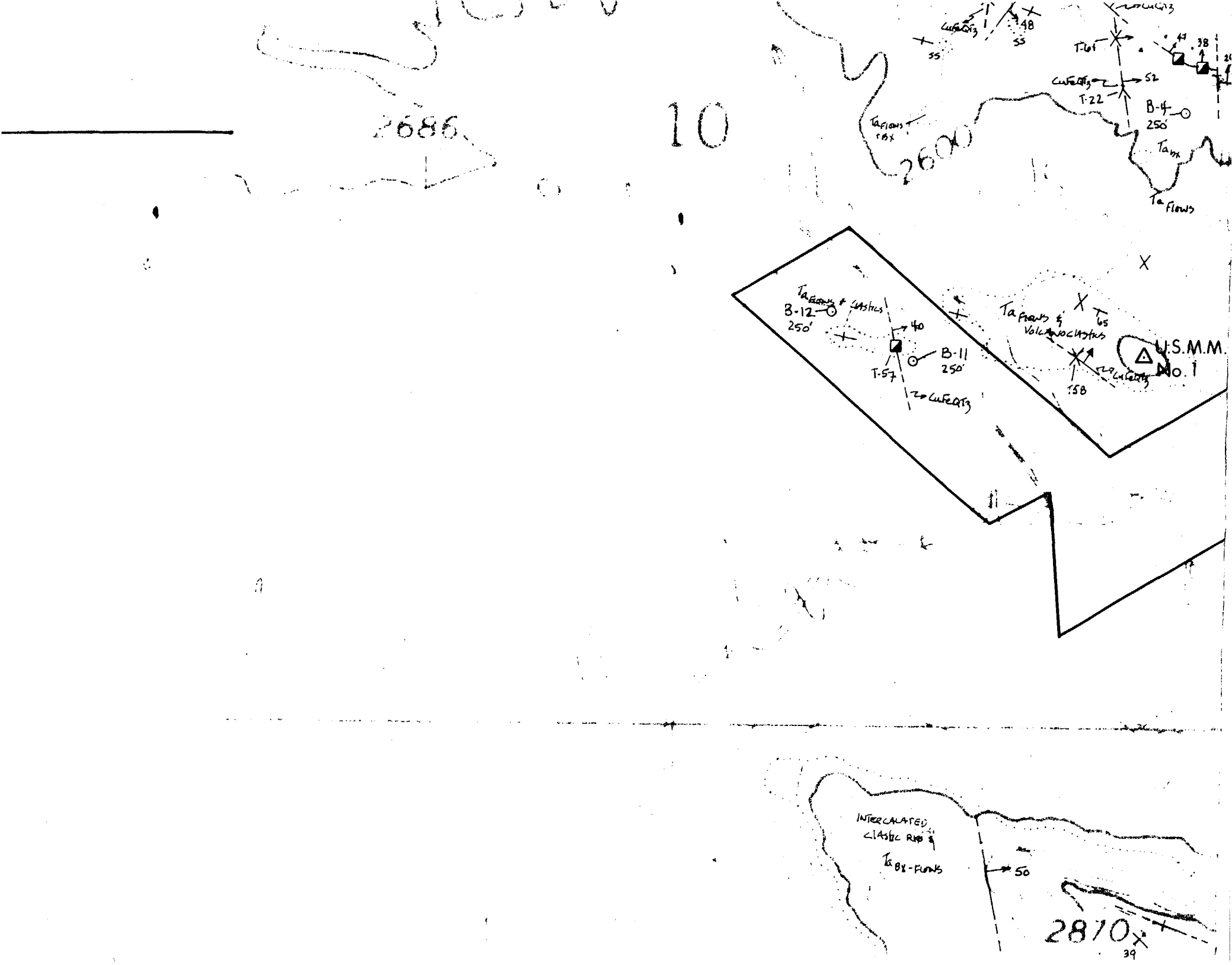
0 500 feet

CHB 3-13-90

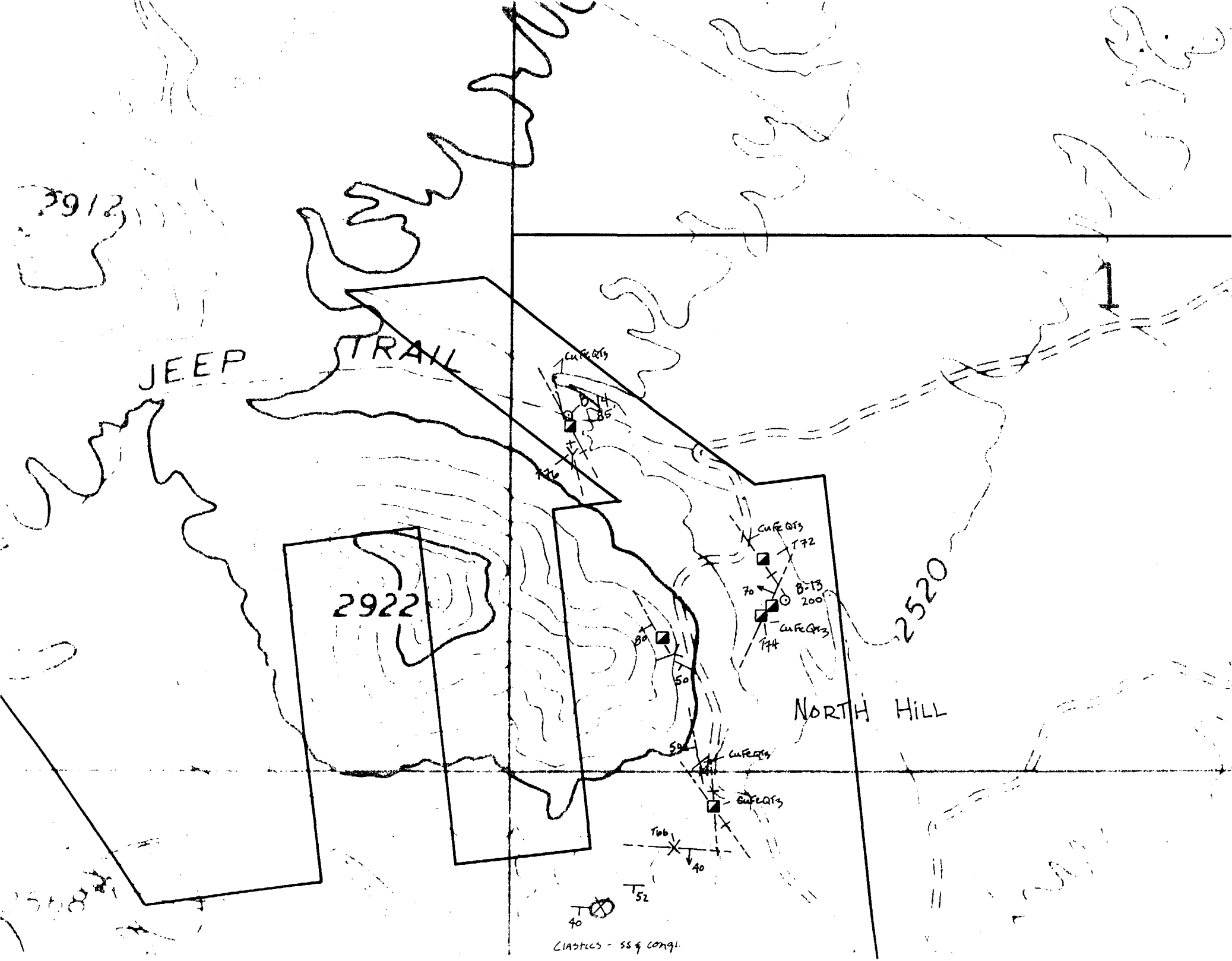


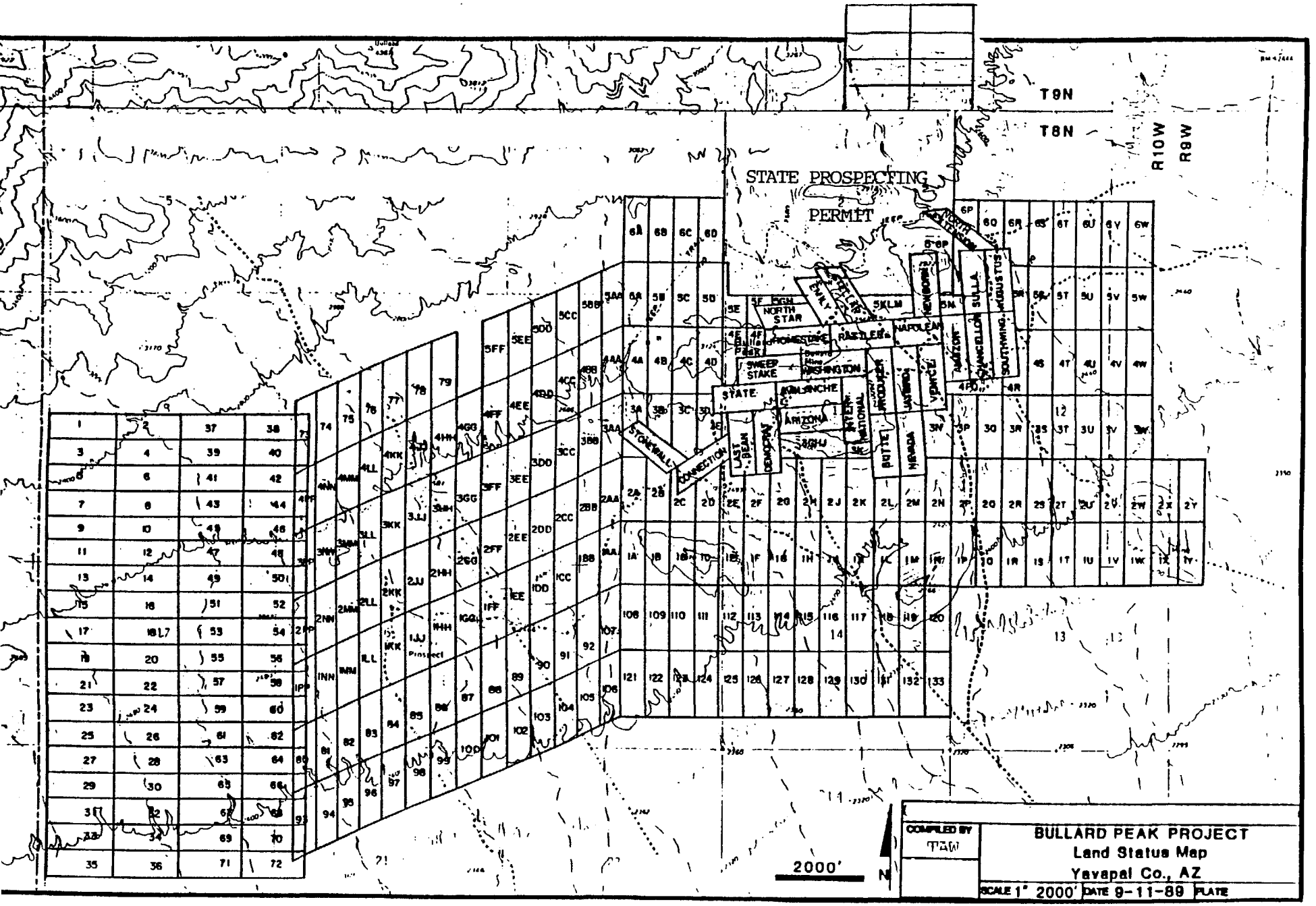
JOHN MOORE STRUCTURE
CuFeQTz
B-2
300'
B-1
300'
T17
T18
B-8
155'
B-6
250'
B-7
250'
B-9
250'
T20
T21
B-10
250
CuFeQTz
NRG
11
2935
2600
2600
2493
TONY HILL

