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PRINTED: 07-09-2012

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: BROWN MAGNETITE

ALTERNATE NAMES:
D.J. CLAIMS
LJC CLAIMS
MAGMA PLACERS
PECOS PLACERS
BLACK MAGIC PLACERS
LJC IRON CO.

MARICOPA COUNTY MILS NUMBER: 113

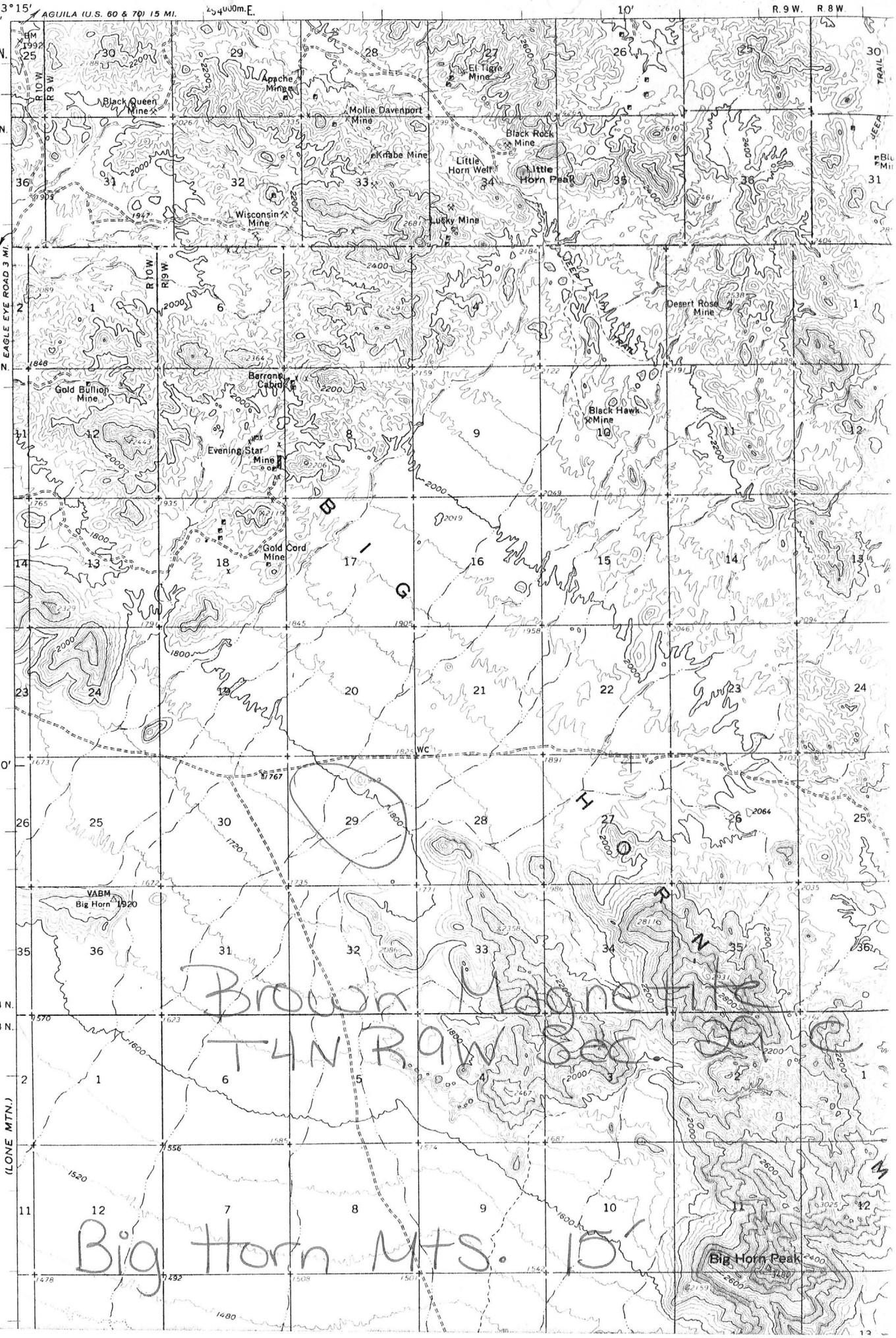
LOCATION: TOWNSHIP 4 N RANGE 9 W SECTION 29 QUARTER C
LATITUDE: N 33DEG 39MIN 38SEC LONGITUDE: W 113DEG 12MIN 08SEC
TOPO MAP NAME: BIG HORN MTS - 15 MIN

CURRENT STATUS: UNKNOWN

COMMODITY:
IRON MAGNETITE
GOLD PLACER
IRON TI MAGNETITE

BIBLIOGRAPHY:
ADMMR BROWN MAGNETITE MINE FILE
HARRER C USBM IC 8236 P 71
ADMMR LJC IRON CO FILE
ADDITIONAL WORKINGS/CLAIMS SECS 9,10,14,15,
16,17,19,20,21,22,23,27,28,29,30,32-T4N-R9W
SCHREINER, R.A. "MIN RES OF BIG HORN MTNS.
WILDERNESS STUDY AREA, AZ" 1985, MLA 44-85
(PHOENIX GEOLOGY FILE)

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



BLACK MAGIC PLACERS MARICOPA COUNTY

(Summary from "U" card) Black Magic Mining Association, a partnership in July 1953 owned the placer claims in the South½ of T4N R9W, Maricopa County. Radioactive materials seem to be radioactive sphene and alter zircon. Monazite was reported in the black sands and thorite from a nearby area.

BROWN MAGNETITE MARICOPA COUNTY

(Fred) Brown Magnetite placer claims leased by Ralph Langley. J. E. Dietrick, 2133 N. Walnut Blvd. phoned for information. He and associates have financing and may undertake drilling and geological program preliminary to mine development. Say Langley has offer from large Japanese iron firm to take set quantity per year. Said claims involved are DI Nos. 1-26, 26 recorded in Maricopa, Book 1487, pp 478-503 and Nos. 27-30 recorded in Book 1538, pp 184-187 in 8½ sections.
FPK 6-14-63

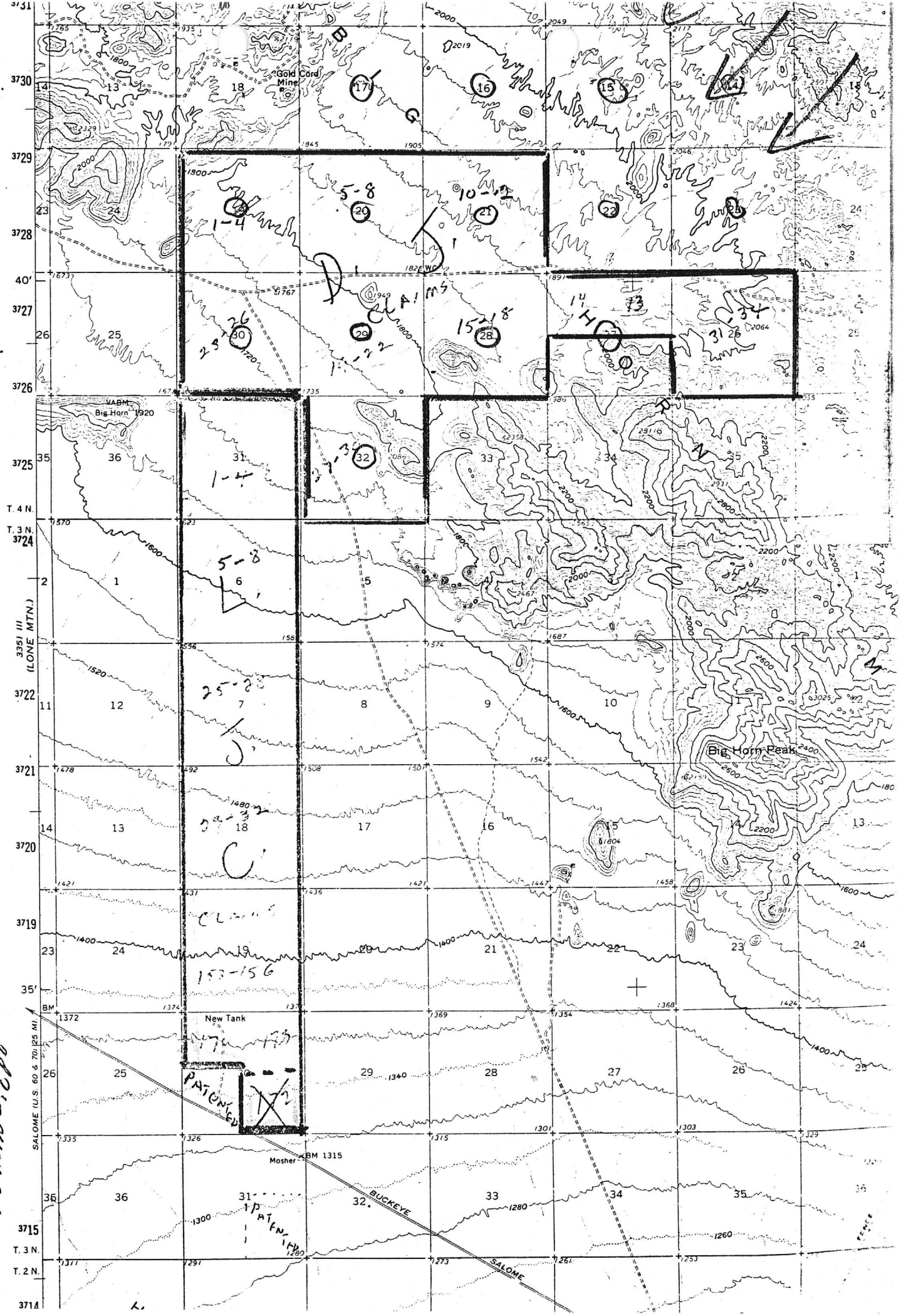
Correspondence To Col. George Brown of McLean, Virginia, regarding the Fred Brown alluvial iron deposit near the Big Horn Mts.; gave him reports made by this department. The deposit is said to contain appreciable amounts of placer gold. A pilot plant for wet recovery of the gold was tried in 1966; no activity since. FTJ WR 8/15/73

USBM "U" File

GJBX 143 1981 Radioactive Occurrences and Uranium Production in Arizona
p. 197 ABG&MT Report

BROWN MAGNETITE MARICOPA COUNTY

Abstract from "Arizona Iron Ore Deposits" in IRON COMMODITY file: The Brown Magnetite Placer Deposit, Maricopa County, is located about 17 to 20 miles south of Aguila and a short distance east of the Aguila-Tonopah Road (Sections 19-23, 27-30, and 32, T4N, R9W). The deposit, according to Ralph Langley, compreses 6,000 or more acres of stream gravels of variable thickness, which contain 3½ to 4½ percent of magnetite and some illmenite ("hot" spots run up to 10 percent of magnetite). Beneficiation tests by Langley and associates, indicated that magnetic separation and screens will yield a concentrate carrying 65 to 67 percent iron and less than 0.80 percent of titanium oxide. The illemenite and magnetite, in this case, are partially separable by differential magnetism. Tests are now being run to determine comparative costs between nodulizing and extrusion with a suitable binder. The latter appears to be considerably cheaper than nodulizing and the pellets can be sized. The area was recently examined by Japanese engineers but Mr. Langley had not, up to April 1961, received a report from them. (Owner, Fred R. Brown, Box 26, Picacho, Arizona.)



