

CONTACT INFORMATION
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Arizona Geological Survey
3550 N. Central Ave, 2nd floor
Phoenix, AZ, 85012
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

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H. Lanier

FROM: C.K. Chase

SUBJECT: REPORT NO. 71-4-4

#### COPPER PRODUCTION FROM

## SANDSTONE DEPOSITS

### General:

The sedimentary deposits of copper in sandstone are common in the Colorado Plateau region but only moderate production has resulted from them in the past because of the low copper tenor in such ores. The old time miners did not find ore of this grade profitable. Modern prospectors have been initially attracted by the highly visible surface occurrences but interest lags when it is discovered that mineable tonnages may average 0.5% copper or less.

The conventional and generally unsuccessful modern approach to recovery of copper from these ores is a coarse crush followed by acid leaching in heaps. Scrap iron cementation is used to recover a product to be shipped to a smelter. Since recovery of copper from the heaps is at best 50% and problems of permeability are common due to precipitation of iron-aluminum hydrates, very little of the copper content of the lean ores ever gets through to a cement copper product. Operating life of most of these copper projects is extremely limited.

As a result of these factors, the sandstone copper deposits have been neglected by the large copper companies. It is difficult to project possible copper production from the sandstone deposits but such production may turn out to be substantial if the proper processing methods can be developed. This report is to suggest a metallurgical technique that takes advantage of unique charac teristics of these ores and may provide the necessary economic breakthrough.

Most copper deposits in sandstone have some interesting characteristics. They are loosely-cemented, with rounded grains free from metallic inclusions. The cementing material is only a small proportion of the total weight but the copper occurs in this cementing material. The high tonnage part of the proposed operation consists of mining, hauling, crushing, initial leaching, and sand-slime separation. These operations result in a rejectable sand tailing that represents 90% or more of the total ore weight. Consequently, the more expensive part of the circuit, the counter current

decantation thickener operation, needs only to be sized to handle 2 to 10% of the total weight. Pregnant solutions are high grade. A liquid ion exchange circuit can be very moderate in size since the flow-rate will be small.

The sandstone copper deposits vary in metallurgical characteristics, as is expected; consequently, each deposit should be tested to establish its suitability to the proposed scheme. Since the surface exposures of these ores are oxidized, malachite is the main leachable mineral. The ores were undoubtedly originally deposited as sulfides, however, and careful note should be taken of occurrence of sulfides since the processing requirements are quite different.

### Test Procedure:

Nine different sandstone copper ores were tested in the program, both with and without attrition. The work was performed at Brigham Young University at Provo by Michael R. Harper, a graduate student. Generally but not invariably, attrition resulted in better extraction. The test samples were originally assayed by the atomic absorption method but this proved inadequate. All samples were re-assayed by the American Analytical & Research Laboratories using the long iodide method. Even with re-assaying, metallurgical accounting perfection was elusive, but the general performance of these ores is apparent.

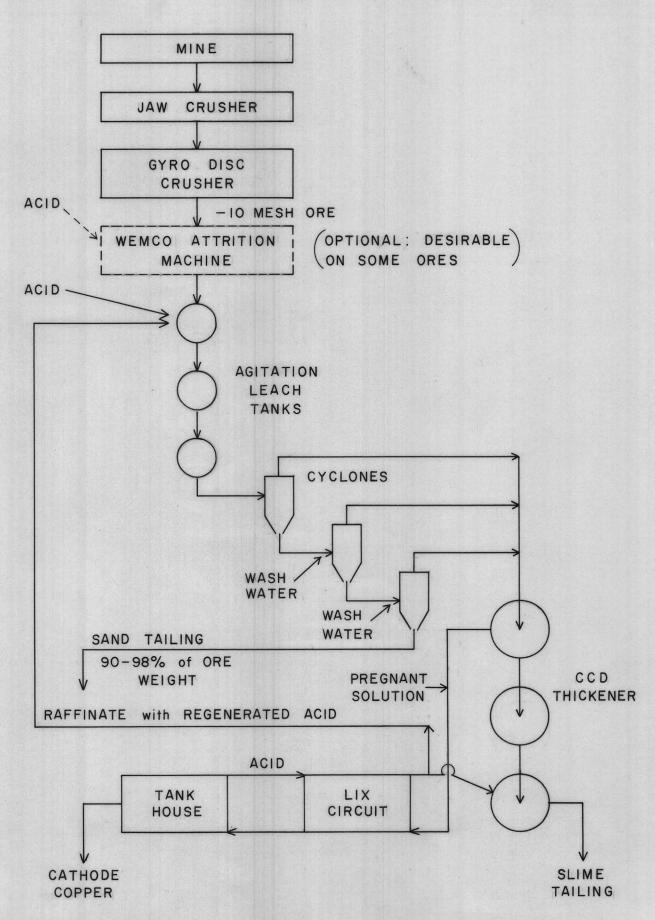
Clement K. Chase

CKC:td April 13, 1971

Attachments: Test Results

Flowsheet for Sandstones

								200
White Mesa	Cashin "	White Rock	Mill Canyon, East Not Done	Hipshot "	Tusher "	Turnbow I Armstrong-East #1	Blackwall "	Ore Sample
No Yes	No Yes	No	l S	No Yes	Yes Yes	No Yes	Yes	Attrition
0.40	1.15 1.27	0.29	0.023	1.20	0.45	0.63	0.46	Heads % Cu
ω N N N	6.7	8.7	1 8	14.9	2.0	1.0 8.0	ω ω •••••••••••••••••••••••••••••••••••	% Wt. Slimes
7.3	20.8	σ σ © Ο	10.2	18.8 16.5	7.2	10.0 12.6	7.4 9.1	Lb Cu Leached Per Ton
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public domain, in the Inlice Money Real Mining Scatter, Coconine County, Arizona.

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a sandatone 20 x 16 x 4 inches, sartet 7 x - 3 - 2757 and X cartes, which

Thomas, third course, south one thousand five hundred feet to dorner No. 4, a sundstone 24 x 10 x 6 inches, marked V V - 4 - 2757 and X on top, with mound of stone;

which discovery cut bears north five hundred feet distant; six hundred feet to comer No. 1, the place of beginning; the survey of the lode claim, as above described, extending one thousand five hundred feet in length along seld valley varie vein crateds.

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five hundred feet to corner No. 1, the place of backmains; the survey of the lode claim, as above described, extending one thousand five hundred feet in length along said this mass Queen vens or lode; the printers have meaning forty-one and one hundred seventy-five thousand sandths acres.

NOW KNOW YE, That there is therefore, pursuant to the laws aforesald, hereby granted by the United States unto the said

the said mining premises bereinbefore described, and not expressly excepted

from these presents, and all that portion of the salt veing, lode of ar ledge of and of all other veins, lodes, and lodges throughout their entire depth, the tops or apexes of which lie inside of the surface boundary lines of said granted premises in said survey extended downward vertically, although such veins, todes, or ledges in their downward course may so far depart from a perpendicular as to extend outside the vertical side lines of said premises: Provided, That the right of possession to such outside parts of said veins, lodes, or ledges shall be confined to such portions thereof as lie between vertical planes drawn downward through the end lines of said survey so continued in their own direction that such planes will intersect such exterior parts of said veins, lodes, or ledges: And provided further, That nothing herein contained shall authorize the grantee.

herein to enter upon the surface of a claim owned or possessed by another.

TO HAVE AND TO HOLD said mining premises, together with all the rights, privileges, immunities, and appurtenances of whatsoever nature thereunto belonging, unto the said grantee above named and to fig successors and assigns forever; subject, nevertheless, to the above-mentioned and to the following conditions and stipulations:

FIRST. That the premises hereby granted shall be held subject to any vested and accrued water rights for mining, agricultural, manufacturing, or other purposes, and rights to disches and reservoirs used in connection with such water rights, as may be recognized and acknowledged by the local laws, customs, and decisions of the courts. And there is reserved from the lands hereby granted a right of way thereon for disches or canals constructed by the authority of the United States.

SECOND. That in the absence of necessary legislation by Congress, the Legislature of Arizona may provide rules for working the mining claim or premises hereby granted, involving easements, drainage, and other necessary means to its complete development.

IN TESTIMONY WHEREOF, I. Woodrow Wilson

President of the United States of America, have caused these letters to be made,

Patent, and the Seal of the General Land Office to be hereunto affixed.

GIVEN under my hand, at the City of Washington, the IWENTY-FIFTH

of MAY

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By the President

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474643

RECORD OF PATENTS , Patent Number

11

The United States of America,

En all to minou these presents aball come, Secretion.