APPROX. TRACE
WIARD DETACHMENT FAULT
(FROM FREEPORT DATA, 1986)
312
2686
10
2600
60
55
40
48
55
55
52
T-22
B-4
250'
38
Ta Flows
B-12
250'
40
T-57
B-11
250'
Ta Flows & Volcanoclastics
65
58
U.S.M.M.
No. 1



2686
10
2600
48
55
T-61
47
38
52
T-22
B-4
250'
Ta Flows
Ta Flows + Clastics
B-12
250'
40
T-57
B-11
250'
Ta Flows & Volcanoclastics
65
U.S.M.M.
No. 1
58
INTERCALATED
Clastic Rks &
Ta Bx-Flows
50
2870
39


JEEP TRAIL
2922
2520
NORTH HILL
CLASTICS - SS & CONGL.



Date Creek Ranch SW, Smith Peak 7.5 minute quads

T8N,R9-10W G & SR Meridian

FIGURE 2

(after Telford 1990)

12/17/91

See Drafting for Mylars of large drilling/sample site/Geology maps by Freeport & Cominco.

JDS

JDS

ASARCO

Exploration Department
Southwestern United States Division
James D. Sell
Manager

December 17, 1991

Mr. Michael Sansone
Box 10402
Phoenix, AZ 85064

Bullard Claims
Yavapai County, AZ

Dear Mike:

It was a pleasure talking with you while reviewing the data on the Bullard Claims.

I am returning the mylars of the four large geology/sample site maps from Freeport and Cominco which you graciously loaned us to copy.

I'll put some more thought into deciding if SWED can find the hidden zone out there before I drop out to see you and the property first-hand.

Again, thanks for the loan of the big maps.

Sincerely,

James D. Sell

JDS:mek

cc: W.L. Kurtz

ASARCO Incorporated P.O. Box 5747 Tucson, Az 85703-0747
1150 North 7th Avenue FAX (602) 792-3934 Phone (602) 792-3010

To J D Sell

Date 12/18/71 Time 8:30 ☑ AM ☐ PM

WHILE YOU WERE OUT

M Elmo Poteet

of

Phone (505) 325-7685

Area Code Number Extension

TELEPHONED	✓	PLEASE CALL	✓
CALLED TO SEE YOU		WILL CALL AGAIN	
WANTS TO SEE YOU		URGENT	
RETURNED YOUR CALL			

Message Spoke with Mike Sansone last night - Mike told him you were going to look at his claims. He has some claims in the same area that you might be interest in.

Operator

AMPAD EFFICIENCY® REORDER #23-000

If he is not in leave word on his machine

Farmington, N. M.

Had 400 + claims, has now cut that down. Golden Giant gold vein looks good in Sec 32, he is in Sec 30, with few structures.

Will send data (to be kept in file for future use?).

Noranda (Wenus Saunders) & Atlas have been out as well as Noranda

Call Elmo as well as Mike when ready to go.