GEOL SURVEY MAP - 1961
BIGHORN MTS Quad
ARIZ - MARICOPA CO
15 MIN - TOPO

CHARLES R. WARD CORPORATION
Mining Development & Mineral Recovery
(602) 242-8345
Phoenix, Arizona 85015

PARCEL # 150

Big Horn Mining District
Maricopa County, Arizona

Excerpts From Report

By

Walter W. McMillen
April 1975

And

Lewis A. Smith
Arizona Department of Mineral Resources
August 1960

And

R. E. Mieritz
Register Mining Engineer & Geologist
December 1975

1973-74

THE MAGNA AND IRON MAC PLACER CLAIMS

LOCATION AND DESCRIPTION

The Magna and Iron Mac Placer Claims are located in the Big Horn Mining District of Maricopa County, Arizona, approximately 85 miles west of Phoenix and 300 miles east of Los Angeles. They can be reached via Interstate 10, the main highway connecting Phoenix and Los Angeles, to the Salome Exit (Exit 81) thence via an unimproved dirt road a distance of approximately 8 miles in a northerly direction.

There are railheads on the A.T.&S.F. (Santa Fe) railroad at Aguila and Salome about 30 miles northwest of the property via gravelled roads, and on the Southern Pacific railroad at Arlington about 28 miles southeast of the property approximately 20 miles of which is via paved road. (See Arizona Highway Map)

The claims consist of 79 unpatented placer mining claims located on public lands of the federal government which are open to mineral discovery and exploration pursuant to the mining laws of the U. S. and the State of Arizona. The principal mineral discovered is magnetite (FE_3O_4) existing in "black sands" with some, titanium, gold and silver in evidence.

HISTORY AND BACKGROUND

The Magna Claims, except for Claim Nos. 35, 36, 41 and 42, were originally located circa 1954-1955 by a Fred Brown and others under the name D. J. Placer Claim Nos. 1 through 34. These claims were later transferred by quit-claim deed to Frank Broes who transferred them in succession to Calazona Development Company, L. J. C. Iron Company and Stradco Iron Company, all corporations in which he was either the sole or majority stockholder and over which he exercised absolute control.

The writer first became aware of the existence of the claims while he was employed for a brief period in 1966 by Calazona Development Company and had

occasion to visit them in connection with his employment. Prior to that time Broes, acting through his various corporations, had undertaken an extensive drilling and exploration project on the claims, and the writer later learned through reading correspondence and assay reports which were shown to him, and through visual observation and conversations with Broes and others who were present at the time of the project, that a sizeable body of magnetite ore had been blocked out over the claimed area. The depth was reported to be 500 feet with some assays running as high as 69% plus magnetite or 55% plus iron. This was confirmed by a report of a registered geologist named Donald P. McCarthy (now deceased) and accompanying assay reports which were read by the writer. Some 30 odd holes 36 inches in diameter and approximately 30 feet deep were drilled. Some of them are still in existence but have become partially filled. It was also reported to the writer that some 200 core drill holes 2 inches in diameter by 500 feet deep were drilled. None of these was ever seen by the writer, but one can occasionally run across the 2 x 2 white painted stakes on the property which reportedly were used to mark the location of the holes. In addition two 10 inch by at least 500 foot deep water wells were drilled on the property, and during the time the writer was employed by the company at least one of these wells was producing what was reputed to be "heavy water" with gold in suspension. Samples of this water were shown to the writer. At that time Broes under the guidance of a metallurgist named Howe was attempting to develop a process whereby gold could be taken out of suspension, but as far as the writer knows this was unsuccessful. The ruins of the building and part of the equipment employed in this process are still in existence on the property. The two wells were evidently capped at one time and apparently the caps have been cut off the casing and dropped into the wells. As a consequence the wells are both plugged at this time.

The writer was again employed by Broes in 1971. This time as Secretary of Stradco, Inc., a holding company with offices in Washington, D. C.. During this employment the claims were transferred to Stradco Iron Company, s subsidiary of Stradco, Inc., and as part of this employment the writer was detailed to secure an appraisal of the mining claims for corporate accounting purposes. This appraisal was made by Richard E. Mieritz, a registered geologist. Since no current information was available to him upon which to base his appraisal a "conditional" appraisal was made based upon the assumption that the McCarthy geological report was accurate and correct and that the assay reports were correct and upon a visual inspection of some of the remaining 36 inch by 30 foot drill holes, which by that time had become partially filled. As the writer can best recollect Mieritz appraised the value of the mineral in place to a depth of 27 feet at $165,000,000.00, and the possible existence of gold, silver and titanium in the ore body and the existence of "heavy water" with gold in suspension were not taken into consideration. For reasons of professional ethics Mieritz cannot make available a copy of his appraisal and the McCarthy report and accompanying assay reports are not available to the writer. In any event it is believed they would be of little or no probative value at this time and their contents would have to be confirmed through another extensive drilling and assaying program. However, based upon what the writer has seen and heard of the ore body, and the results of recent shallow subsurface sampling by the writer and the other locators under the direction of Mieritz, it is felt there is good reason to believe the ore body exists in some degree of proximation to that which was previously reported.

During the period from noon September 1, 1973 through noon September 1, 1974, Stradco Iron Company failed to perform the assessment work required to be

performed each year on unpatented mining claims. As the direct result of this failure the property reverted by operation of law to the public domain and became open to mineral location.

The writer and the other locators named in the notices of location re-located the D. J. Claims on November 1, 1974 as Magna Placer Claims together with Magna Claims Nos. 35 and 36 which were located as original locations. Later, on December 21, 1974, Magna Placer Claims Nos. 41 and 42 were located as original locations. On February 15 through 17, 1975, the Iron Mac Placer Claims Nos. 1 through 29 together with 9X, 9Y, 9Z, 10X, 10Y, 10Z, 14X and 15X were located as original locations. Three of these claims are one-half of a quarter section. The remainder are quarter section claims.

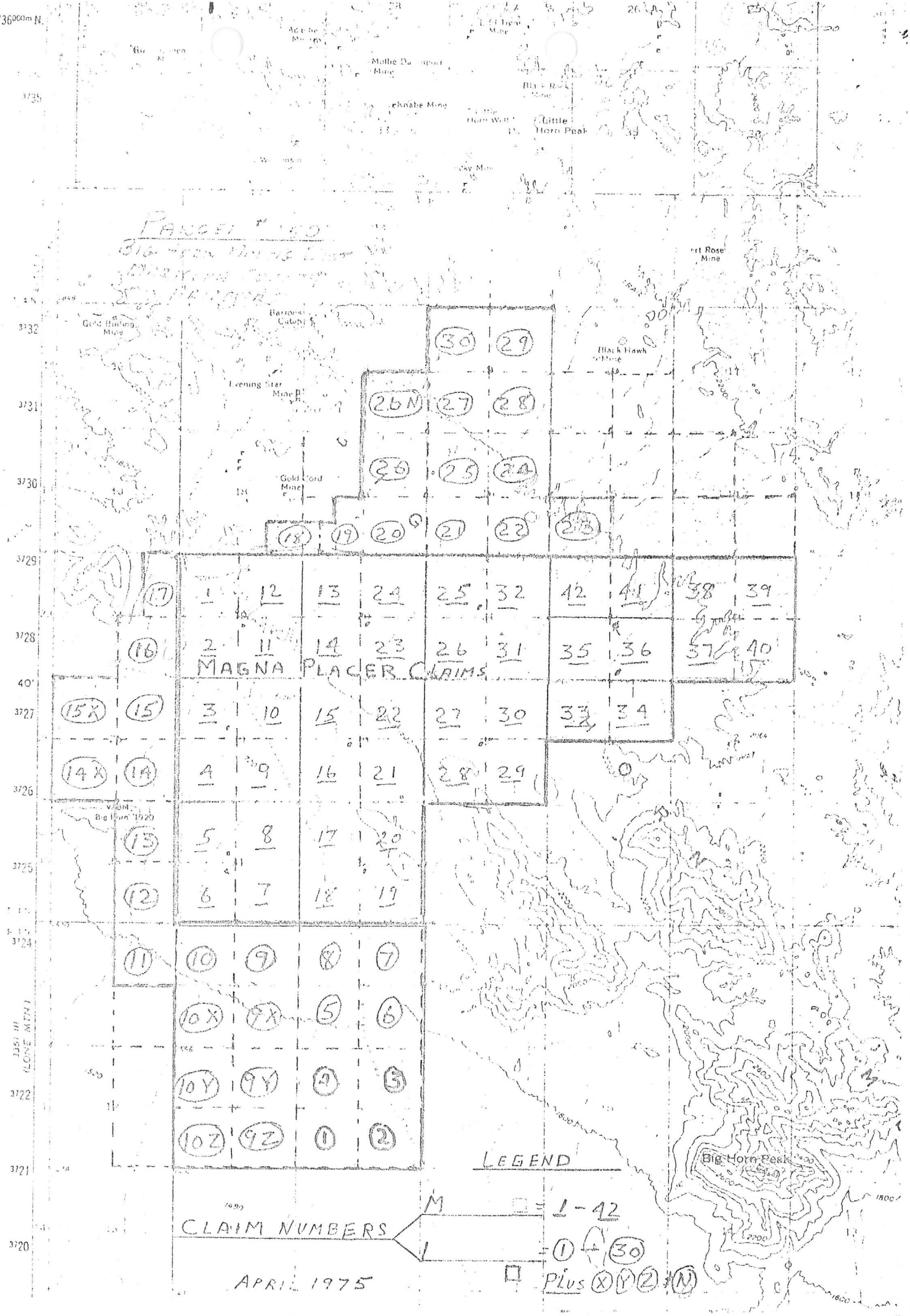
The total number of 79 claims now held by the locators of the Magna and Iron Mac Placer Claims comprises 19.125 sections of surface land. Arbitrarily assuming that 75% of the area can be mined as a placer deposit, an area covering 14.14 sections, 9050 acres, or 43,802,000 square yards could be mined to a depth as yet undetermined. Based upon that assumption, and the weight of the ore (i. e. sand, gravel, rock and minerals) being 1.35 tons per cubic yard (as determined by R. E. Mieritz), and further assuming various average contents of iron which might exist throughout the ore body, as yet undetermined, the following attached table was compiled to demonstrate graphically the various possibilities which could exist in these mining claims upon a determination of the average iron content and the depth of the ore body.

Respectfully submitted,

Walter W. McMillen

Walter W. McMillen

Depth Feet	Ore Cubic Yds.	Ore Tons	IRON (Fe)/tons 30%	40%	50%
30	438,020,000	591,327,000	177,398,100	236,530,800	295,663,500
60	876,040,000	1,182,654,000	262,812,000	350,416,000	438,020,000
90	1,314,060,000	1,773,981,000	394,218,000	525,624,000	657,030,000
120	1,752,080,000	2,365,308,000	525,624,000	700,832,000	876,040,000
150	2,190,100,000	2,956,635,000	657,030,000	876,040,000	1,095,050,000
180	2,628,120,000	3,547,962,000	788,436,000	1,051, 248,000	1,314,060,000
210	3,066,140,000	4,139,289,000	919,842,000	1,226,456,000	1,533,070,000
240	3,504,160,000	4,730,616,000	1,051,248,000	1,401,664,000	1,752,080,000
270	3,942,180,000	5,321,943,000	1,182,654,000	1,576,872,000	1,971,090,000
300	4,380,200,000	5,913,270,000	1,314,060,000	1,752,080,000	2,190,100,000



Little Horn Peak
Black Rock Mine
Black Hawk Mine
Gold Bullion Mine
Evening Star Mine
Gold Cord Mine
Barrows Cabin
Big Horn Peak
MAGNA PLACER CLAIMS
LEGEND
CLAIM NUMBERS
M = 1 - 42
1 = 1 - 30
Plus X Y Z & N
APRIL 1975

District: MARICOPA COUNTY - BIG HORN DIST. Date: LEWIS A. SMITH

Subject: Mine Visit and Conference - Chris J. Hall (In charge of field operations) 2/4/65

ACCESS: Travel 26 miles along the Hassayampa - Salome County road to where the Mary B. Ranch road joins it. Here turn north for 9 miles to the mine headquarters (This road had been graded, but it is now rough). (The road from Hassayampa is paved to the Mary B junction, but is 3 miles longer.