WHEREAS, in pursuance of the provisions of the Register of the United States, Chapter Six Title Thirty-two, and legislation supplemental thereto, there have been deposited in the General Chapter of the United States the Piat and Field Notes of Survey and the Certificate of the Register of the Land Office at Phoenix, Arizona, accompanied by other evidence whereby it appears that the Pittsburg Copper and Mining Company

ha 8 entered and paid for the Ide M. "Smyth" lode mining claim

designated by the Surveyor Constraint of Survey No. 2761, embracing a portion of the unsurveyord Public Domain in the White Mesa Mining District, Occoming County, Arizona.

x 6 inches, marked a X on top and I M S-1-2761, with mound of stone. Trom which U. S. Location Monument No. 2758 bears south eight degrees twenty-one minutes seet ninety-three and seventy-eight-hundredths feet distant;

Themse, first course, sast one thousand five hundred feet to corner No. 2, a sand stone 30 x 12 x 8 inches, marked a X on top and I M S-2-2761, with mound of stone;

Thence, second course, south six hundred feet to corner No.3, a sand stone 26 x 12 x 8 inches, marked a X on top and I M 3-3-2761, with mound of stone;

Thence, third course, sest one thousand five hundred feet to corner No. 4, a sand stone 40 x 20 x 2 inches, marked a X on top and I M 3-4-2761, with mound of stone;

RECORD OF PATENTS: Patent Number ( )

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NOW KNOW YE. The part is therefore, parsually the large afternals, hereby granted by the United States unto the said
Pittaburg Copper and Mining Commany

from these presents and all that portion of the said verse, lede or longer, and of all other verse, lodes, and ledges throughout their entire depth, the tops or apexes of which the inside of the surface boundary lines of said premises in said survey axtended downward vertically, although such verse, lodes, or hidges in their downward source may so far depart from a perpendicular as to extend outside the vertical side lines of said premises. From the highest the highest countries to such outside parts of said velos, lodes, or ledges shall be confined to such partions thereof as the but was certical bilines downward through the end lines of said survey so continued in their own direction that such planes will intersect acts extend region the surface of a lodges. And provided further, That nothing herein contained shall authorize the grantes. In said we make upon the surface of a claim owned or possessed by another.

TO HAVE AND TO HOLD said mining promises, tagether with all the rights, privileges, immunities, and appurtenances of w nature thereunto belonging, note the said granten above montaned and to the following conditions and attitulations:

FIRST. That the greenists hereby grapted shall be held subject to any vested and accrued water rights for mining, agricultural manufacturing, or other purposes, and slights to discuss and exception used in connection with such water rights, as may be recognized and acknowledged by the local laws could be a local the course of the course. And there is reserved from the lands hereby granted a right of wat thereon for dischas or course course on the authority of the United States.

SECOND. That in the absence of necessary inglatelian by Gangrass, the Legislature of Arizona may provide rules for working the mining claim or attacks absence available ensurements, drainage, and other necessary means to its complete development.

IN TESTIMONY WHEREOF, I. Woodrow Wilson

President of the United States of America, have caused these letters to be made,

GIVEN under my hand, at the City of Weshington, the

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United States the one hundred and

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By the President .

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1 Number 47464

RECORD OF PATENTS - Patent Number

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Thende, fourth course, north three hundred feet to a point from which discovery shaft bears don't seven hundred fifty feet distant; six hundred feet to corner No. 1, the place of beginning; said Survey No. 2761 extending one thousand five hundred feet in length along the Ida M. "Smyth" rein or lode; the promises, herein granted, containing twenty and six hundred sixty-one-thousandths sores.

WHITE MESA COPPER DEPOSIT

NAVAJO INDIAN RESERVATION COCONINO COUNTY, ARIZONA FOR ESSEX INTERNATIONAL, INC.

## WHITE MESA COPPER DEPOSIT

T.37 N. R.9 E. T.38 N. R.9 E.

NAVAJO INDIAN RESERVATION COCONINO COUNTY, ARIZONA

April 8, 1970

FOR

ESSEX INTERNATIONAL INC.

BY

P.O. Box 5964 - Tucson, Arizona
Telephone 1-602-623-0578



## TABLE OF CONTENTS

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Conclusions and Recommendations	2
Property, Title, Legal and Land Information	4
Geology and Mineralogy	6
Signature Page	7

Addendum: Affidavit of performance of annual work. In pocket.

- Map 1. Portion of Arizona Bureau Mines Geology of Coconino County. Scale 1: 375,000
- Map 2. Mineral and Land Status
  From U.S. Department of Interior, Bureau of Land
  Management showing patented and unpatented claims
  Scale 1"= 2000'
- Map 3. Army Map Service 1: 250,000 scale Marble Canyon Quad. U.S.G.S.

# INTRODUCTION

At the request of Mr. Howard Lanier and Mr. Jerome Willis of Essex International, Heinrichs GEOEXploration Company conducted a preliminary investigation to determine the availability and the possible future economic potential of the White Mesa Copper Company. The site was briefly visited by E. Grover Heinrichs on 25-26 February 1970, but no attempt was made to do any geological work other than an office correlation of published data.

A search was made of the U.S. Bureau of Land Management and Coconino Court House records and the findings are a part of this report.

# CONCLUSIONS AND RECOMMENDATIONS

The property appears to have a significant though small economic mineral potential if proper technical management and financing is utilized.

This statement would have to be substantiated by further geological and geophysical investigations in conjunction with a drilling program. However, it has been reported that there are two million tons of copper-bearing material at White Mesa with a probable grade of 0.75% copper, or 30,000,000 # of copper.

Past operational activities reportedly were hindered by inexperienced operators, possible fraud, poor financing, serious water problems and legal land entanglements with the Navajo Reservation and others.

It is recommended, if the legal and land status problems can reasonably and quickly be resolved, that an engineering program be undertaken to determine possible grade, tonnage and character of available copper reserves in the deposit or deposits involved.

The exploration and evaluation program should be divided into two phases. Phase one would evaluate the exposed known area, where most of the workings are, in the immediate vicinity of the trading post, at an estimated cost of

approximately \$ 20,000. If justified by phase one results, a second phase would undertake to preliminarily check out the potential of approximately an eleven square mile area located easterly of the Trading Post at an initial estimated cost of about \$ 30,000.

Comprehensive geological mapping, coupled with limited airborne magnetics, geochemical, ground geophysical, drilling and sampling work designed to cover selected-representative portions of the eleven square miles would total about \$50,000 for phase 1 and 2 combined. Results of this initial work should tell if a development feasibility program were warranted.

# PROPERTY, TITLE, LEGAL AND LAND INFORMATION

Investigation and discussions with Bob Patterson (son of Coit Patterson, owner of Copper Mine Trading Post) and personnel in the offices of Coconino County Assessor, Recorder and Treasurer reveal the following:

- Coit Patterson reportedly has a \$ 25,000 suit against Don J. Ames, President of Zontelli Western Mining Company for bad checks and purchased items not paid for.
- County Treasurer has unpaid property taxes past due against Zontelli Western Mining Company amounting to approximately \$ 7000.00.
- 3. Numerous other suits alluded to against Zontelli Western Mining Company.
- 4. Utility payments unpaid.
- 5. Assessment work on 28 unpatented mining claims up to date. Records indicate other unpatented claims filed by one L. Vaitch of Spokane, Wash.
- 6. Land possibly available for exploration and lease from the Navajo Indian Reservation surrounds the patented and unpatented mining claims, total area to explore consists of 11 sections (about 7000 acres).

- 7. Patented Mining Claims accounting for 185.609 acres including mineral surveys numbered 2757, 2758, 2759, 2760, 2761, 2762, 2763 are currently held in trust by the Chase Manhatten Bank, Lemuel C. Shattuck Trustee.
- 8. To clear title may cost in the neighbourhood of \$ 100,000.00.

## GEOLOGY AND MINERALOGY

The White Mesa deposit is of Jurassic-Triassic age and the mineralization is malachite and copper silicate with some black copper oxide present forming halos around disseminated chalcocite and bornite in a matrix of Navajo Sandstone. No chalcocite or bornite was observed in this visit but they have been reported in various Arizona State publications.

The better mineralization occurs along shearing and fracture intersections. Little information is available on the depth of old mineralization other than some non systematic drilling that reported copper occurences at 80' deep.