Michael C. Sansone
2214 E. Glenn Dr.
Phoenix, AZ 85020-5626

Xmas card address, received 12/20/91

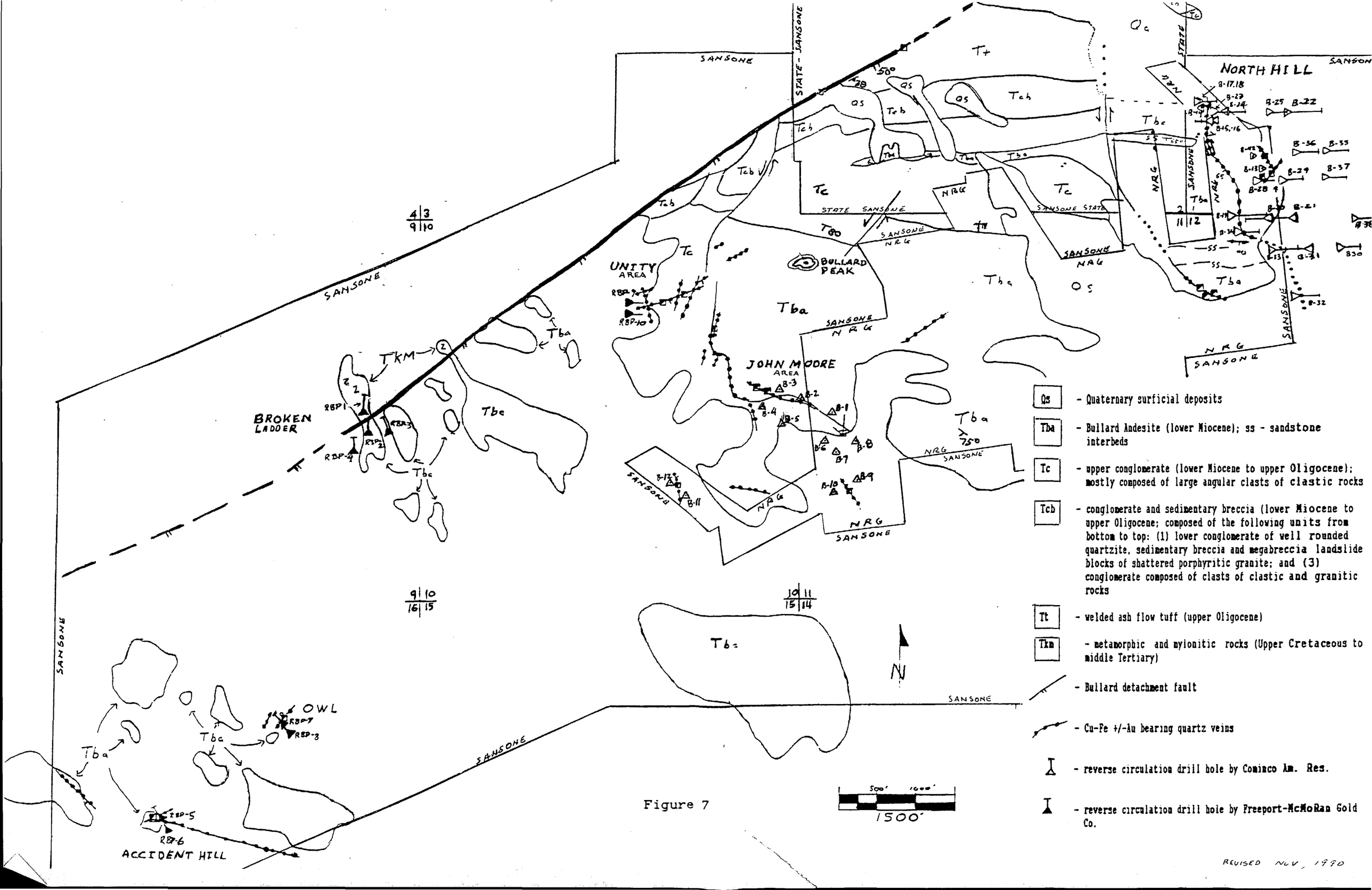

NORTH HILL
UNITY AREA
BULLARD PEAK
JOHN MOORE AREA
BROKEN LADDER
OWL
ACCIDENT HILL
SANSONE
STATE - SANSONE
STATE SANSONE
SANSONE STATE
NRG
Qs
Tt
Tcb
Tc
Tba
Tbc
TKM
Tb=
N
500'
1000'
1500'
Qs - Quaternary surficial deposits
Tba - Bullard Andesite (lower Miocene); ss - sandstone interbeds
Tc - upper conglomerate (lower Miocene to upper Oligocene); mostly composed of large angular clasts of clastic rocks
Tcb - conglomerate and sedimentary breccia (lower Miocene to upper Oligocene; composed of the following units from bottom to top: (1) lower conglomerate of well rounded quartzite, sedimentary breccia and megabreccia landslide blocks of shattered porphyritic granite; and (3) conglomerate composed of clasts of clastic and granitic rocks
Tt - welded ash flow tuff (upper Oligocene)
Tkm - metamorphic and mylonitic rocks (Upper Cretaceous to middle Tertiary)
- Bullard detachment fault
- Cu-Fe +/-Au bearing quartz veins
- reverse circulation drill hole by Cominco Am. Res.
- reverse circulation drill hole by Freeport-McMoRan Gold Co.
REVISED NOV, 1990

Figure 7

800

JDS

ASARCO

Exploration Department

664-150-2907-7090

1/28/92 to M Sansone, Phoenix.
from Wechenbrug 602/684-5445, ext 228

TELECOPIER

DATE: 1/22/92

TO:

NAME: G.D. Van Voorhis

LOCATION: Exploration Dept., New York

FROM: J.D. Sell

MESSAGE:

Elmo Poteet
505/327-1394

Itinerary:

Monday - Jan. 27 and Tuesday - Jan. 28	Townhouse Motel Safford, AZ	602-428-3474
→ Call Mike Sansone 602/956-6070	Review large land package on NW side, mainly in andesite with apparent small windows of mineral showing.	
Wednesday - Jan. 29 and Thursday - Jan. 30	Burro Inn Aguila, AZ	602-685-2272
	Review two large land packages, abundant high grade, very narrow, streaks of Au in Bullard detachment zone.	
Friday - Jan. 31	Tucson	

You will receive 1 page(s) of copy including this sheet.
If you do not receive all pages, please call: 602-792-3010
Ext. 324

This transmission ____ will X will not be confirmed by mail.

cc: W.L. Kurtz

ASARCO Incorporated P.O. Box 5747 Tucson, Az 85703
1150 North 7th Avenue FAX (602) 792-3934 Phone (602) 792-3010

JDS

FROM: J. D. SELL 1/9-92

TO: Elmo

Your packet of material from your Bullard area – Yavapai Co and the Marla L Prospect – Graham Co. has been received.

I'll be reviewing it in the next several weeks & get back to you.

Thanks for the data

J D Sell

2-12-92

FROM: J. D. SELL

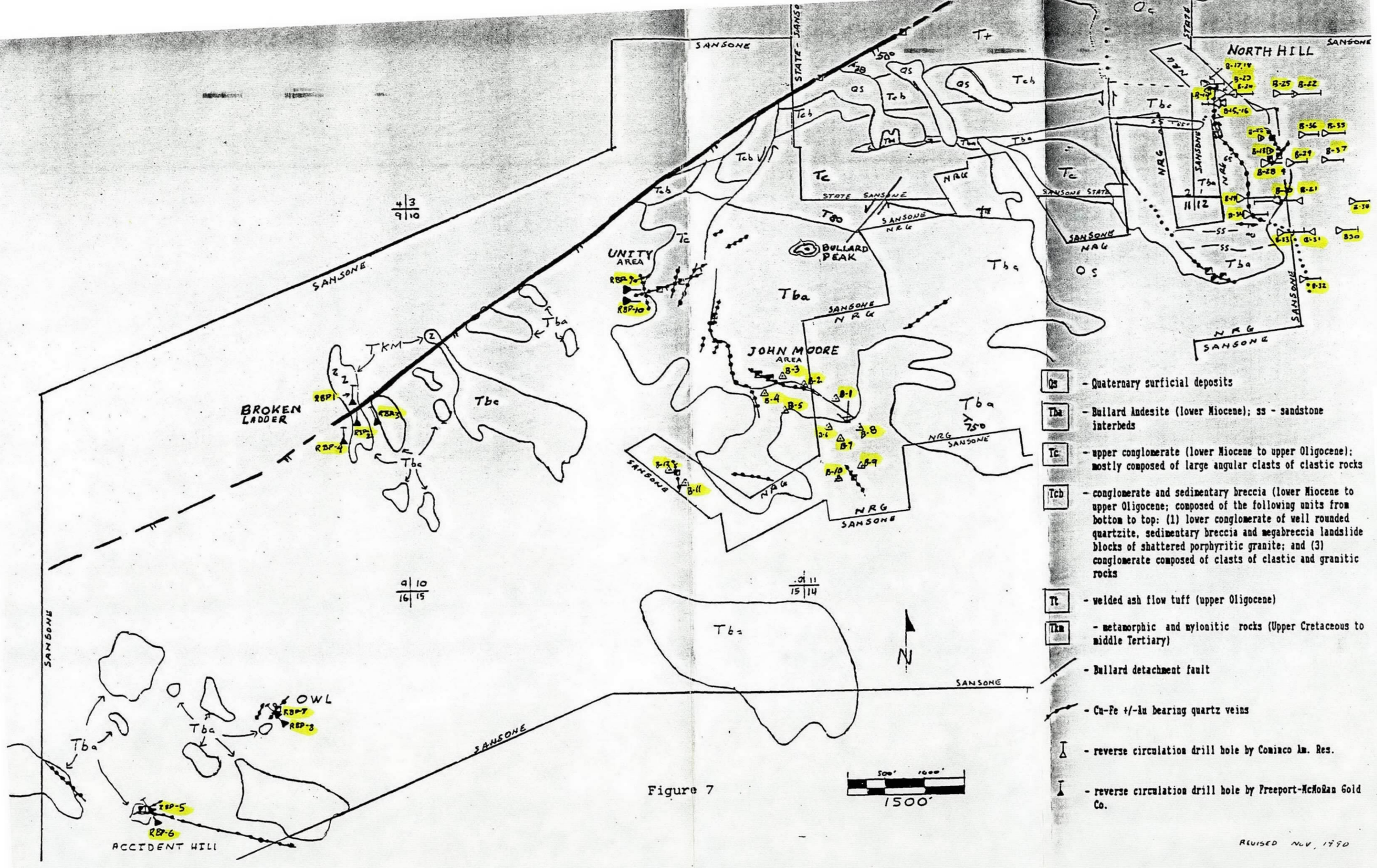
TO: Mike Sansone

Thank you for the loan of this "one-of-a-kind" compilation.