WORK: This is described in previous reports, except that the present water hole is now at 575 feet and has a set of tools stuck in it. Water in both holes was encountered at about 200' below the collar, according to Hall. At this well a fence has been erected for a storage yard and the proposed plant. A pile of tarred power poles was stored here. Later this will be used to build a power line 8 miles to Public Service lines on the Salome highway. The rerun on the samples from the 36" holes shows considerable recoverable gold. (The concentrates, according to Frank Broes, show up to $30-$35 of gold per ton or rough $1-$1.25 per ton of gravel, and 4½-5 percent of magnetite (up to 6 percent). He stated that the Japanese checked this gold figure, and it was their report that caused L.J.C. to make the rerun for gold. The 34 holes (36 inches in diameter) showed reasonable consistency in magnetite content as did 45-2" holes (30 feet deep).

GEOLOGY: The magnetite placer occupies an amphitheatre that is roughly half of a circle, surrounded on the east and north by volcanic flow rocks lying on granite gneiss (and probably some schist). These in order are andesite, rhyolite and rhyolitic tuff, and last capping the ridges, is a flow of basalt that is largely small remnants. Each of the three groups of flows is separated from the other by erosional unconformities. The andesite is somewhat basic in places. The magnetite may have weathered out of the basalt and the andesites. The Tiger and other small gold properties lie N and NE and lie, in the main, in the andesites and the underlying granite gneiss. This sort of mineralization could also have yielded the gold found in the placer. Comparing the thick flows of the Plomosa Mountains andesites (Kofa Series) (possibly 2,000 feet thick) with what remains of the Big Horn andesites, it is evident that an erosion of the latter has been extensive. It is also probably that the granitic rocks may be in part basic (diorite or hornblendite) as is the case in the Little Harquahala Mountains to the NW of this area. (These rocks formed the Bauer magnetite placer). In the manganese bearing area immediately north of this area the remaining andesites were locally very thin, and indicating extensive erosion. To the northwest gneissic granitic rocks predominate. A few small granite and gneissic granite remnants project upward out of the gravels and out from under the andesite flows, around the east and north perimeter of these gravels. The 800-foot water hole, ending in coarse gravel, show that a considerable volume of gravels lies in the amphitheatre. The cobbles, pebbles and sand around the camp consist of andesite, rhyolite, basalt and granitic rocks, at or near the surface of the gravels. The sand is largely of granitic origin.

The drill rig is a Walker-Neer Model S-32. The casing in the collar of the 575 foot hole is in 12" diameter. Recently two diesel motor-driven generators (125 KW) were placed on the ground for standby power. They are Ready Power units manufactured in Detroit, Mich.

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[illegible]: A large [illegible] miles south of Hwy 60 [illegible] and south to the Big Horn Mou[illegible]ns. (A brochure will be sent to the Department on this).

CONTACT: • Frank Broes, 2809 W. Adams, Phoenix (273-7151).
• [illegible]as S. Hubbie, 500 W. Clarendon (265-2455).
• Stanton C. Dick, 1623 N. 26th Pl. (Brother of School Supt., Skipper Dick.)

MINERAL: Magnetite iron, titanium.

[illegible]: (1) 37 two inch sample holes, 40-100 feet deep.
(2) 1 36" hole, now 600 feet deep.
(3) Several 36" holes, to various shallower depths are contemplated.
(4) Several bulldozer trenches, and test pits.

The 600-foot hole, according to Broes, contained consistant values all the way down.

RESERVES: A very large reserve of magnetite sands is estimated and, from tests so far, [illegible] these reserves appear to have a grade of about 5 per cent magnetite and minus [illegible] per cent titanium. The magnetite concentrates run 67 to 70 per cent iron.

PLANS: According to Broes, the Company plans to be mining within 5 or 6 months to supply a contract with the Japanese that would require delivery of 2,000,000 or more, tons of magnetite concentrates per year. The Japs did not object to the titanium. (Most magnetite placers carry more than ½ per cent titanium, principally as ilmenite).

NOTE: The L. J. C. Iron Company and the Calazona Mining Companies are intertwined.

STATE OF ARIZONA
DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX, ARIZONA 85007

August 20, 1973

COPY

Lt. Col. George H. Brown, Ret.
P.O. Box 626
McLean, Virginia 22101

Dear Col. Brown:

The Brown magnetite claims DI Nos. 1-26, are recorded in Maricopa Recorder's Book 1487, pp. 478-503 and Nos. 27-30 in Book 1538, pp. 184-187. Mr. Brown was an independent prospector.

The lessee was Ralph R. Langley, et al, 1156 South Highland Avenue, Los Angeles, California. I believe Mr. Langley passed away last year.

Long Drilling Company, of Phoenix, did the drilling, but I cannot find them in the phone directory. They were contracted to drill 10 or more 16" holes up to 100 feet in depth.

Concerning Mr. Broes, if he were given a quit claim deed, that deed may not have been recorded. Our records indicate he owned them. We cannot judge the presence or not of iron in the SW¼ of Sec. 30, T3N R9W. If Mr. Broes stated he did not find values, we would have to accept that.

According to a memo we have dated June, 1967, Mr. Broes said they completed two 800 foot wells with a good flow of water (untested by pumping). Our records indicate "a gold extraction pilot plant was about ready to test at the mine, a wet method will be used since the wells have developed a very good supply of water." October, 1966.

This agency has not been queried by the Mellon National Bank or the Pittsburg National Bank or U.S. Steel regarding the properties.

One of our field engineers visited the properties in November, 1971, and saw nothing to indicate a revival of interest in the claims.

Sincerely yours,

F.T. Johnson,
Field Engineer

FTJ/GGS

CRYSTAL MANAGEMENT SERVICES
INC.
6825 Redmond Drive
McLean, Virginia 22101
356-2630

August 13, 1973

Mr. John H. Jett Director
Mineral Resources Dept.
State of Arizona
Mineral Bldg- Fairgrounds
Phoenix, Ariz. 85007

Dear Mr. Jett:

I have been pursuing with some degree of diligence a sort of "hindsight" program of developing information relating to the D. J. and LJC Claims (unpatented placer mining claims) indicated within the outlines on the enclosed Frag. Map.
My associate and agent John W. Crosby, has been in touch with members of your Dept., and I have communicated with you at an earlier date. John secured for me some copies of memoranda relating to interviews and physical inspections of properties described by members of your Dept., and with one Frank Broes, or his associates. I enclose a copy of a definitive paragraph relating to (the late) Fred R. Brown's discovery. On the Frag. Map
I have enclosed. I have circled in purple, the sections involved in the Fred R. Brown Alluvial Magnetite location. Was Fred Brown officially connected with your Dept. or the Fed Bureau at the time? Or was his discovery as that of a private prospector. Did he ever actually file Claims on the sections so located and described?
Do you have knowledge of who the lessees were that did the testing in 1961? Broes tells a story of having acquired the D. J. Claims (area enclosed in greed) from an old and ailing man, who didn't want his family to have the property and that Broes had done him a favor. My agent can find no record in Maricopa County, of Broes ever filing Claims on the D. J. area. Yet he has passed " interest " in them from one of his Companies to another on two occasions. The first of these was from Broes LJC Iron CO. to Intnl. Iron CO. Ltd., yet there is no record in the County of Record as to how the claims got into the LJC Iron CO. in the first place
The purple arrows on the frag map indicate a general direction of alluvial flow from the NE to the SW.

The elevations to the SE of the DJ area, would indicate an interruption to the flow of the fan, and perhaps indicate that the substantial outwash plain, including the yellow outlined LJC Claims area, might be outside the area of concentration of an "heavy Mineral" deposition in Placer matrix. Certainly as on tends to the south IE: claim # 172 marked with red X , the probability of Magnetite (or gold) in flotation even at a depth in placer matrix, could in my view be remote. How say you?
Broes stated that he "did not find iron in the SW ½ of Sec. 30, T3N, R9W." This may be because it was a proved up homestead, or it may simply be that he hound no iron there, or in SE ½ either.
Broes two wells and his production shed are located in Sec.30, T4N, just above the green/yellow line confluence. I have an opinion, that perhaps Broes' sole interest in the LJC claims at all, was as a mile wide corridor, into the DJ Property, for the purpose of expeditious transportation of any mined mineral to the Salome-Buckeye Rd.
(Your own Dept. memo) ,describing the routing into the DJ area, is torturous! Thus it may be that in all of the LJC Claims, there is the elemental lack of Discovery of Iron/Gold. Also I cannot believe that water, in the amounts required to produce palletized iron, would be available from wells or from surface streams. (even in the Masai they need 16000 GPM per annual 1 million T pellet output.)
My particular interest in the ¼ Sec. 30, T3N, R9W marked with the X .

If you're Dept. has any records to indicate the discovery of Fe_2O_3, of a nature to meet the State/Fed criteria for Placer mining, I'd like to be so informed. I could infer from previous responses from your Dept. that Broes or others attempted a mining Open.
Has your Dept. been queried by the Mellon Natl. Bank of Pittsburgh, PA, regarding these claims by Broes? Or the Pittsburgh Natl. Bank, or more recently US Steel Corp?
I believe that Broes is trying to capitalize on something that does not exist or exists so marginally that it is operationally impossible. I have tried to ask the "right questions". I will appreciate your candid response

Sincerely
Signed George H. Brown
Lt Col USA Ret'd.

DEPT OF INT BUREAU OF MINES CIRC 8236-1964
(C.M HARRER - AUTHOR) "RECON. OF IRON
RESOURCES IN ARIZ."

THE ARIZONA DEPARTMENT OF MINERAL RESOURCES MAKES NO REPRESENTATION AS TO THE ACCURACY OF THE CONTENTS OF THESE DOCUMENTS.

Big Horn District (Fred Brown) Magnetitic Alluvium

Approximately 6,000 acres of alluvial plain have been located by Fred R. Brown of Picacho as a large magnetite placer deposit in the Big Horn Mountains area (49, fig. 1) and mining district. The alluvial area comprises parts of secs 9, 10, 14, 15, 16, 17, 19, 20, 21, 22, 23, 27, 28, 29, 30, and 32, T 4 N, R 9 W, Gila and Salt River meridian and baseline. The magnetite placer area starts about 17 miles south of Aguila, just east of the Aguila-Tonopah road.

Titaniferous magnetite occurs in alluvium and stream gravels reportedly ranging in thickness from a few feet to more than 100 feet. The magnetite with minor amounts of ilmenite makes up 3 to 7 percent of the alluvium; parts of the deposit contain as much as 10 percent magnetite.