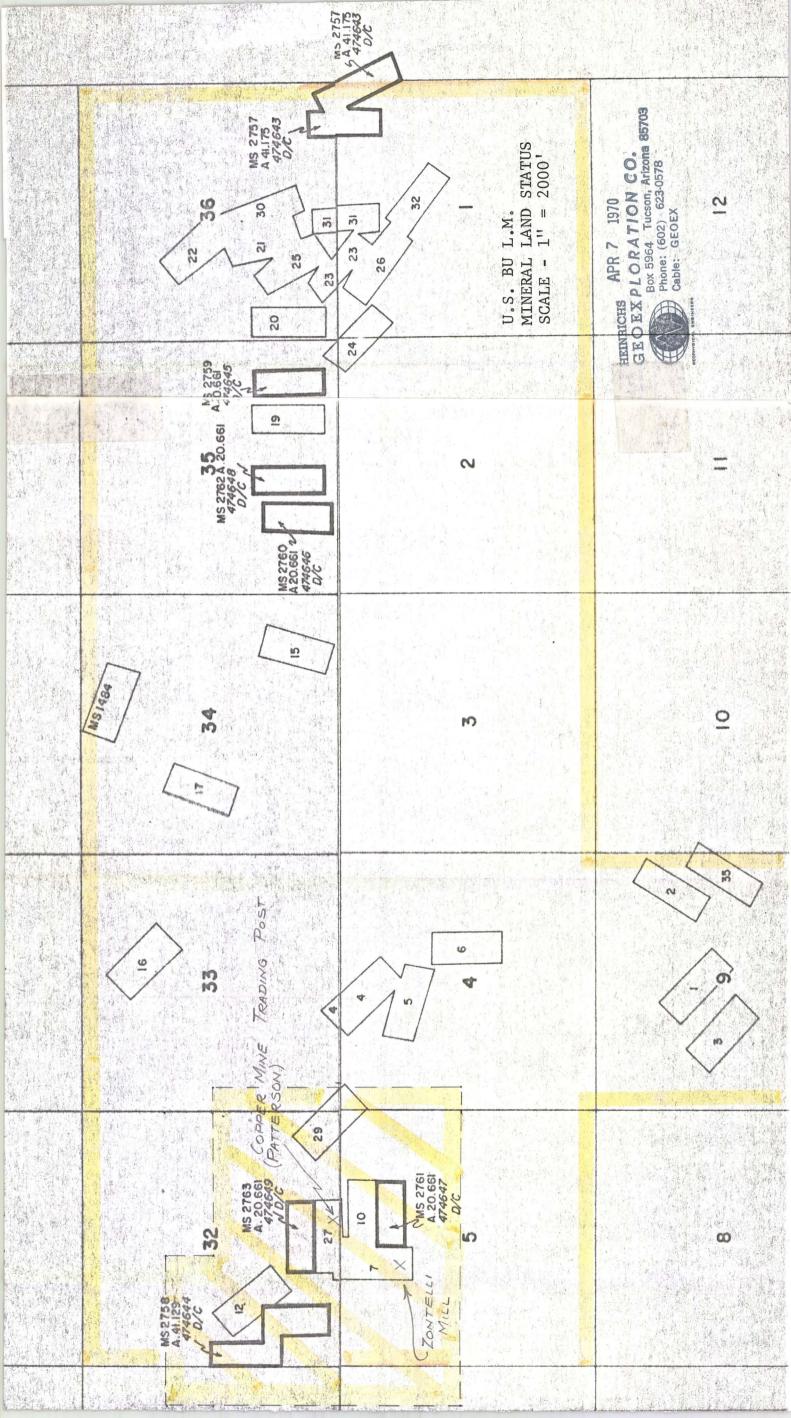
Respectfully Submitted:

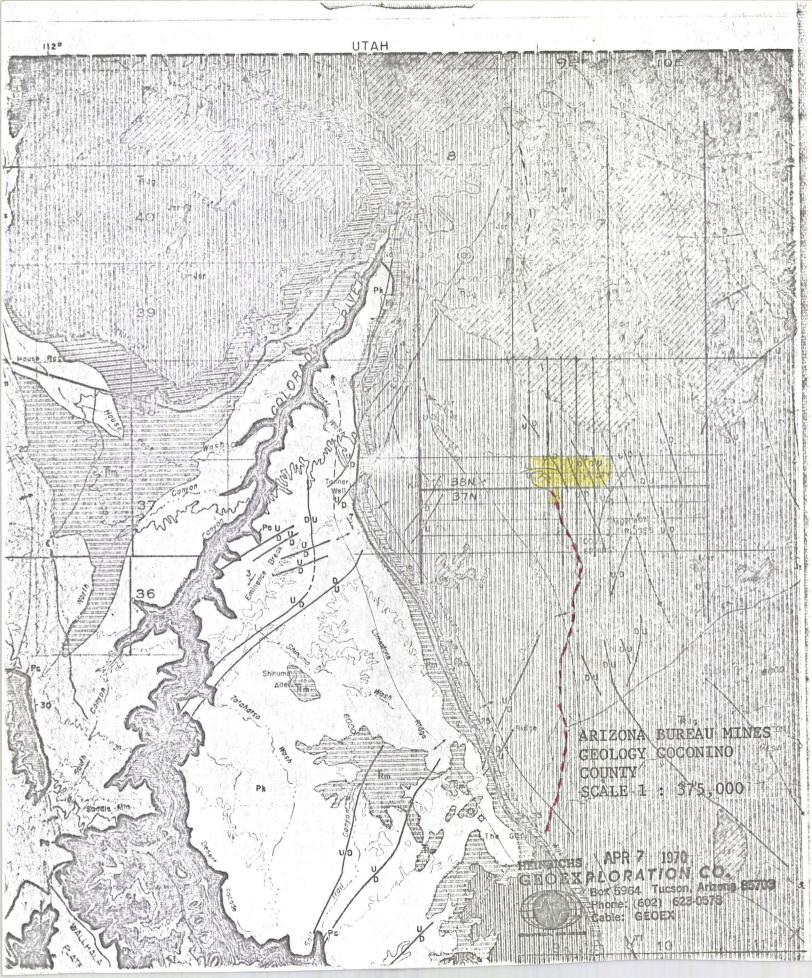
HEINRICHS GEOEXPLORATION COMPANY (INC.)

E. Grover Heinrichs Vice President

Walter E. Heinrichs, Jr.

President





### AFFIDAVIT OF PERFORMANCE OF ANNUAL WORK

STATE OF ARIZONA )
COUNTY OF COCONINO )

JACK A. TAITCH, being duly sworn, deposes and says that he is a citisen of the United States and more than twenty-one (21) years of age, resides at Spokane, in Spokane County, Washington, is personally acquainted with the mining claims situated in the White Mess Mining District, Coconino County, Arisons, described as follows, to-wit:

N	AME OF CLAIM	BOOK OF MINES	PAGE
	Inspiration	1	513
	Camp	,	506
	Clark	1	505
	Lautern Star	,	511
	Bunter		503
	Mach	13	13
	Dutehman		503
	Ray		519
	Tonner		12
	Scarlight	3.3	
	Brass o or L	111	15
	Green	13	 10
	King	13	17
	Maine		18
	Moon	13	
	State	13	21
	Harvey		16
	Militop	11	14
	Lucky		7.44
	Princess	11	1
	Copper King	1 1	4
	National Thrift	11	19
		11	8
	Chico	1	11
	Duke	1 1	`5
	Boso	11	20
	Arisona		4
	Prosperity	1 1 1	,

That between the lat day of September, 1968, and the lat day of September, 1969, at least 52,800.00 worth of work and improvements were done and performed upon said claims, not including the location work of said claims. Such work and improvements were made by and at the expense of affiant, owner of said claims, for the purpose of complying with the laws of the United States pertaining to assessment or annual work, and

RECORDED AT REQUEST OF	Josh A. Taitch	
August 98 A	0. 1969 at 1:00	o clock P
of Cocesino County, Aresona.	Mae Thornton	County Records
dv	Lileve ys	Deput Deput

Thosie Bigman, Kme Howard, Tom Howard, Ed Kent, Robert Lane, John Lane, John Cling, Frank Clinsie, Lee Spencer, John Scott, Max Johnson, Harry Begay, Kensley Iron, Floyd Stevens, Tully Bitsoie, Russell Cordery, Claude Thompson; geologist, William R. Green, of Mostow, Idaho, and Kocjan Construction Company, of Page, Arisona, were the men employed by said owner and who labored upon said claim, did said work and improvements, the same being as follows, to-wit:

Road construction, making buildozer exploration cuts and manually digging prospect boles, and making a complete geological evaluation and geological supervision of the claims based on such cuts and prospect boles, and other pertinent data, verified report of which is under preparation for fitting.

Jacy A. fatton

SUBSCRIBED AND SWORN to before me this 22nd day of

Mothey Partie

My Cosmanson Expires;

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CANADIAN Addicks Mag. CORP. & Addicks CANADIAN Properties INC.
Summony of Properties Est

Into. Submitted To Walter Probst SAN. 1970.

O FINLAYSON LAKE AREA

Adequate Report & data enclosed

a) group 34 claims 100% CAN Add. CORP.

b) group 20 claims 49% " "

51% Addits CANADIAN

Properties INC

D STURGEON LAKE Claims

Very Little infomation need

chaineering reports, driving data etc.

30 claims 100% Addicks Compain Properties INC.

Wery little factual information need engineering reports etc.

46 claims 100% Addicks CAN Trop. Inc. & or CANADIAN Addicks Mag. CORP.

Sa pawe LAKE AREA

purchase agreement for

400 acres (joins Kawene Lake

property?)

we Need engineering report

4 data to evaluate. 30 Saganaga LAKE Claims

Joclains 100% owned Addick's Connain Proporties

INC. ce Need engineering reports à data to evaluate. (6) Clacier Creek Chains
31 claims 100% Addicks CAN. Prop.