I appreciate your time on the ground and in the air — all of which made the report reading more understandable.

Hope to review all the data soon & get back to you -

James D. Sell


NORTH HILL
UNITY AREA
BULLARD PEAK
JOHN MOORE AREA
BROKEN LADDER
OWL
ACCIDENT HILL
SANSONE
STATE - SANSONE
STATE SANSONE
SANSONE NRG
NRG SANSONE
Qs - Quaternary surficial deposits
Tba - Bullard Andesite (lower Miocene); ss - sandstone interbeds
Tc - upper conglomerate (lower Miocene to upper Oligocene); mostly composed of large angular clasts of clastic rocks
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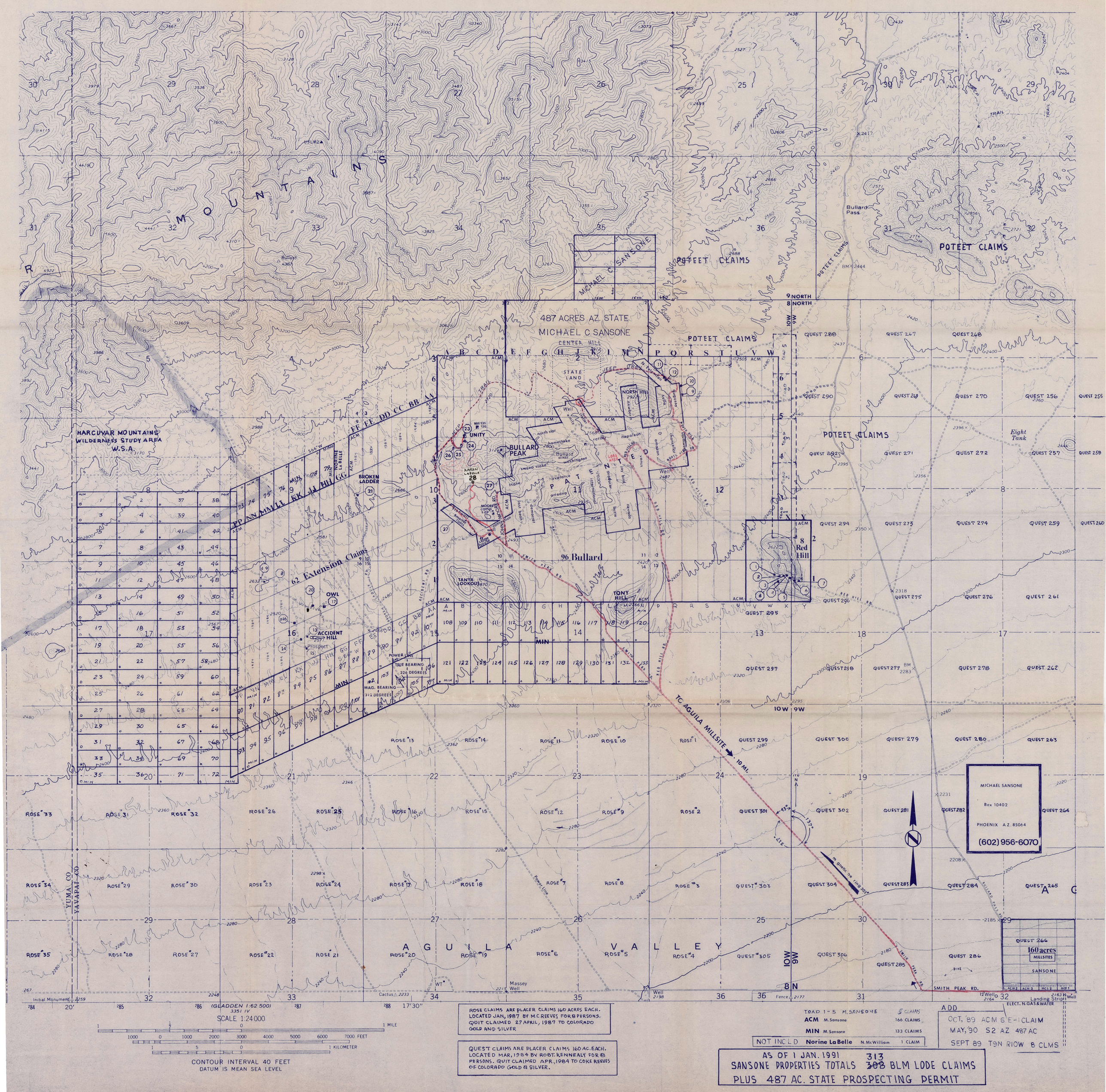
- Bullard detachment fault
- Cu-Fe +/-Au bearing quartz veins
- reverse circulation drill hole by Cominco Am. Res.
- reverse circulation drill hole by Freeport-McMoRan Gold Co.
500' 1000'
1500'
N
REVISED NOV, 1990