Beneficiation tests made by lessees in 1961, including screening and magnetic separation, yielded concentrates containing 65 to 69 percent iron and 0.3 to 0.8 percent titania. The area has been prospected by scattered pits 10 to 15 feet deep.

Bilge Pump, New Year, Toro Hematite, Goethite Turgite

Hematite, goethite, and turgite occur as scattered clusters and color prominent northeast-trending quartzite ledges and crinkle folded jasper about 0.2 mile north of the Bards-Little Grand Canyon Ranch road (51, fig. 1) on the Toro, Bilge Pump, and New Year's limonite groups of claims located in 1956-59 by T. Collins, M. W. Rollins, and others. The deposits are in secs 32 and 33, T 6 N, R 2 E, north of the Big Boulder magnetite taconite deposit. The quartzite-jasper beds are about 50 feet thick and can be traced for almost 2 miles. Dips range from 50° N to vertical.

Gold placer-mining operations in the Wickenburg district indicate the presence of abundant magnetite and some hematite, ilmenite, and zircon in alluvium of the area (17, pp. 1180-1181).

Phoenix Mountains Magnetite

[illegible] lenses of magnetite and some hematite (52, fig. 1) occur parallel to [illegible] in Precambrian quartzite beds in the Phoenix Mountains, [illegible] not of commercial [illegible]

BROWN MAGNETITE (f) MARICOPA

AN APPRAISAL

of

"IN PLACE" MINERAL WEALTH

of the

D. J. & L. J. C. PLACERS

in

Maricopa County, Arizona

by

Richard E. Mieritz
Mining Consultant
Engineer - Geologist
(Sun City, Arizona)
Phoenix, Arizona

October 23, 1971

TABLE of CONTENTS

	Page
Introduction	1
Conclusions	1
Property, Location and Accessibility	1
Geology	2
Mineralization	2
Property Development	3
Potential Mineral Wealth	4

Attachments:

Map No. 1, Index Map
Map No. 2, Property Map
Map No. 3, Surface Geology Map

Factual data submitted by Stradco ~~Inc.~~ Iron Company and reviewed by the writer.

Assay Sheet, Metallurgical Laboratories, May 6, 1964
Assay Sheet, Laboratory of Analytical Chemistry, July 18, 1968
Assay and screening sheet, part of above
Assay Sheet, Technical, Commercial & Industrial Co. July 29, 1968
Assay Sheet, Smith-Emery Company, June 10, 1964
Spectrographic Examination Sheet, Smith-Emery Co., June 10, 1964
Assay Sheet, Smith-Emery Company, June 30, 1964
Assay Sheet, Technical, Commercial & Industrial Co., August 2, 1968

15 Airport Service Rd,
P.O. Box 18189, Jacksonville,
Florida, 32229

INTRODUCTION:

~~At the request of Mr. Walter W. McMillen, President of Stradco Inc.~~ and with written authorization from Mr. Frank Broes, Board Chairman of ~~Stradco Inc., Suite 700, 1030 Fifteenth Street, N. W., Washington D. C.,~~ the writer completed an appraisal of the D. J. and L. J. C. placer mining claims, Maricopa County, Arizona. The completed appraisal reported on herein factualizes to some extent and reflects the potential mineralwealth in situ within the property boundary.

The writer personally and physically examined a portion of the property in a general way on October 20, 1971, accompanied by Mr. McMillen. Some of the physical exploratory efforts by International Iron Co. were observed on the ground during the visit. Unfortunately, no drill hole sample records, geologic or assay, are available for study, consequently, no "ore reserve" as such can be calculated. A few assay records of "crude ore" and "concentrates" are available but sample discriptions, correlations, locations and other sample details are lacking.

In view of the above situation - lack of adequate, positive, identifyable information, the writer is required to rely on his experience with and knowledge of placer deposits of similar nature, characteristics and mineralization.

CONCLUSIONS:

The purpose of this report is but for a single objective - an appraisal of the placer claims mineral wealth "in place" - consequently but one conclusion is required. The conclusion is based on four assumptionsl factors. A variance of any one factor would revise the appraisal either upwards or downwards. Also, for the most part, the four assumptions are derived from the writers experience and knowledge of similar deposits in Arizona. The limited factual data available on the property in question has been used solely as a guide, rather than actual proof, to establish the realistic assumptions used by the writer. The limited amount of factual data permits the writer but one categorical definition of the appraisal value - namely, inference, - thus justifyably, the writer concludes that:

(1) - The area of consideration as discribed within the report would have and "inferred, in place" mineral wealth, as regards the mineral magnetite (Fe_3O_4), of 9,161,000 long tons at a possible market value of $176,700,000.- - at property.

PROPERTY, LOCATION and ACCESSIBILITY:

The property consists of fifty seven 160 acre placer claims totalling plus or minus 9120 acres. Claims involved are the D. J. #1 through #34 and the L. J. C. #1 through #8, #25 through #31, #153 through #156 and #172 through #174. (34 D. J. claims and 23 L. J. C. claims) See Map No. 2.

All of the D. J. claims lie within T. 4 N., R. 9 W. covering all of

Sections 19, 20, 21, 26, 28, 29, 30, 32 and the N/2 of Section 27. The L. J. C. claims cover all of Sections 31 in T. 4 N., R. 9 W., all of Sections 6, 7, 18 and 19 plus the N/2 and SE/4 of Section 30 in T. 3 N., R. 9 W., of the G. & S. R. B. & M. in western Maricopa County, Arizona.

Mr. McMillen states that all claims are valid and current as regards annual accessment work.

Travel to the property can be accomplished by passenger auto from Phoenix via U. S. highway 80 to Buckeye, thence westerly on the Buckeye-Hassayampa-Salome County road. This route is paved to a point 29 miles westerly of Buckeye (the Mary E. farm road Junction). Beyond this junction the road is gravel but usually well maintained by the County Highway Department. Twenty miles past the Mary E. Junction in a northwesterly direction toward Salome, a northeasterly trending gravel road junctions on the right and leads to the town of Aguila located on U. S. highway 60-70. Traveling 3.9 miles northeasterly on this road is an easterly trending desert road on the right. Travel on this desert road for 5.1 miles easterly, passing a ranchers fenced earth water tank, one intersects the west boundary (Range Line) of the property and onto claim D. J. #26, Section 30, T. 4 N., R. 9 W. See Map No. 1 and No. 3.

Several ranch type desert roads make a portion of the property accessible by passenger auto. Access to other portions would possibly require a four wheel drive, high center vehicle to overcome some of the hazardous steep banked narrow type gullies in the area.

GEOLOGY:

For the most part, the claims cover a broad expanse of valley fill alluvium consisting of sand, pebbles, cobbles and boulders representing the exposed rocks of the surrounding area. A striking physical feature of the alluvium is the minimum amount of boulders (a four to six inch size or greater) and the abundance of sand and pebbles. This characteristic was also observed when viewing the walls of several 36 inch diameter drill holes.

Rocks in the surrounding area consist of Pre-Cambrian gneiss and granite, Cretaceous andesite and rhyolite and Quaternary basalt which is largely small remnants capping the ridges of the mounds and hills surrounding the placer property. See Map No. 3. Float-wise, white quartz fragments were noted as well as some pieces of pegmatite, not at all uncommon to the area.

MINERALIZATION:

The principal mineral of interest within the placer property is magnetite, Fe_3O_4, which has a magnetic characteristic and a usual constituent of many igneous rock types. Through the erosional processes, the magnetite has been removed from the rocks and transported to the valley fill alluvium where it concnetrates in thin layers separated by barren or lean sand and pebble layers. To a lesser degree there may be dissemination of the magnetite in the afore mentioned barren or lean layers.

Most magnetite occurring in placer deposits, particularly in Arizona, contains illmenite ($FeTiO_3$) as an admixture and a deleterious impurity when considering the magnetite as a raw material for production of iron and steel. Many of the Arizona magnetite sands contain this impurity. Removal of the titanium is a difficult and costly process and it is mostly for this reason that several of the magnetite placers in Arizona are not operative. Illmenite also occurs as a separate, divorced mineral and as such, because of its slight magnetic property, it can be almost wholly removed.

Available assay reports of ore samples and concentrates indicate that some of the titanium content can be removed by concentration of the magnetite and (2) that there is a very minimum amount of titanium married to the magnetite as an admixture, which, ofcourse, is good from the standpoint of the material being concentrated and used as an iron ore.

All Arizona magnetite sands range from about 4% to 6% magnetite (2.8 to 4.2% iron). These percentages bear a direct relationship to the magnetite content of the surrounding rock outcrops from whence it came. The D. J. and L. J. C. placer group is no exception. All Arizona magnetite sands contain gold in varying amounts. Occasionally, the gold is free (pannable or amalgamable) but more often than not, the gold is married to the magnetite as an admixture - like the titanium - and in this occurance would require a cyanide dissolution.

Summarizing, the potential mineral wealth of the property is in its magnetite content for use as an iron ore and possibly, just possibly, the gold content, if extractable.

PROPERTY DEVELOPMENT:

Available records indicate that the property was partially explored by 34 drill holes of 36 inch diameter and 20 to 30 feet deep. This is one hole on each of the 34 D. J. claims. (See Map No. 3.) It is assumed by the writer that most holes were located close to the center of each claim (as shown on the Map), however, it is thought that their location was determined more by accessibility of the truck mounted drill than by an exacting, equally spaced, surveyed grid drilling pattern. Thus, the drill hole locations on the map are merely pictorial for convenience.

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20 feet deep and the fourth visible hole was estimated at 30 feet deep. Observation of the hole walls in three of the holes indicated the alluvium penetrated consisted, for the most part, of sand, pebbles and cobbles with few boulders larger than 4 to 6 inches. The fourth observed hole (believed to be in Section 19, SE/4) contained a greater amount of boulders larger than 4 to 6 inches. This criteria was also noted on the surface inthe immediate area. This criteria should be a significant indicator for determining particle sizes at depth.

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POTENTIAL MINERAL WEALTH:

Unfortunately, as in many instances, the above discribed exploratory drilling and development has been for naught in as much as there are no geologic logs, sample discriptions or sample assay values available to and for the writer to review, study and correlate into a meaningful, accurate and positive type calculation to arrive at an "in place" potential mineral wealth appraisal. Records such as these, if taken, are usually lost or misplaced or else not taken during the exploratory program.