INC.

with 10% to prospectores,

we need engineering reports

2 Data to evaluate. D Sims LAKE
50 claims 100% Addicks Claw. with ? % to prospectors. à deta to evaluate. (8) ST. Ignace Island 12 claims 100% Addicks CAN. Props. We need more engineering roots Inc. Edata to evaluate

Owell to County Treasurer 7 years approx # 12,000 on equip. 5 mill Not land Feb. 76,70

> Dan. Anos Pres, Zonfelli Mie 117 8th Ave. S. FARGO N. DAKOTA /2322594. White offera Co.

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1/Kely hot blg. just
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Chase Manhallan BANK Lemgel C. Shattuck mister To Chase Almohatton BANK M. Flaherty 35th floor 1 Chase Manhattan Pluza N.Y. , N.Y. 151/2 Seliaguent 134.12 Total/yr: 268.24 Val 1/2 lue Hamels Selaguent May 185,609 Acres includes surveys # 2763 2758 2761 2759 2762 2257 2760

Limbaugh Engineers made a map of area 1966 Coever Marker 2369-15 1966 near main workings

While Mesa Proj. 2-26-70 Assessment Work Name of Clair Affint THUNER etal Juck A. Taitch
Thrift ""

Date. Aug. 22, 1969 Lee. some dake
BK 339 pg. 226 2 Claims listed on Affidouit not on Meltie sheet Maine & Clark Clinax not listed on Affidavit Spokane is resident of Don Ames is Pres. of Zonkelli Mug. Co. 800-30-700 Copper Mine Trading Post
Accountant Joe Aubin
Box 156

F/149 AZ 86001 ? Take paid for assessment

500' = 1" 10' Co I.

Lynd Investigation Dept.

Map ch. # 50.00 guess

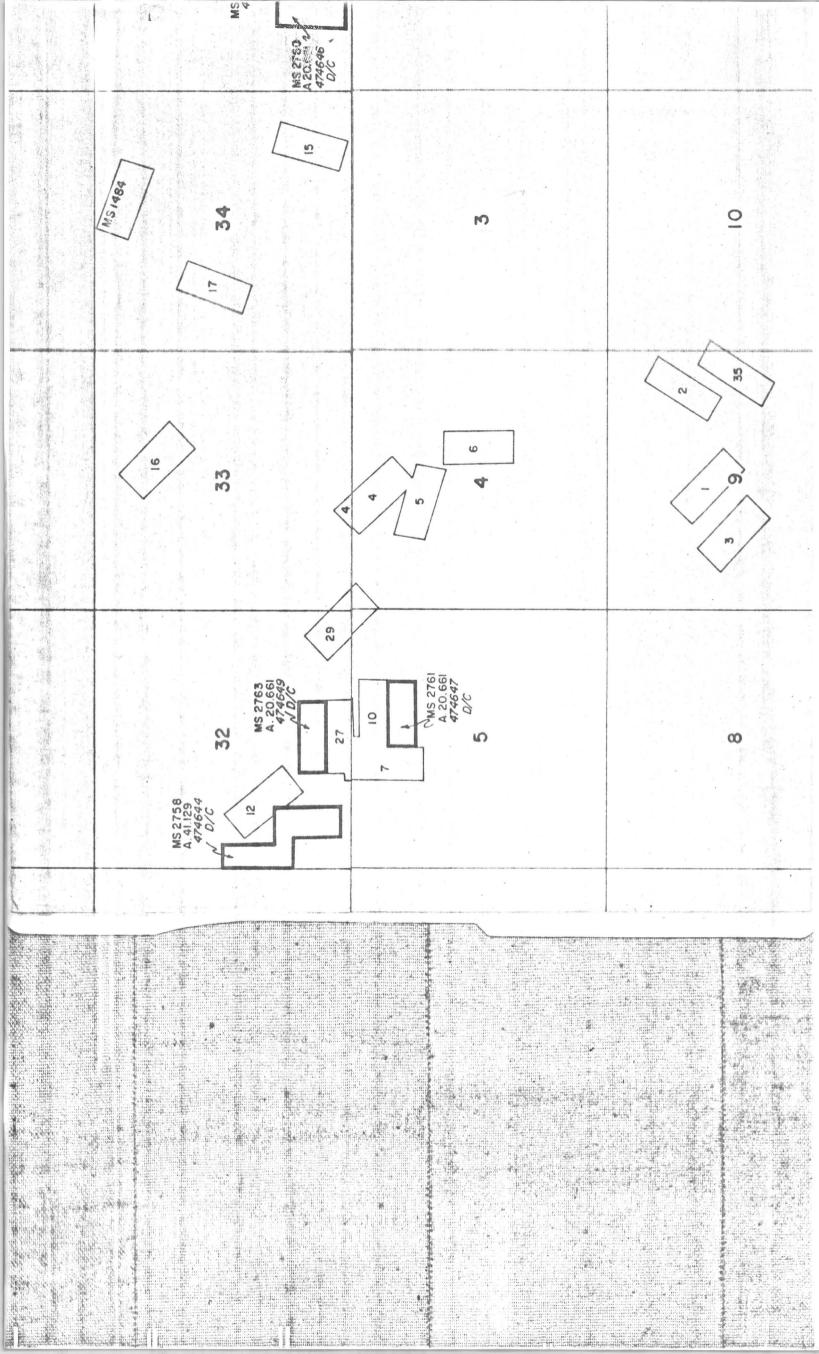
Boundary Investigations

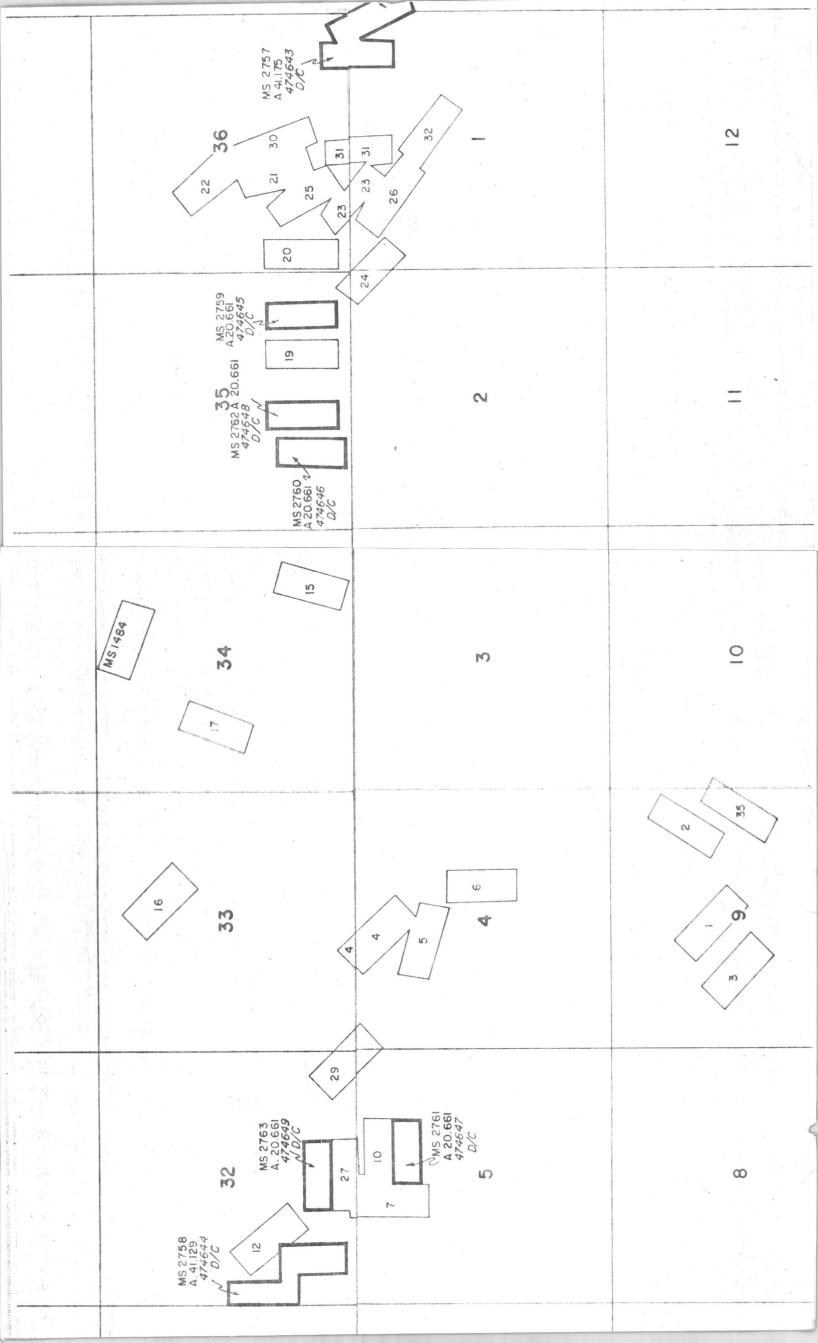
36 × 24 conser

Boundary investigation work

White Mesa FROj. 2-26-70 NORMAN BOWMAN Wadow Rock 8714131 NAVOJO LAND 505 AL 5/267 Bully Tinkle 505/25 5-1267. 40/10N Albug 243 4421 Normal Wolkinson # 672 2374 Shado Page & Cayenta So. E. LAT 110 30 Long 36 15 N to 37° N to 111° 6 15' 5Leets Centro/ & advance & completion 2,000,000 blocked outon 28 000 000 \$ 14,000,000

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# STEWART TITLE & TRUST

CEPTERLAGSTAPF.