Figure 7



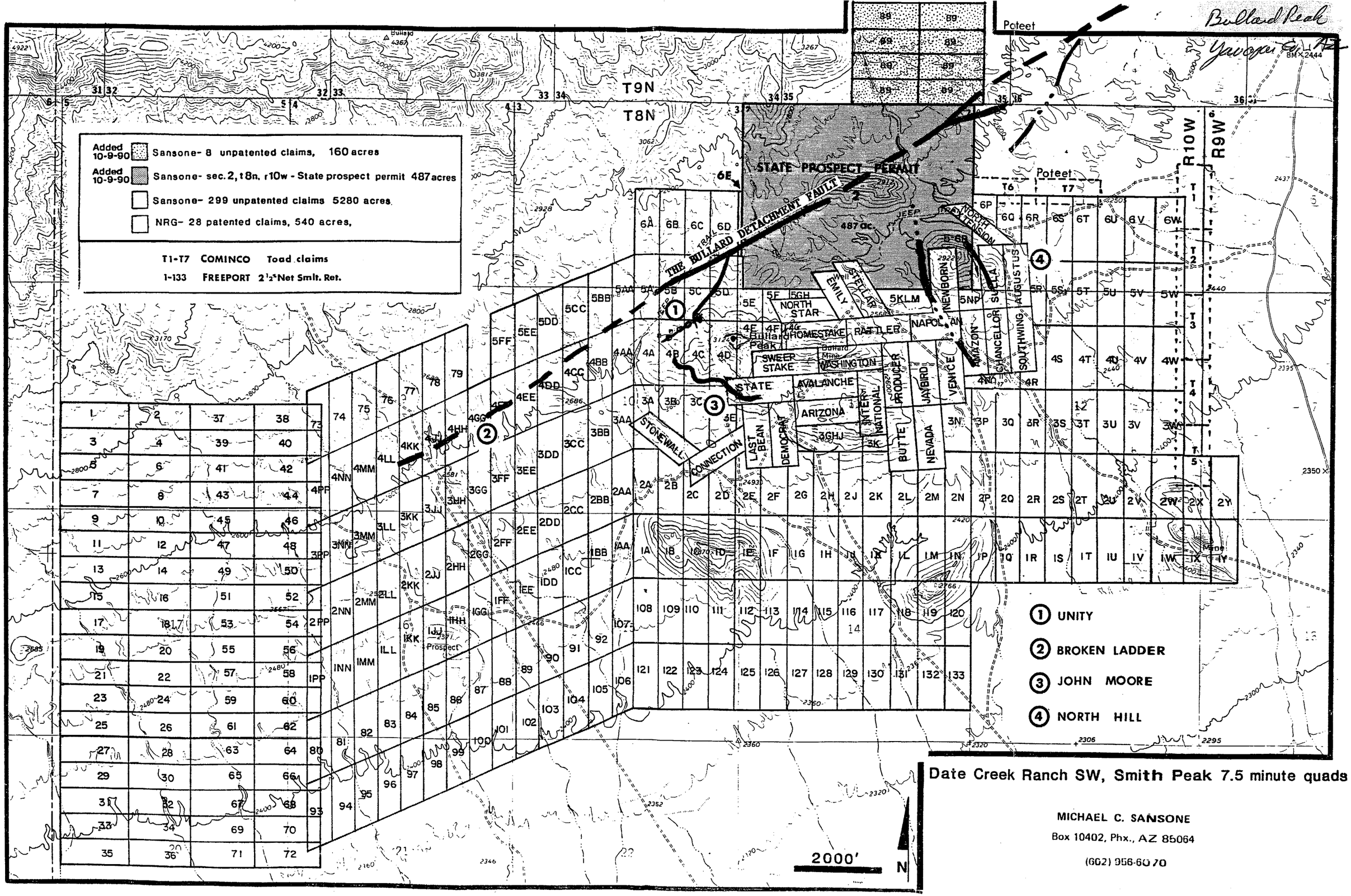
ROSE CLAIMS ARE PLACER CLAIMS 160 ACRES EACH. LOCATED JAN, 1987 BY M.C. REEVES FOR 8 PERSONS. QUIT CLAIMED 27 APRIL, 1987 TO COLORADO GOLD AND SILVER

QUEST CLAIMS ARE PLACER CLAIMS 160 AC. EACH. LOCATED MAR, 1984 BY ROBT. KENNEALY FOR 8 PERSONS. QUIT CLAIMED APR., 1984 TO COKE REEVES OF COLORADO GOLD & SILVER.

TOAD 1-5	M. SANSONE		CLAIMS
ACM	M. Sansone		166 CLAIMS
MIN	M. Sansone		133 CLAIMS
NOT INCL'D	Norine LaBelle	N. McWilliam	1 CLAIM

ADD
OCT, '89 ACM 6 E-1 CLAIM
MAY, '90 S2 AZ 487 AC
SEPT 89 T9N R10W 8 CLMS

AS OF 1 JAN. 1991
SANSONE PROPERTIES TOTALS ~~308~~ 313 BLM LODE CLAIMS
PLUS 487 AC. STATE PROSPECTING PERMIT



Date Creek Ranch SW, Smith Peak 7.5 minute quads

MICHAEL C. SANSONE
Box 10402, Phx., AZ 85064
(602) 956-6070

CERTIFIED ASSAY SAMPLES OF SANSONE'S CLAIMS

Surface Samples - Gold (Au) - Silver (Ag) - Copper (Cu)

In some reports listed below the results have been assays converted to ounces per ton

Documentation supporting data contained herein will be furnished upon request.