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Lack of positive, orderly obtained, adequately identifyable information and records requires that certain assumptions be made, keeping in mind, that these assumptions are not "unknowns" but substantiated facts as related to similar deposits in Arizona. These are:

(1) - Magnetite content averages 4.5% (3.1% Fe)
(Dept. of Mineral Resources data, writers experience)

(2) - Magnetite content continues to an average 21 foot depth.
(Indicated by large diameter drill holes)

(3) - Magnetite recovery is possible in excess of 93%
(Indicated by Laboratory of Analytical Chemistry, Athens, Greece)

(4) - Weight per cubic yard of material averages 3000 pounds.
(writers experience)

The area of mineralization under consideration in this instance is:

All of Sections 20, 21 & 30,	T.	4 N.,	R.	9 W.	1920	acres
90% of Sections 19 & 32	"	"	"	"	1150	"
80% of Section 29	"	"	"	"	510	"

65% of Sections 26 & 28, T. 4 N., R. 9 W.	830 acres
50% of Section 27 " " " "	320 "
Total area	4730 acres
Square yard factor (acres to yards)	x 4840
Square yards	22,893,200 sq. yds.
Factor for 21 foot depth, 7 yards	x 7
Cubic yards for 7 yard depth	160,252,400 cu. yds.
Factor, cubic yards to short tons	x 1.5
Short tons mineralized sand, gravel	240,378,600 S. T.
Magnetite content, 4.5% (assumed)	x 4.5
Magnetite, short tons	10,817,000 S. T.
Recovery factor (beneficiation), 93%	x 0.93
Marketable magnetite, 97%	10,260,000 S. T.
Conversion factor, Short to long tons, 0.89287	x 0.89287
Marketable Magnetite, long tons	9,160,900 L. T.
Marketable iron grade, 65%+ Fe.	
Pellet price, 28¢/LTU or $18.20/LT (E. & M. J. quotation, Sept. 1971)	x $18.20.
Inferred value of magnetite mineralization "in place" within D. J. placer claims to a depth of 21 feet below surface.	$176,728,400.-

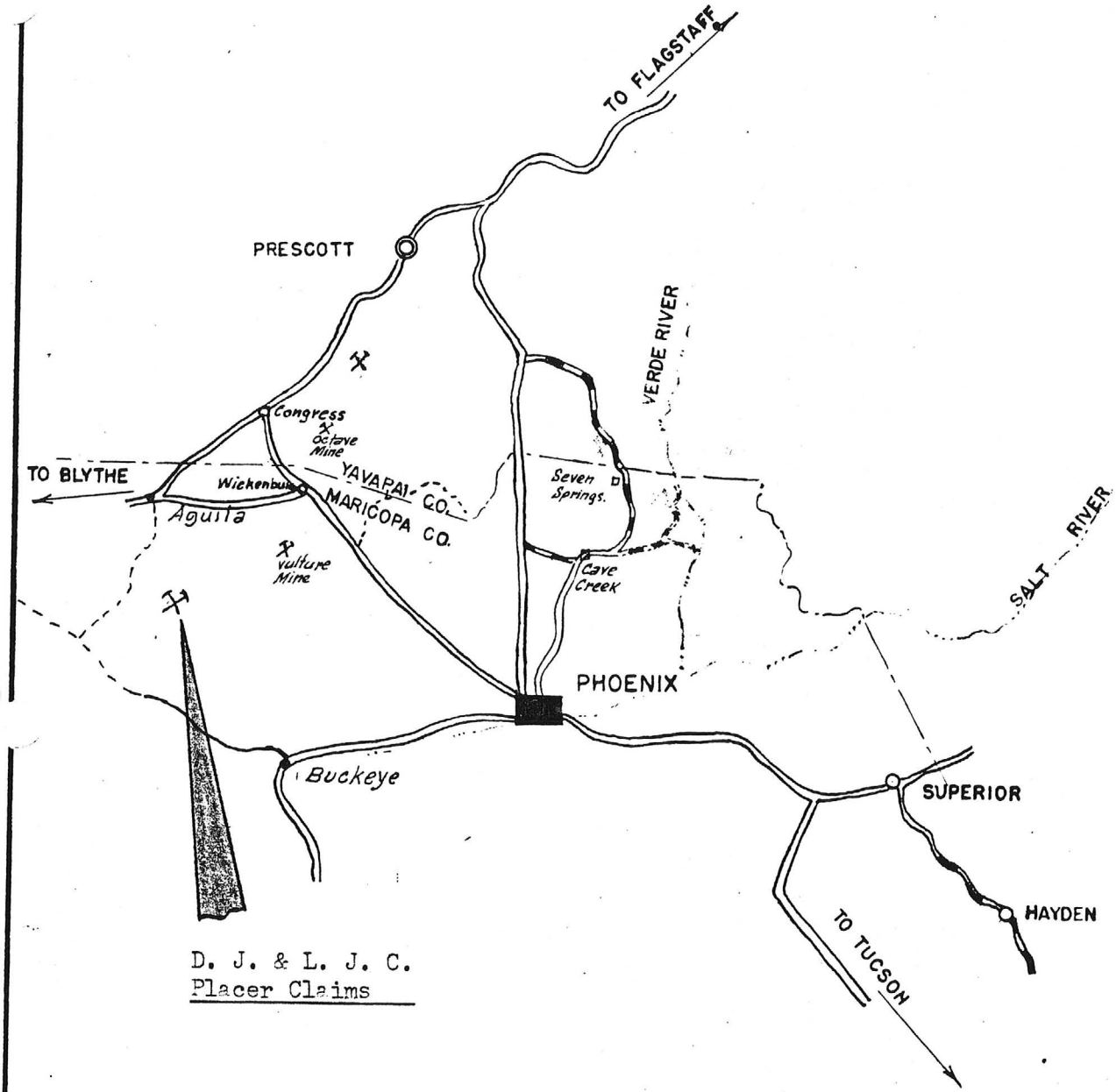
The 23 L. J. C. claims have not been considered in the above appraisal simply because of their geographic position and lack of any positive and visual information. However, if similar conditions exist, a dollar value equivalent to 50% of the above figure, or $88,000,000.-, could be added to the above calculated value.

Mr. Frank Broes had advised the Department of Mineral Resources, Phoenix, Arizona, on or about February 4, 1965 that gold values of $30.00 to $35.-/tonof concentrates (magnetite) were indicated. The writer has no factual data or proof at hand to verify this conclusion, consequently, an appraisal of the gold content cannot be included in the appraisal value. If, however, the gold is present in the amounts indicated, it would more than double the "inferred" appraised or calculated dollar value of mineral wealth "in place".

Actual development of a proven, delimited ore reserve of specific grade by drilling, feasibility study of mining and beneficiation, economics and marketing are the next successive phases toward a complete evaluation prior to an operation.

Respectfully submitted,

Richard E. Mieritz,
Mining Consultant
Engineer and Geologist
Sun City, Arizona (now Phoenix)
October 23, 1971



D. J. & L. J. C.
Placer Claims

Registered Professional Engineer (Mining)
CERTIFICATE EXPIRES
RICHARD
E. MIERITZ
DEC. 31, 19
ARIZONA, U.S.A.

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R.E.M.

INDEX MAP
CENTRAL ARIZ.

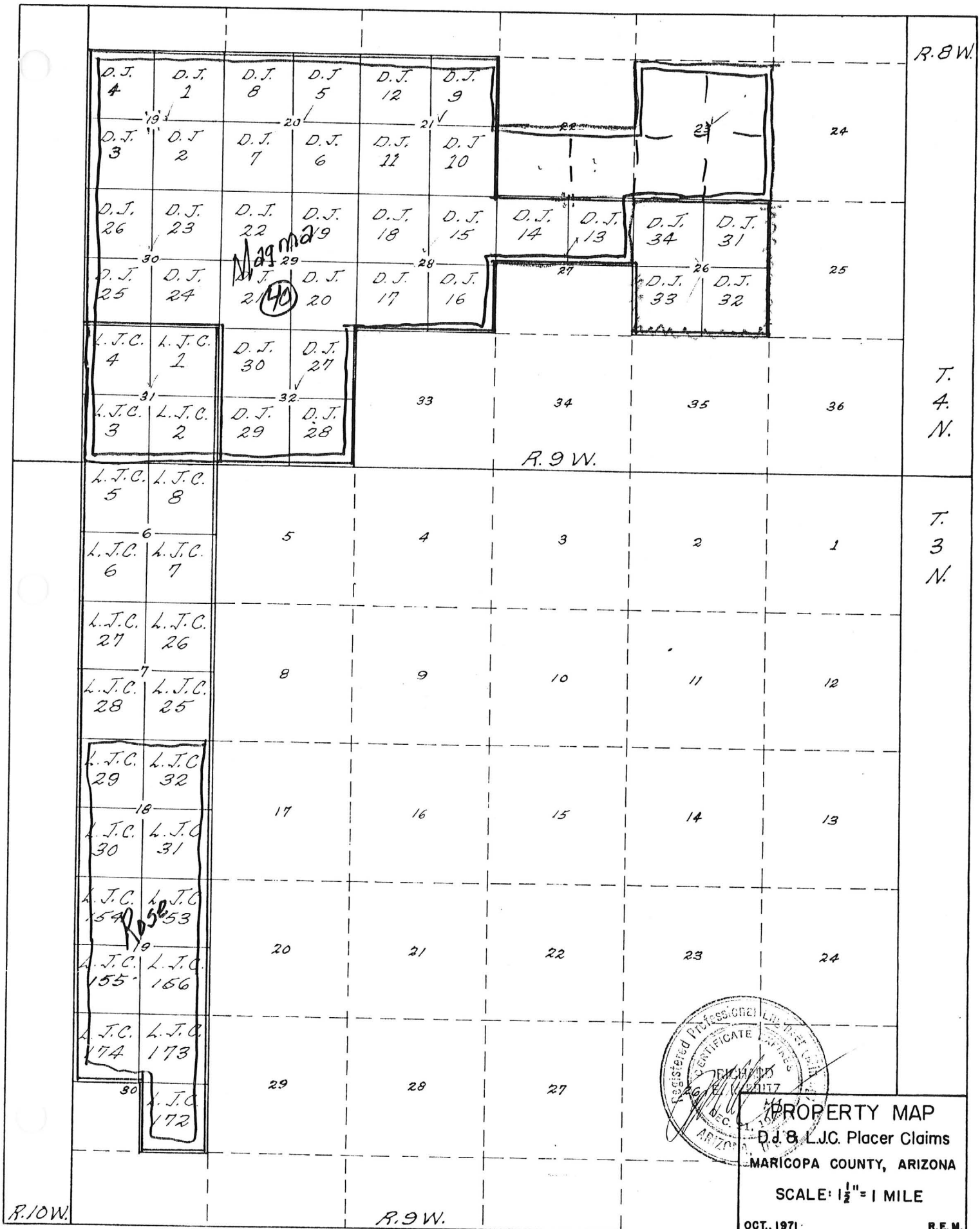
SCALE: 1" = 27 MI.

R.E. MIERITZ, P.E.