HIZ EAST ASPEN PLACSTAFF, ARIZONA

TITLE INSURANCE

REPRESENTING STEWART TITLE GUARANTY CO.

relain

August 10, 1964

Mr. James J. Melfi Albuquerque, New Mexico Page 2

A "Quit Claim Deed" dated August 31, 1935 and recorded July 6, 1937 in Book 64 of Deeds, Page 125, in which M. L. Archer conveys an undivided 50% interest in the National claim to Claude F. Thompson.

A "Quit Claim Deed" dated July 24, 1935 and recorded August 5, 1937 in Book 64 of Deeds, Page 157 in which Nellie M. Francis conveys an easement for roads and rights to use of any water found on claims (reference Nos.) 1, 2, 3, 4, 5, 6, 8, 12, 16, 18, 19, 21, 23, 24 and 27.

An "Assignment" dated September 15, 1962 and recorded January 22, 1964 in Docket 214, Pages 247-249, of an undivided 10% interest from Zontelli Western Mining Company, Assignor, to Reserve Oil and Minerals Corporation, Assignee.

Record of assessment work for Claude F. Thompson for \$2,800.00 for 28 claims have been recorded annually through August 30, 1963 (Docket 208, Page 71) since 1959 (Docket 142, Page 327).

The names of parties mentioned herein were searched through indexes of Deeds, Assignments, and Assessment Work, and no other items of record pertaining to the aforesaid property have been placed of record in Coconino County, Arizona.

Very truly yours, STEWART TITLE & TRUST OF FLAGSTAFF

Manager

WCB:pab

Enclosure

EXHIBIT A

	•						
	Name of Claim	Party	Filing	Date of Claim	Date Rec	<b>!</b> •	Book & Page Record of Mines
	D	T W	Emanaia	Aug. 21, 1923	Nov. 6,	1922	7-503
	Buster	J. W.	Francis	Mug. 21, 1925	11 11	17	7-506
	Camp	11 11	Ü	11 11 11	11 11		7-509
	Dutchman	11 11	. ••• •••		11 11	11	7-511
	Eastern Star		11	11 11 11	11 11	11	7-513
	Inspiration	11 11		11 11 11	11 11	11	7-519
	Ray				H(t,x) = -4	1929	13-1
÷	Copper King		Archer	Sept. 5, 1929	Oct. 1,	1929	13-2
٠,	Starlite	11 11			11 11	11	13-2 13-3
	Princess	11 11	11		71 11	11	13-4
	National	11 11	11		n n	11	
:	Bozo	. 11 11	**				13-5
;	King	11 11-			11 11	11	13-6
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## STEWART TITLE & TRUST

OF FLAGSTAFF

112 EAST ASPEN

TITLE INSURANCE

REPRESENTING

August 10, 1964

Mr. James J. Melfi, President Reserve Oil and Minerals Company Bank of New Mexico Building Albuquerque, New Mexico

RE: 27 UNPATENTED MINING CLAIMS IN THE WHITE

MESA MINING DISTRICT IN COCONINO COUNTY,

ARIZONA .

Dear Mr. Melfi:

Pursuant to your order, we have made a search of the records in the Office of the Coconino County Recorder as they relate to the title of the following described property situate in Coconino County, Arizona, to-wit: SEE EXHIBIT A

From the aforesaid dates of recording of subject claims up to and including July 5, 1964 at 8:00 A.M., the following instruments affecting the above described property have been filed or placed of record in this county:

A "Quit Claim Deed" dated June 3, 1930 and recorded June 3, 1930 in Book of Deeds 58, Page 152 in which M. L. Archer conveys and undivided 51% interest to Nellie M. Francis, widow of J. W. Francis, in Claims (reference Nos.) 8, 12, 16, 18, 19, 21, 23, 24 and 27.

A "Quit Claim Deed" dated June 3, 1930 and recorded June 3, 1930 in Book of Deeds 58, Page 153, in which Nellie M. Francis, widow of J. W. Francis, conveys an undivided 49% interest to M. L. Archer in claims (reference Nos.) 1, 2, 3, 4, 5 and one other claim.

A "Quit Claim Deed" dated September 5, 1930 and recorded September 25, 1930 in Book 60 of Deeds, Page 67, in which M. L. Archer conveys an undivided 50% interest to Claude F. Thompson in the Arizona claim.

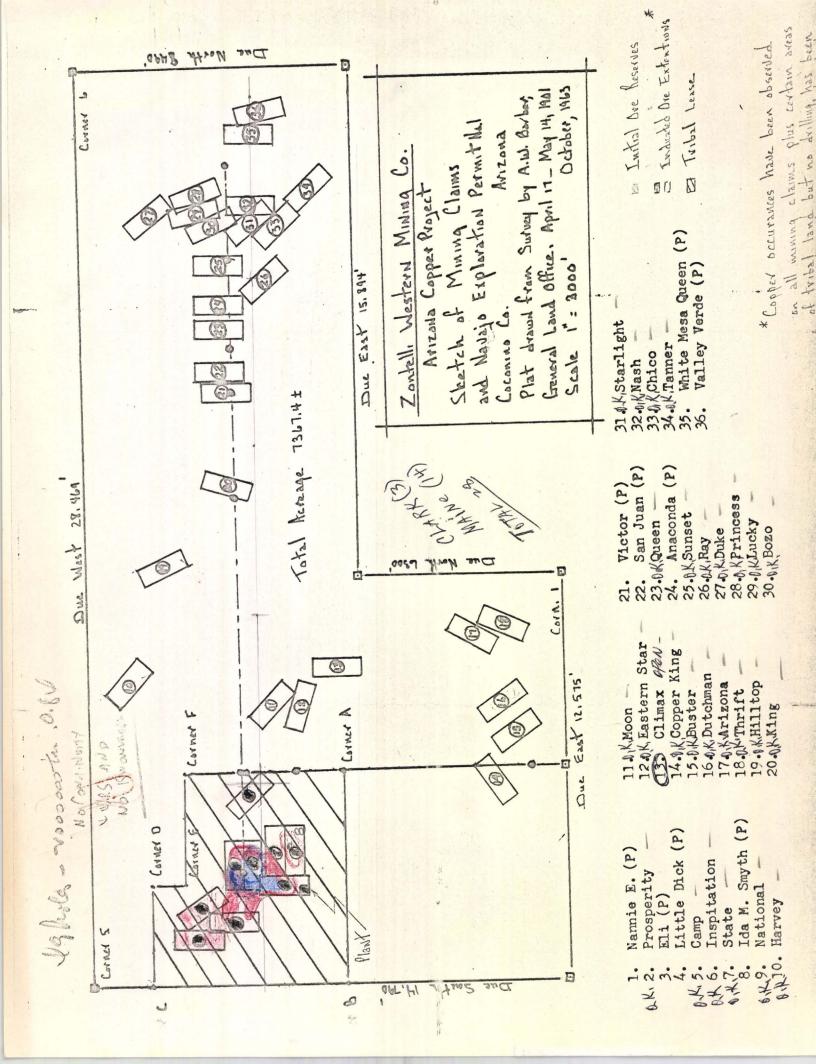
A "Quit Claim Deed" dated August 31, 1935 and recorded September 31, 1935 in Book 63 of Deeds, Page 49, in which M. L. Archer conveys his remaining 50% interest in the Arizona claim to Fred W. Carnes.

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Continuental Ocil is looking at it now They are duiling just amer. metale Elimon In taken up a township adjuning La morth & east, Bolomer of the elsto will be avoilable Manday. Suching # 100000 Juntoh of Jackago work

Terry Willis TO	PROM James J. Melfi, President  RESERVE OIL & MINERALS CORP.  821 BANK OF NEW MEXICO BLDG.  ALBUQUERQUE, N. M. 87103  Phone: 505 - 242-9138
SUBJECT:	DATE: 2/21/20
FOLD & Terry	
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DATE 2/23/10 SIGNED X. S.	