ASSAY LABORATORY	1 UNITY GROUP 23,24,25,26	2 BROKEN LADDER 21	3 JOHN MOORE 27	4 NORTH HILL 9,10,11,12
	Sub # Au Gold oz/t / Ag Silver oz/t / Cu Copper %	Sub # Au Gold oz/t / Ag Silver oz/t / Cu Copper %	Sub # Au Gold oz/t / Ag Silver oz/t / Cu Copper %	Sub # Au Gold oz/t / Ag Silver oz/t / Cu Copper %
Cone Geochemical, Inc. 810 Quail St, Suite 1 Lakewood, CO 80215	FREEPORT McMoRAN GOLD CO. A-4162-BP 0.126 0.462 1.028 A-4163-BP 0.076 0.232 1.138	FREEPORT McMoRAN GOLD CO. A-4160-BP 0.514 0.123 1.615 Cross Section Map A-4365-BP 0.101 0.30 A-4366-BP 0.337 0.19 Recheck A-4364-A 0.142 B 0.104 C 0.079 A-4366-A 0.326 B 0.336 C 0.407	FREEPORT McMoRAN GOLD CO. A-4249 BP 0.60 0.285 1.32 A-4251-BP 0.343 0.853 2.71	FREEPORT McMoRAN GOLD CO. No Sampling at this location Awaiting sampling results March 6, 1991 from FMC Gold Co. Noranda AMEX Echo Bay
Chemex Laboratories, Ltd. 155 Glendale Ave., North Sparks, NV 89436	REDCO (Paul Strobel) PS 4020 0.068 PS 4022 0.708 PS 4025 0.776 PS 4028 1.545 PS 4029 0.094 PS 4030 0.148 PS 4034 0.112 PS 4012 0.212 PS 4013 0.082 PS 4014 0.114	REDCO (Paul Strobel) No Sampling at this location	REDCO (Paul Strobel) PS 4038 0.102 PS 4040 0.473 PS 4041 0.508 PS 4043 0.110 PS 4044 0.054	REDCO (Paul Strobel) No Sampling at this location
TRANSWESTERN MINING COMPANY LABORATORY	TRANSWESTERN MINING COMPANY 5321 0.114 0.25 5327 0.190 0.60	TRANSWESTERN MINING COMPANY 5333 0.518 0.26	TRANSWESTERN MINING COMPANY 5338 0.198 0.66 5342 0.151 0.51	TRANSWESTERN MINING COMPANY No Sampling at this location
Skyline Laboratories, Inc. 1775 W. Sahuaro Drive P.O. Box 50106 Tucson, AZ 85703 (602) 622-4836	E. THOMAS RIGGS - CADMUS GOSS, P.E. B-23-2 0.720 1.08 B-23-3 1.150 0.49 B-25-3 0.165 0.12 B-26-3 0.09 0.21	E. THOMAS RIGGS - CADMUS GOSS, P.E. B-21-2 0.940 0.30 B-22-4 0.100 0.38	E. THOMAS RIGGS - CADMUS GOSS, P.E. B27-6 0.445 0.64 B-27-9 0.600 0.46	E. THOMAS RIGGS - CADMUS GOSS, P.E. No Sampling at this location
Unity Lab, Fire Assay	22-1 0.23 23-3 1.67 23-2 1.730 25-3 0.470 25-1 0.470 26-3 0.116 26-2 0.082 26-1 0.083	21-2 1.000	27-1 0.213 27-2 0.100 27.3 0.095 27-5 0.119 27-6 0.80 27-7 0.279 27-8 0.100 27-9 1.100	No Sampling at this location

Compiled from records on file with MICHAEL C. SANSONE, P.O. Box 10402, Phoenix, Arizona 85064
(602) 956-6070

Date Creek Ranch SW
Smith Peak
Chatelley 15'

Bullard Peak
Area
1/30/92

1964 Powder Metals Company numerous 200 vertical
holes all along "Kaleff" zone to Rudy Pass.

Bill Graham Prez NGR Vancouver 604/685-8284
Bill Cross, cat-grader etc man for Agnico
Ralph Hodges mining & moving Bullard material
to Pere Mining & Milling in Deming.

Pull out Elmo data

Pull out Ballard Peak data

Bill Graham
office 685-8284
home 936-0743

(604)

Write letter note to
M Sansone on cost of
trip 1 day

Bullard Peak
M-Sansone
Yavapai Co.

COSTS

IDS, 1 day, Jan. 29, 1992	= $358.30
Room, 1/2 of 65.30	= 32.70
Meals	= 34.15
Xerox	= 2.75
Vehicle: 315 mile x 0.40/mile	= 126.00
	$553.90

Bullard Peak Area
E. Poteet
Yavapai Co

COSTS

2 days, 9 HS, Jan 30-31, 1992 @ 358.30	=	716.60
Room	=	53.00
meals	=	30.05
Vehicle: 299 miles × 0.40	=	119.60
		$919.25