MAR., 1962

— MAP No 1

1-23


R.8W.
D.J. 4
D.J. 1
D.J. 8
D.J. 5
D.J. 12
D.J. 9
19
20
21
22
23
24
D.J. 3
D.J. 2
D.J. 7
D.J. 6
D.J. 11
D.J. 10
D.J. 26
D.J. 23
D.J. 22
D.J. 19
D.J. 18
D.J. 15
D.J. 14
D.J. 13
D.J. 34
D.J. 31
30
29
28
27
26
25
D.J. 25
D.J. 24
D.J. 21
D.J. 20
D.J. 17
D.J. 16
D.J. 33
D.J. 32
Magma
40
L.J.C. 4
L.J.C. 1
D.J. 30
D.J. 27
31
32
33
34
35
36
T. 4. N.
L.J.C. 3
L.J.C. 2
D.J. 29
D.J. 28
R.9W.
L.J.C. 5
L.J.C. 8
6
5
4
3
2
1
T. 3 N.
L.J.C. 6
L.J.C. 7
L.J.C. 27
L.J.C. 26
7
8
9
10
11
12
L.J.C. 28
L.J.C. 25
L.J.C. 29
L.J.C. 32
18
17
16
15
14
13
L.J.C. 30
L.J.C. 31
L.J.C. 154
L.J.C. 153
Rose
19
20
21
22
23
24
L.J.C. 155
L.J.C. 156
L.J.C. 174
L.J.C. 173
30
29
28
27
26
L.J.C. 172
R.10W.
R.9W.
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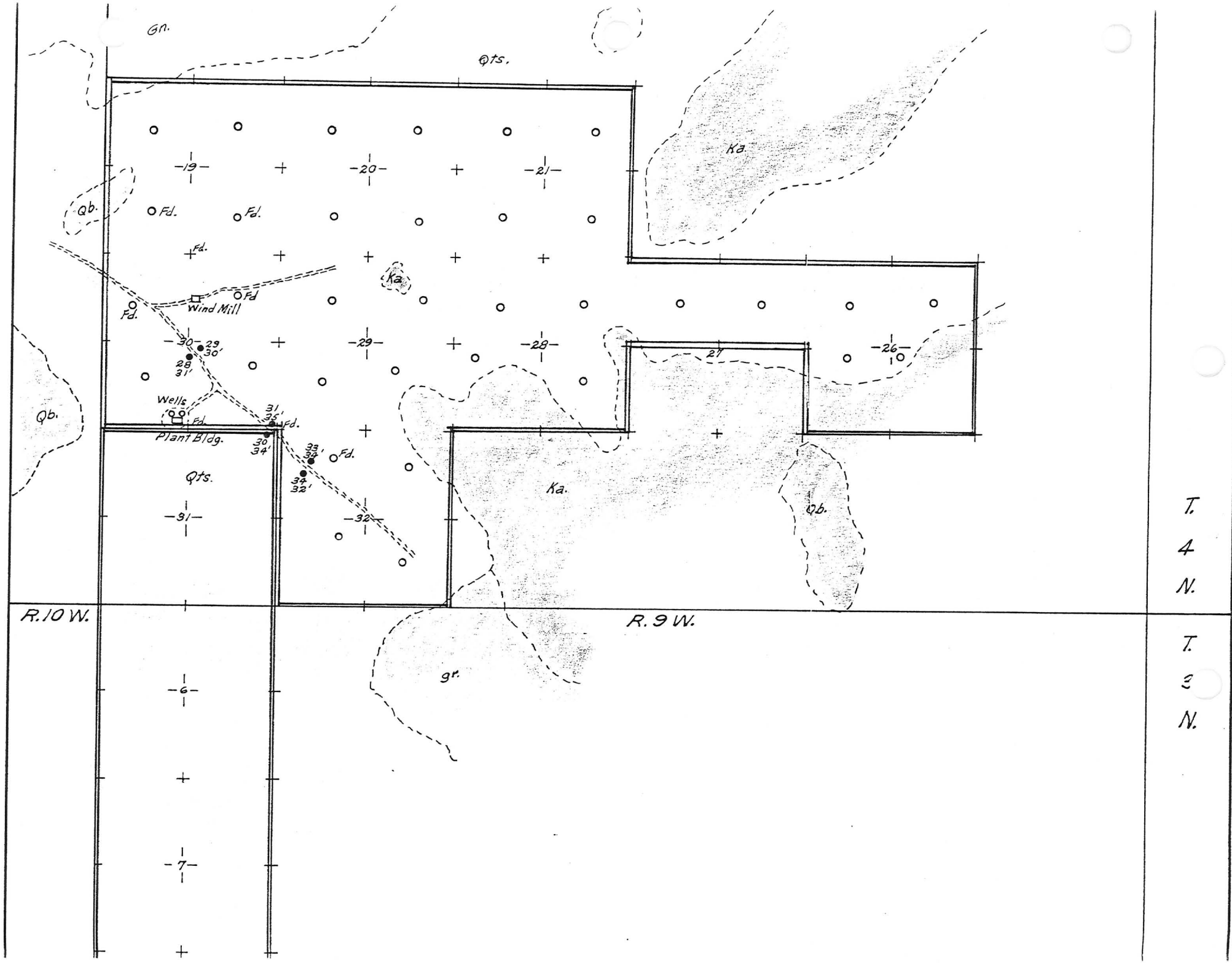
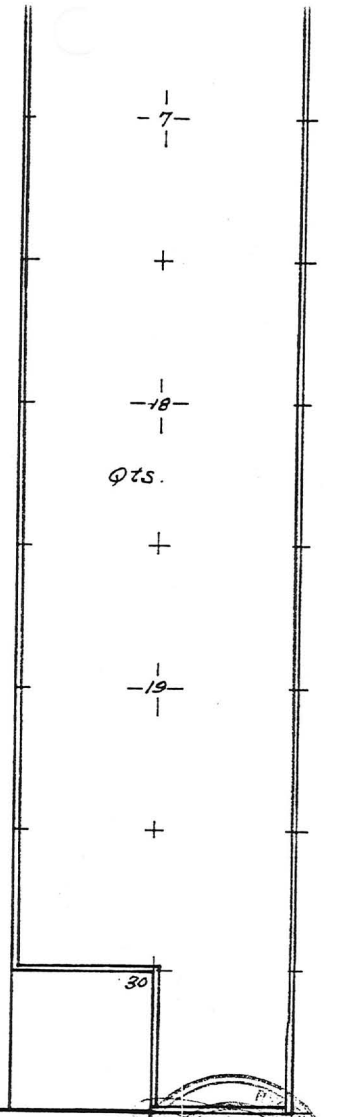
CERTIFICATE EXPIRES
RICHARD E. KREUTZ
DEC. 31, 1971
ARIZONA
PROPERTY MAP
D.J. & L.J.C. Placer Claims
MARICOPA COUNTY, ARIZONA
SCALE: 1½" = 1 MILE
OCT., 1971
R.E.M.

MAP No. 2



Gn.
Qts.
Ka.
Qb.
Fd.
Wind Mill
Wells
Plant Bldg.
Qts.
Ka.
Qb.
gr.
-19-
-20-
-21-
-30-
-29-
-28-
-27-
-26-
-31-
-32-
-6-
-7-
R.10 W.
R.9 W.
T. 4 N.
T. 3 N.



LEGEND

- D.J. Claims
- L.J.C. Claims
- 36" dia. Drill Holes
- 34 32' 2" dia Drill Holes
- 109 Qts. Quaternary Sand-Gravel
- 197 Qb. Quaternary Basalt
- 173 Ka. Cretaceous Andesite
- 170 gr. Precambrian Granite
- 172 Gn. Precambrian Gneiss

R.9 W.

R.8W.

SURFACE GEOLOGY MAP

D.J. & L.J.C. Placer Claims

MARICOPA COUNTY, ARIZONA

SCALE: 2" = 1 MILE

OCT., 1971

R.E.M.

AN APPRAISAL

OF

"IN PLACE MINERAL WEALTH"

of the

D. J. & L. J. C. PLACERS

in

Maricopa County, Arizona

by

Richard E. Mieritz
Mining Consultant
Engineer - Geologist
Sun City, Arizona

January 27, 1973

TABLE of CONTENTS

	Page
Introduction	1
Conclusions	1
Property, Location and Accessibility	1
Geology	2
Mineralization	2
Property Development	3
Potential Mineral Wealth	4

Attachments:

Map No. 1, Index Map
Map No. 2, Property Map
Map No. 3, Surface Geology Map

Factual Data submitted by Tradco Inc. and reviewed by the writer.

Assay Sheet, Metallurgical Laboratories, May 6, 1964
Assay Sheet, Laboratory of Analytical Chemistry, July 18, 1968
Assay and screening sheet, part of above.
Assay Sheet, Technical, Commercial & Industrial Co., July 29, 1968
Assay Sheet, Smith-Emery Company, June 10, 1964
Spectrographic Examination Sheet, Smith-Emery Co., June 10, 1964
Assay Sheet, Smith-Emery Company, June 30, 1964
Assay Sheet, Technical, Commercial & Industrial Co., August 2, 1968

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Cubic yards for 7 yard depth	160,252,400 cu. yds.
Factor, cubic yards to short tons	X 1.5
Short tons mineralized sand, gravel	240,378,600 S. T.
Magnetite content, 4.5% (assumed)	X 4.5
Magnetite, short tons	10,817,000 S. T.
Recovery factor (beneficiation), 93%	X 0.93
Marketable magnetite, 97%	10,260,000 S. T.
Conversion factor, short to long tons, 0.89287	X 0.89287
Marketable magnetite, long tons	9,160,900 L. T.
Marketable iron grade, 65%+ Fe.	
Pellet price, 28¢/LTU or $18.20/LT (E. & M. J. quotation, Sept. 1971)	X $18.20
Inferred value of magnetite mineralization "in place" within D. J. placer claims to a depth of 21 feet below surface.	$176,728,400.-

The 23 L. J. C. claims have not been considered in the above appraisal simply because of their geographic position and lack of any positive and visual information. However, if similar conditions exist, a dollar value equivalent to 50% of the above figure, or $88,000,000.-, could be added to the above calculated value.

Mr. Frank Brees had advised the Department of Mineral Resources, Phoenix, Arizona, on or about February 4, 1965 that gold values of $30.00 to $35.-/ton of concentrates (magnetite) were indicated. The writer has no factual data or proof at hand to verify this conclusion, consequently, an appraisal of the gold content cannot be included in the appraisal value. If, however, the gold is present in the amounts indicated, it would more than double the "inferred" appraised or calculated dollar value of mineral wealth "in place".

Actual development of a proven, delimited ore reserve of specific grade by drilling, feasibility study of mining and beneficiation, economics and marketing are the next successive phases toward a complete evaluation prior to an operation.

Respectfully submitted,

Richard E. Mieritz,
Mining Consultant,
Engineer and Geologist
Sun City, Arizona
January 27, 1973

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Brown Magnetite Deposit **Date** August 25, 1960

District Big Horn, Maricopa County **Engineer** Lewis A. Smith

Subject:

Location: 18 miles due south of Aguila. T. 8 N., R. 4 W., Secs. 19-23, 27-30 and 32.

Owner: Fred Brown, Picacho, Arizona

Lessees: Ralph R. Langley et al, 1156 South Highland Avenue, Los Angeles 19, California. (Telephone WE 1-2351).

Property: 10 sections of ground.

Preliminary Tests: These show an unknown depth of magnetite placer which runs 5½% of magnetitic material. Tests with magnetic separators, with variable degrees of strength, also show that the placer shows 0.8% of TiO_2. However, the titanium is reduced to 0.14% and the iron raised to 60.6% with a magnetic strength of so much. The titanium concentrate thus obtained runs around 27% and some silica. This meets Japa nese specifications. Agglomeration tests show that the magnetite concentrate can be agglomerated by extrusion to pellets which are 2½ to 3 inches long and 2 inches thick in the shape of a small hamburger bun.

According to Mr. Langley, the hardness and toughness of the pellets is dependent upon the complete removal of all air in the concentrate rather than on pressure alone. The pellets produced from the Brown ore, were quite satisfactory in a blast furnace charge as tested by the Japanese Cartel laboratories. A Stearns Magnetic Separator was used and the analytic work done by Eisenhauer Laboratories of Los Angeles. Several firms are cooperating with Langley in the tests.

Further Tests: Long Drilling Company, 4345 N 32nd St., Phoenix, has been contracted to drill ten or more 16 inch tests holes up to 100 feet of depth. This firm did the test-holing for Garpac. These holes will also serve for the annual assessment work on the claims. They will be sampled in 1 foot intervals at first. The interval will be widened if practicable, depending upon the first results.

Mr. Langley said he had negotiated a $3.00 per ton freight rate from Aguila. The Aguila to Hassayampa road passes within 2 miles of the area making a total haul of 18-20 miles by truck to Aguila. This haul can be contracted for 4 to 4½ cents per ton mile. As now figured the price for +60% iron ore F.O.B. ship at San Pedro, is around $10.00 to $10.50.