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## AFFIDAVIT OF PERFORMANCE OF ANNUAL WORK

STATE OF ARIZONA )
COUNTY OF COCONINO )

JACK A. TAITCH, being duly sworn, deposes and says that he is a citisen of the United States and more than twenty-one (21) years of age, resides at Spokane, in Spokane County, Washington, is personally acquainted with the mining claims situated in the White Mesa Mining District, Coconino County, Arisona, described as follows, to-wit:

NAME OF CLAIM	BOOK OF MINES	PAGE
- Inspiration	1	513
Camp	1	506
Clark	1	505
- Eastern Star	7	511
- Buster		503
- Nash	13	13
Dutchman	4	509
Ray	.,	519
Tonner	13	12
- Starlight	13	. 2
- Bunset	13	15
Gueen	13	10
King Maine	ii	17
- Moon	ii	17
State	ii	21
Hamron	ii	7
Rillton	13	16
Harvey Hilltop Lucky	13	14
Princess	13	3
Copper King	13	1
Copper King Wational	13	4
- Thrift	13	19
- Chico	13	8
- Duke	13	11
- Bozo	13	5
Arisona	13	20
Prosperity	13	9

That between the 1st day of September, 1968, and the 1st day of September, 1969, at least \$2,800.00 worth of work and improvements were done and performed upon said claims, not including the location work of said claims. Such work and improvements were made by and at the expense of affiant, owner of said claims, for the purpose of complying with the laws of the United States pertaining to assessment or annual work, and

RECORDED AT REQUEST	of Jack A. Taitch	
-August-99-	A D. 1959_at_3:00_	o'clock_P_N
10 1230366 AMERICAN A.A.S.	THE PARTY OF THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER, THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER,	NAME OF TAXABLE PARTY OF TAXABLE PARTY.
of Cooseino County, Argen		

Tsosie Bigman, Kee Howard, Tom Howard, Ed Kent, Robert Lane, John Lane, John Cling, Frank Clissie, Lee Spencer, John Scott, Max Johnson, Harry Begay, Kensley Iron, Floyd Stevens, Tully Bitsoie, Russell Cordery, Claude Thompson; geologist, William R. Green, of Mescow, Idaho, and Kocjan Construction Company, of Page, Arizona, were the men employed by said owner and who labored upon said claim, did said work and improvements, the same being as follows, to-wit:

Road construction, making buildozer exploration cuts and manually digging prospect holes, and making a complete geological evaluation and geological supervision of the claims based on such cuts and prospect holes, and other pertinent data, verified report of which is under preparation for filing.

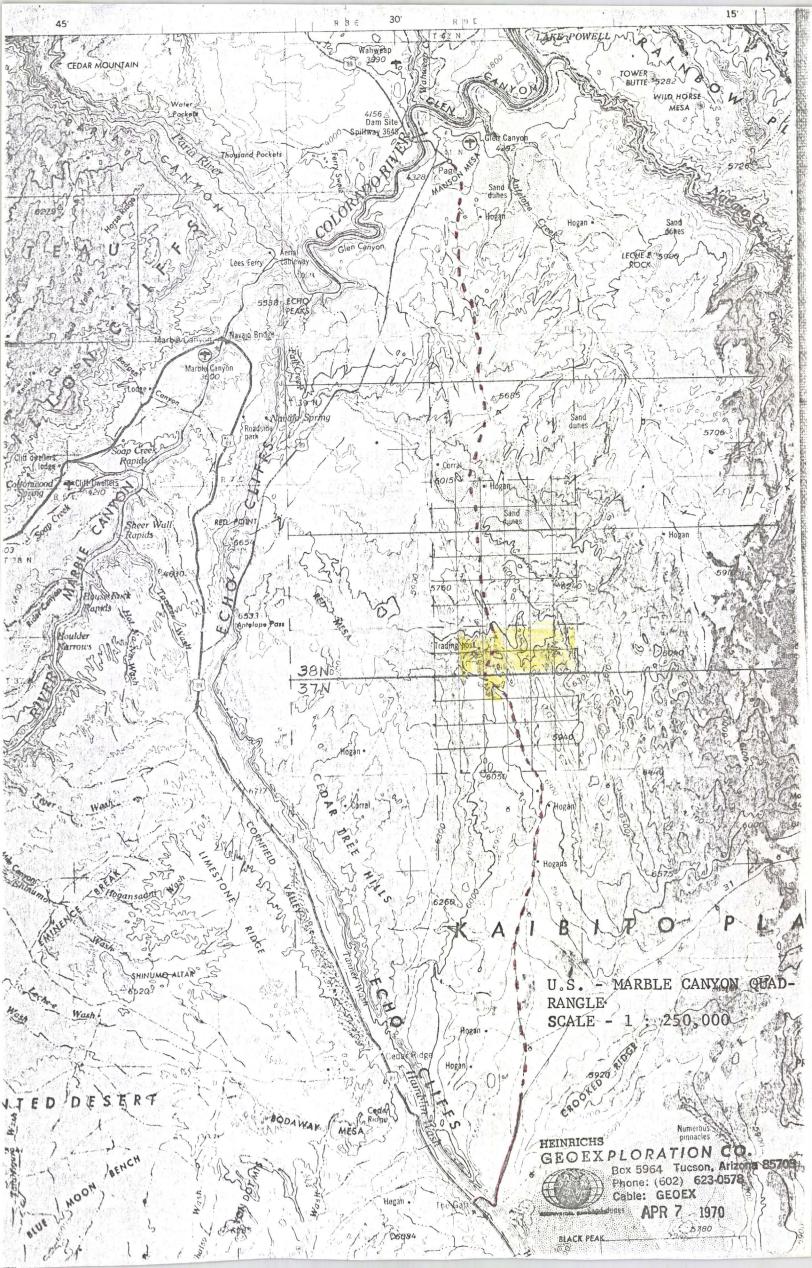
Jack A. tatteh

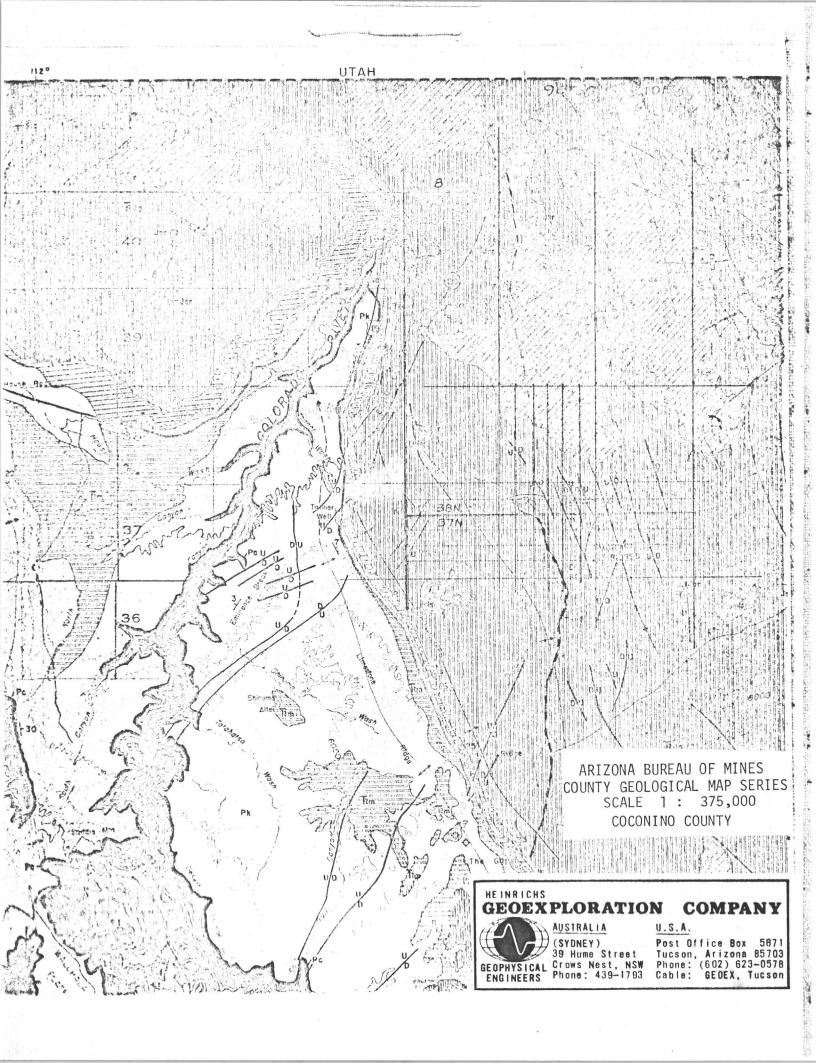
August, 1969.

Motary Public

Ny Commission Expires:





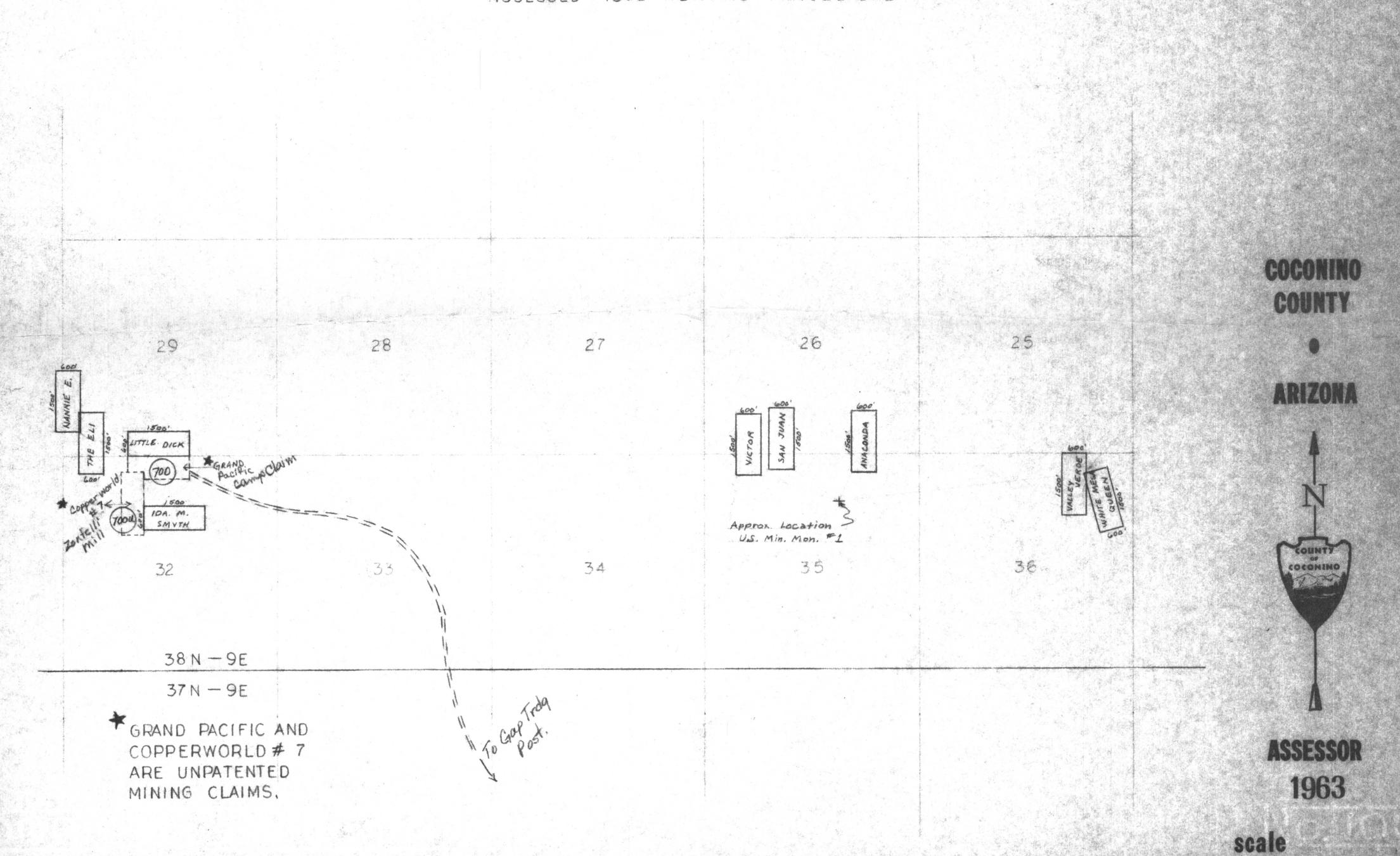


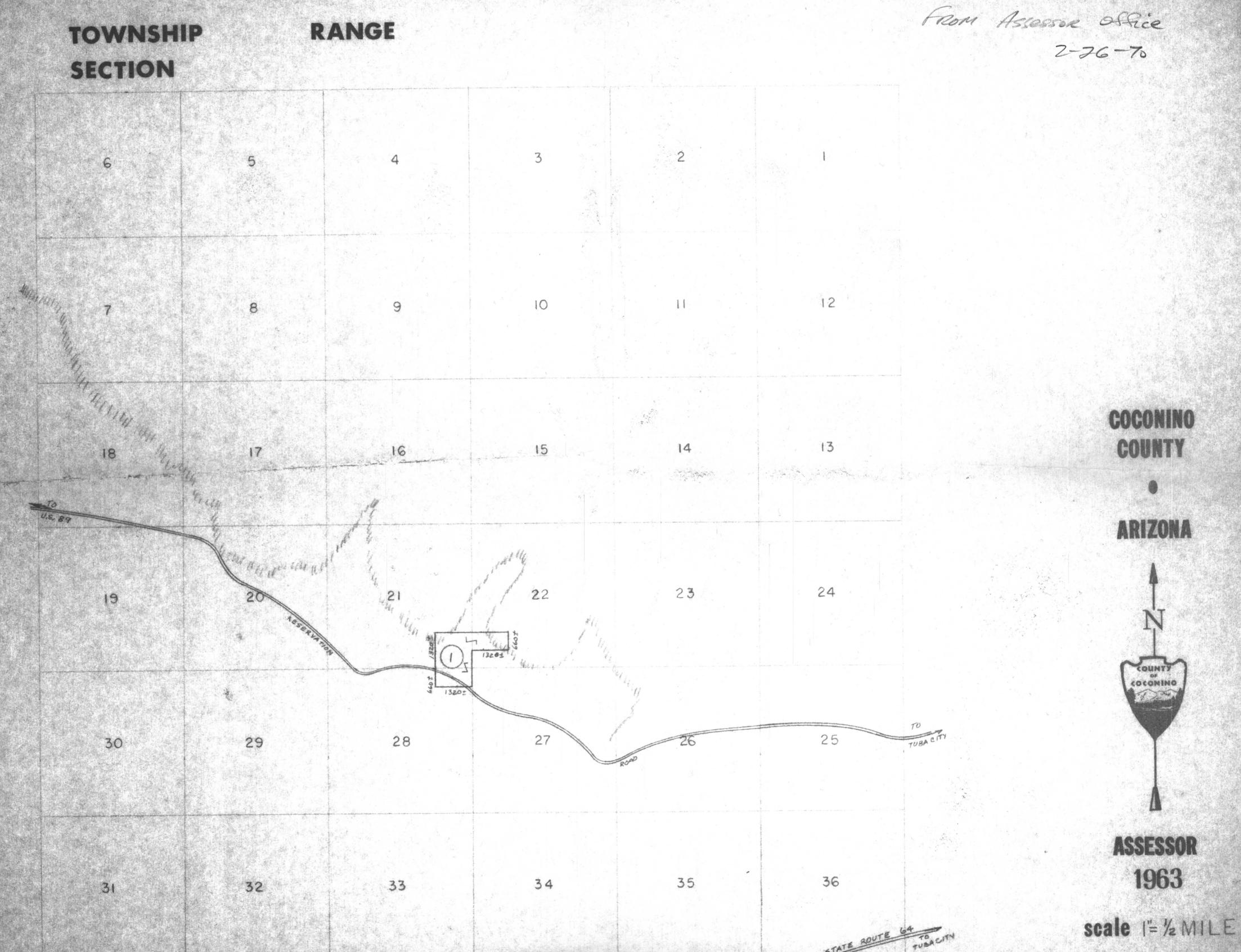
TOWNSHIP


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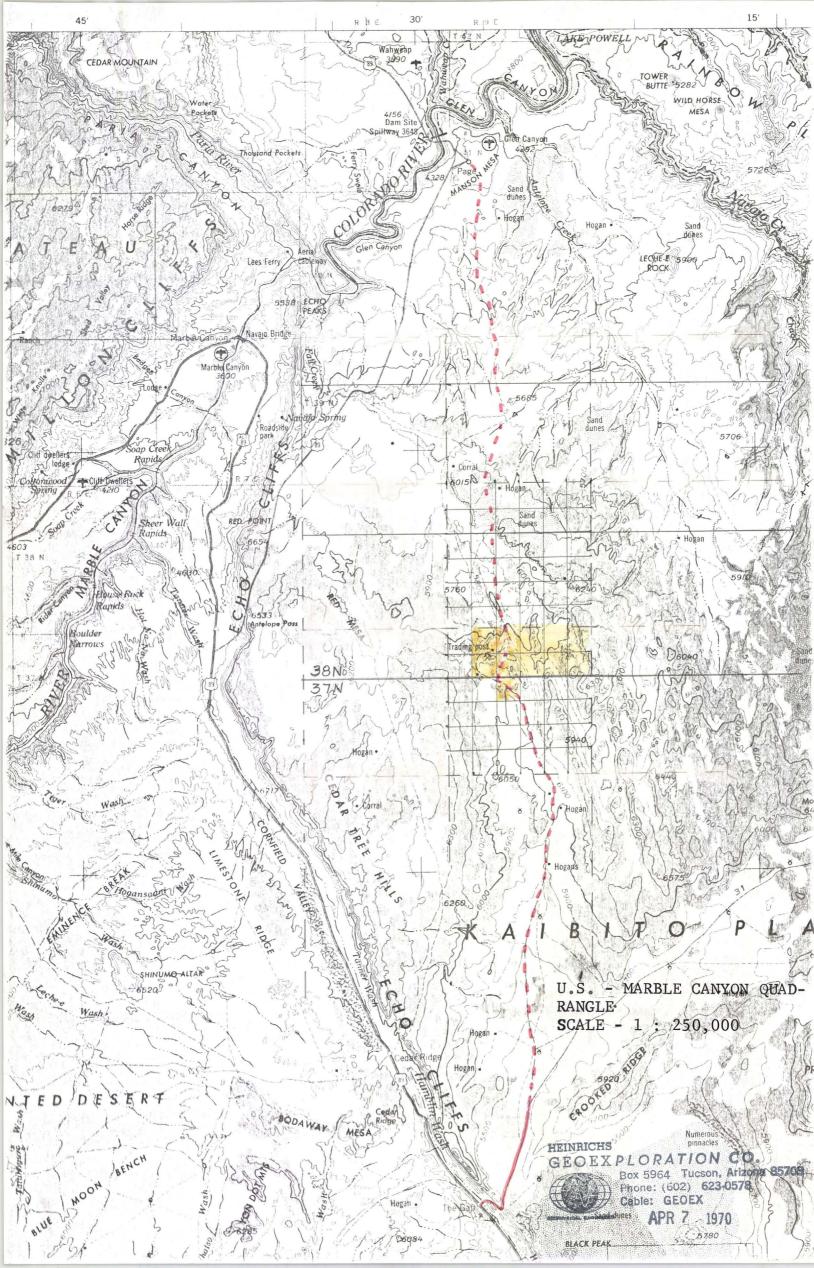
(TAKEN FROM G. L.O. CLAIMS MAP OF APRIL 17, 1901)