Mr. Langley said that the Japs are "hot" on the material and want it as soon as possible since their sources of iron ore are inadequate. They want a considerable tonnage. He is now working out the agglomeration costs. However, the Japs will take unagglomerated ore temporarily. As soon as the test hole results and the agglomeration cost figures are obtained he will be able to determine the economic feasibility of the deposit. He now thinks it may work out well.

Mr. Langley also has tentative working agreements with Kelly (Tucson) who has the deposit west of Omega, and with Paul Bauer and Kelly, who have a similar but lower grade deposit near Salome. He wants to obtain a royalty of 25 cents per ton of concentrates.

Brown Magnetite Deposit (continued)

The plant would consist of an ordinary gravel agreegate plant plus magnetic separators and infra red driers. The agglomeration at first would be done at an extrusion plant near San Pedro. Power for the mine and mill plant would be furnished by a diesel generator unit at the mine.

DEPARTMENT OF MINERAL RESOURCES
State of Arizona
MINE OWNER'S REPORT

Date 2 / 15 / 59

1. Mine: Brown Magnetite
2. Location: Sec. 7½ Sec. Twp. 4 N Range 9 W Nearest Town Salome
   Distance 17 miles Direction N W Road Condition County * dirt
3. Mining District & County: Big Horn Mining District, Maricopa County
4. Former Name of Mine: No.
5. Owner: Mr. Fred R. Brown P.O. Box 26 - Picacho, Arizona
   Address:
6. Operator: No.
   Address:
7. Principal Minerals: Magnitite Iron
8. Number of Claims: 30 Lode Placer X
   Patented Unpatented X
9. Type of Surrounding Terrain: Mountainous except on the west which is open placer ground.
10. Geology & Mineralization:
11. Dimension & Value of Ore Body: This entire 30 claims of 160 acres each or 4,800 acres is all mineralised.

12. Ore "Blocked Out" or "In Sight": Magnetite iron can be found over the entire surface

Ore Probable:

13. Mine Workings—Amount and Condition:

No.	Feet	Condition
Shafts		
Raises		
Tunnels		
Crosscuts		
Stopes		

14. Water Supply: unlimited about 3 to 5 miles Southwest, water may be had on the property by drilling.

15. Brief History: This is a new property and has been prospected to the extent of 15 holes 10 to 15 feet deep and tested to show 4.20% FE average over the total.

KELCO EXPLORATION
331 EAST 36TH STREET
TUCSON, ARIZONA
2-19-59

16. Signature: Kelco Exploration, 2426 N. Castro St. Tucson Ma 35792
P.O. Box 7004 S. L. Kelly

17. If Property for Sale, List Approximate Price and Terms: total price to be negociated 25¢ per ton of 60% FE royalty.

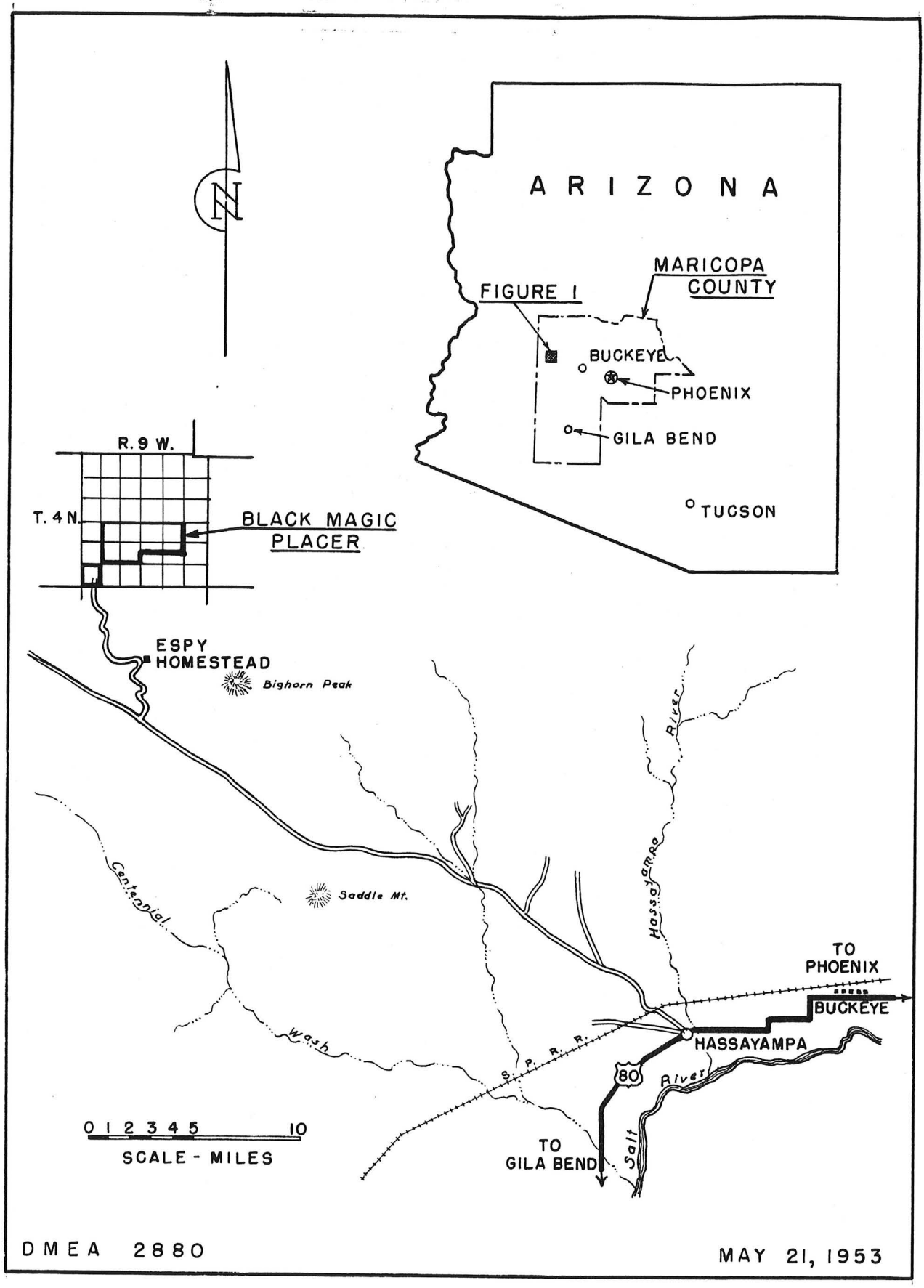
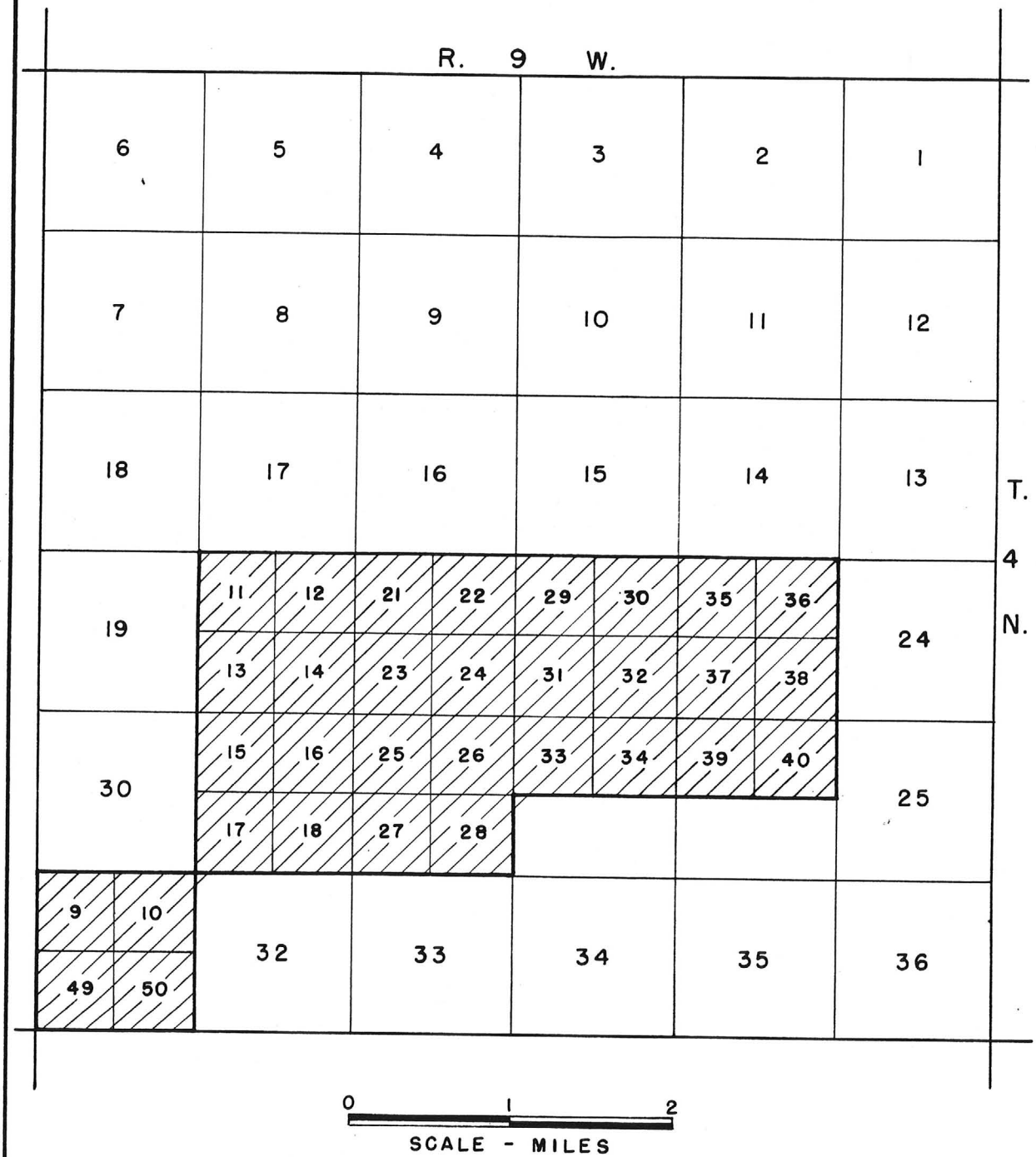


FIGURE 1. - LOCATION MAP - BLACK MAGIC PLACER
MARICOPA COUNTY, ARIZONA



NUMBERS IN SHADED AREA REFER TO BLACK MAGIC CLAIM NUMBERS

DMEA 2880

MAY 21, 1953

FIGURE 2. - CLAIM MAP - BLACK MAGIC PLACER

AN APPRAISAL

of

"IN PLACE" MINERAL WEALTH

of the

D. J. & L. J. C. PLACERS

in

Maricopa County, Arizona

by

Richard E. Mieritz
Mining Consultant
Engineer - Geologist
(Sun City, Arizona)
Phoenix, Arizona

October 23, 1971

TABLE of CONTENTS

	Page
Introduction	1
Conclusions	1
Property, Location and Accessibility	1
Geology	2
Mineralization	2
Property Development	3
Potential Mineral Wealth	4

Attachments:

Map No. 1, Index Map
Map No. 2, Property Map
Map No. 3, Surface Geology Map

Factual data submitted by Stradco Iron Company and reviewed by the writer.