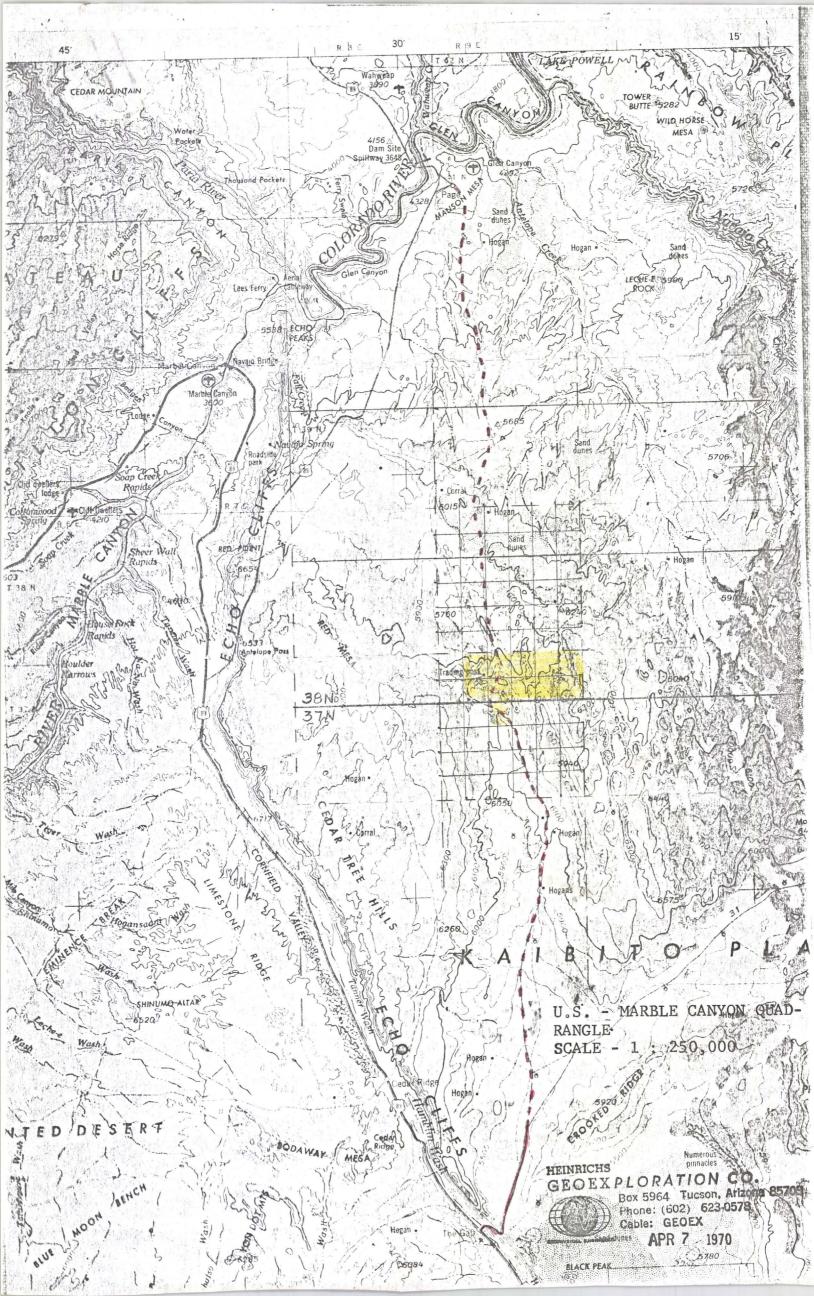
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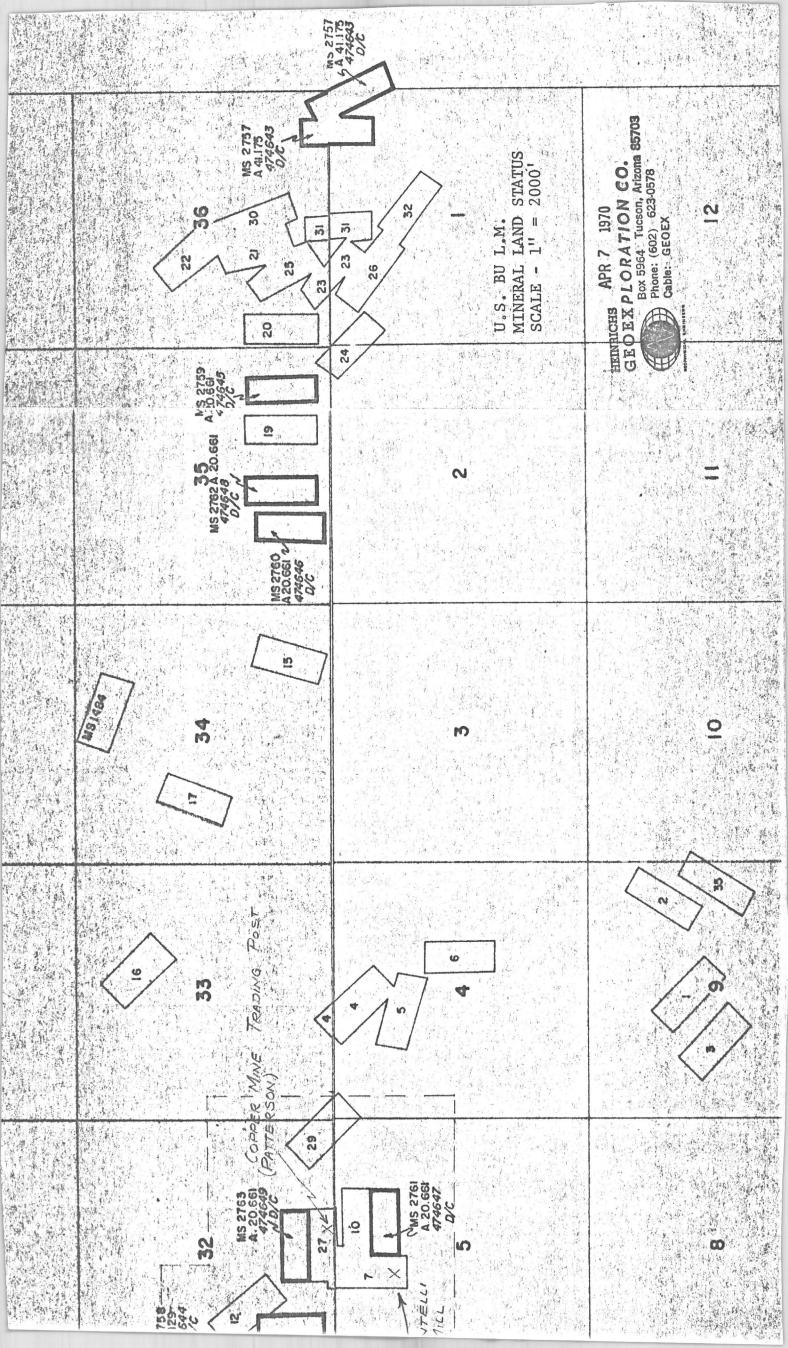












COCONINO COUNTY

STATUS OF PUBLIC DOMAIN LAND AND MINERAL TITLES

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	8	9	10		12	FOR ORDERS EFFECTING DISPOSAL OR USE OF UNIDENTIFIED LANDS WITHDRAWN FOR CLASSIFICAT MINERALS, WATER AND/OR OTHER PUBLIC PURPOSE REFER TO INDEX OF MISCELLANEOUS DOCUMENT All Tp. included in Wdl. Navajo Ind. Res., Act of Cong. 6/14/1934
		16	15	14	13	PROTRACTION DIAGRAM NO. 33
	20	21	22	23	24	
30	29	28		26	25	
	MS 2758 A. 41.129 474641  D/C  32  I2  MS 2763 A. 20.661 474649 D/C  29	33	34	MS 2762 A 20.661 A 20	22 <b>36</b> 21 30 MS 2757 A 41.175 474643 0/C	CURRENT TO BY UT
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