Assay Sheet, Metallurgical Laboratories, May 6, 1964
Assay Sheet, Laboratory of Analytical Chemistry, July 18, 1968
Assay and Screening Sheet, part of above
Assay Sheet, Technical, Commercial & Industrial Co., July 29, 1968
Assay Sheet, Smith-Emery Company, June 10, 1964
Spectrographic Examination Sheet, Smith-Emery Co., June 10, 1964
Assay Sheet, Smith-Emery Company, June 30, 1964
Assay Sheet, Technical, Commercial & Industrial Co., August 2, 1968

INTRODUCTION:

At the request of Mr. Walter W. McMillen, an associate of Stradco, Inc., and with written authorization from Mr. Frank Broes, Board Chairman of Stradco Iron Company, 1351 Airport Service Rd., P.O. Box 18189, Jacksonville, Florida, 32229, the writer completed an appraisal of the D. J. and L. J. C. placer mining claims, Maricopa County, Arizona. The completed appraisal reported on herein factualizes to some extent and reflects the potential mineral wealth in situ within the property boundary.

The writer personally and physically examined a portion of the property in a general way on October 20, 1971, accompanied by Mr. McMillen. Some of the physical exploratory efforts by International Iron Co. were observed on the ground during the visit. Unfortunately, no drill hole sample records, geologic or assay, are available for study, consequently, no "ore reserve" as such can be calculated. A few assay records of "crude ore" and "concentrates" are available but sample descriptions, correlations, locations and other sample details are lacking.

In view of the above situation - lack of adequate, positive, identifiable information, the writer is required to rely on his experience with and knowledge of placer deposits of similar nature, characteristics and mineralization.

CONCLUSIONS:

The purpose of this report is but for a single objective - an appraisal of the placer claims mineral wealth "in place" - consequently but one conclusion is required. The conclusion is based on four assumptional factors. A variance of any one factor would revise the appraisal either upwards or downwards. Also, for the most part, the four assumptions are derived from the writer's experience and knowledge of similar deposits in Arizona. The limited factual data available on the property in question has been used solely as a guide, rather than actual proof, to establish the realistic assumptions used by the writer. The limited amount of factual data permits the writer but one categorical definition of the appraisal value - namely, inference, - thus justifiably, the writer concludes that:

(1) - The area of consideration as described within the report would have an "inferred, in place" mineral wealth, as regards the mineral magnetite (Fe_3O_4) of 9,161,000 long tons at a possible market value of $264,979,000. -- at property.

PROPERTY, LOCATION and ACCESSIBILITY:

The property consists of fifty seven 160 acre placer claims totaling plus or minus 9120 acres. Claims involved are the D. J. #1 through #34 and the L. J. C. #1 through #8, #25 through #31, #153 through #156 and #172 through #174. (34 D. J. claims and 23 L. J. C. claims) See Map No. 2.

All of the D. J. claims lie within T. 4 N., R. 9 W., covering all of

Sections 19, 20, 21, 26, 28, 29, 30, 32 and the N/2 of Section 27. The L. J. C. claims cover all of Sections 31 in T. 4 N., R. 9 W., all of Sections 6, 7, 18 and 19 plus the N/2 and SE/4 of Section 30 in T. 3 N., R. 9 W., of the G. & S. R. B. & M. in western Maricopa County, Arizona.

Mr. McMillen states that all claims are valid and current as regards annual assessment work.

Travel to the property can be accomplished by passenger auto from Phoenix via U. S. highway 80 to Buckeye, thence westerly on the Buckeye-Hassayampa-Salome County road. This route is paved to a point 29 miles westerly of Buckeye (the Mary E. farm road Junction). Beyond this junction the road is gravel but usually well maintained by the County Highway Department. Twenty miles past the Mary E. Junction in a northwesterly direction toward Salome, a northeasterly trending gravel road junctions on the right and leads to the town of Aguila located on U. S. highway 60-70. Traveling 3.9 miles northeasterly on this road is an easterly trending desert road on the right. Travel on this desert road for 5.1 miles easterly, passing a rancher's fenced earth water tank, one intersects the west boundary (Range Line) of the property and onto claim D. J. #26, Section 30, T. 4 N., R. 9 W. See Maps No. 1 and No. 3.

Several ranch type desert roads make a portion of the property accessible by passenger auto. Access to other portions would possibly require a four wheel drive, high center vehicle to overcome some of the hazardous steep banked narrow type gullies in the area.

GEOLOGY:

For the most part, the claims cover a broad expanse of valley fill alluvium consisting of sand, pebbles, cobbles and boulders representing the exposed rocks of the surrounding area. A striking physical feature of the alluvium is the minimum amount of boulders (a four to six inch size or greater) and the abundance of sand and pebbles. This characteristic was also observed when viewing the walls of several 36 inch diameter drill holes.

Rocks in the surrounding area consist of Pre-Cambrian gneiss and granite, Cretaceous andesite and rhyolite and Quaternary basalt which is largely small remnants capping the ridges of the mounds and hills surrounding the placer property. See Map No. 3. Float-wise, white quartz fragments were noted as well as some pieces of pegmatite, not at all uncommon to the area.

MINERALIZATION:

The principal mineral of interest within the placer property is magnetite, Fe_3O_4, which has a magnetic characteristic and a usual constituent of many igneous rock types. Through the erosional processes, the magnetite has been removed from the rocks and transported to the valley fill alluvium where it concentrates in thin layers separated by barren or lean sand and pebble layers. To a lesser degree there may be dissemination of the magnetite in the aforementioned barren or lean layers.

Most magnetite occurring in placer deposits, particularly in Arizona, contains illmenite ($FeTiO_3$) as an admixture and a deleterious impurity when considering the magnetite as a raw material for production of iron and steel. Many of the Arizona magnetite sands contain this impurity. Removal of the titanium is a difficult and costly process and it is mostly for this reason that several of the magnetite placers in Arizona are not operative. Illmenite also occurs as a separate, divorced mineral and as such, because of its slight magnetic property, it can be almost wholly removed.

Available assay reports of ore samples and concentrates indicate that some of the titanium content can be removed by concentration of the magnetite and (2) that there is a very minimum amount of titanium married to the magnetite as an admixture, which, of course, is good from the standpoint of the material being concentrated and used as an iron ore.

All Arizona magnetite sands range from about 4% to 6% magnetite (2.8% to 4.2% iron). These percentages bear a direct relationship to the magnetite content of the surrounding rock outcrops from whence it came. The D. J. and L. J. C. placer group is no exception. All Arizona magnetite sands contain gold in varying amounts. Occasionally, the gold is free (pannable or amalgamable) but more often than not, the gold is married to the magnetite as an admixture - like the titanium - and in this occurrence would require a cyanide dissolution.

Summarizing, the potential mineral wealth of the property is in its magnetite content for use as an iron ore and possibly, just possibly, the gold content, if extractable.

PROPERTY DEVELOPMENT:

Available records indicate that the property was partially explored by 34 drill holes of 36 inch diameter and 20 to 30 feet deep. This is one hole on each of the 34 D. J. claims. (See Map No. 3.) It is assumed by the writer that most holes were located close to the center of each claim (as shown on the Map), however, it is thought that their location was determined more by accessibility of the truck mounted drill than by an exacting, equally spaced, surveyed grid drilling pattern. Thus, the drill hole locations on the map are merely pictorial for convenience.

Forty five 2 inch diameter drill holes were reported as drilled to an average of 30 feet. The location of such holes are not known, however, they were marked in the field by 2" x 2" x 5 foot stakes with the hole numbers and depth of hole marked on each stake. Again, accessibility appears to have determined their location.

While in the field, Mr. McMillen and the writer found six stakes (some upright, others on ground) (See Map No. 3) but none of the 2 inch holes could be located -- no doubt caved and filled in as a result of rain, etc.

Five 36 inch diameter drill holes were found and only one of these had caved and filled in. (See Map No. 3.) Three holes were approximately

20 feet deep and the fourth visible hole was estimated at 30 feet deep. Observation of the hole walls in three of the holes indicated the alluvium penetrated consisted, for the most part, of sand, pebbles and cobbles with few boulders larger than 4 to 6 inches. The fourth observed hole (believed to be in Section 19, SE/4) contained a greater amount of boulders larger than 4 to 6 inches. This criteria was also noted on the surface in the immediate area. This criteria should be a significant indicator for determining particle sizes at depth.

Two water wells, approximately 800 feet deep are located near the plant building. See Map No. 3. It is reported that water was encountered at 200 feet, however, the writer timed a falling stone and only a loud metallic sounding noise was heard at approximately 700 to 750 feet in both wells. No sound of water was heard.

POTENTIAL MINERAL WEALTH:

Unfortunately, as in many instances, the above described exploratory drilling and development has been for naught inasmuch as there are no geologic logs, sample descriptions or sample assay values available to and for the writer to review, study and correlate into a meaningful, accurate and positive type calculation to arrive at an "in place" potential mineral wealth appraisal. Records such as these, if taken, are usually lost or misplaced or else not taken during the exploratory program.

In view of the above status, the writer has little choice but to apply his experience and knowledge in and of deposits of similar nature and character and to sparingly apply the very limited and unidentifiable assay data and test work data to justify the conclusions and terms of the calculations herein presented. The mineral wealth appraisal, as presented, can achieve a level no higher than an "inference," in terms of the industry's mineralization classifications of "inferred," "indicated" and "proven."

Lack of positive, orderly obtained, adequately identifiable information and records requires that certain assumptions be made, keeping in mind that these assumptions are not "unknowns" but substantiated facts as related to similar deposits in Arizona. These are:

(1) - Magnetite content averages 4.5% (3.1% Fe)
(Dept. of Mineral Resources data, writer's experience)

(2) - Magnetite content continues to an average 21 foot depth.
(Indicated by large diameter drill holes)

(3) - Magnetite recovery is possible in excess of 93%
(Indicated by Laboratory of Analytical Chemistry, Athens, Greece)

(4) - Weight per cubic yard of material averages 3000 pounds.
(writer's experience)

The area of mineralization under consideration in this instance is:

All of Sections 20, 21 & 30,	T. 4 N.,	R. 9 W.			1920 acres
90% of Sections 19 & 32	"	"	"	"	1150 "
80% of Section 29	"	"	"	"	510 "

65% of Sections 26 & 28, T. 4 N., R. 9 W.	830 acres
50% of Section 27 " " " "	320 "
Total area	4730 acres
Square yard factor (acres to yards)	x 4840
Square yards	22,893,200 sq. yds.
Factor for 21 foot depth, 7 yards	x 7
Cubic yards for 7 yard depth	160,252,400 cu. yds.
Factor, cubic yards to short tons	x 1.5
Short tons mineralized sand, gravel	240,378,600 S. T.
Magnetite content, 4.5% (assumed)	x 4.5
Magnetite, short tons	10,817,000 S. T.
Recovery factor (beneficiation), 92%	x 0.93
Marketable magnetite, 97%	10,260,000 S. T.
Conversion factor, Short to long tons, 0.89287	x 0.89287
Marketable Magnetite, long tons	9,160,900 L. T.
Marketable iron grade, 65%+ Fe. 55.5	
Pellet price, 44.5¢/LTU or $28.92/LT (E. & M. J. quotation, April, 1975)	x $28,92 36.07
Inferred value of magnetite mineralization "in place" within D. J. placer claims to a depth of 21 feet below surface.	$264,979,000.- $339,434,000.-

The 23 L. J. C. claims have not been considered in the above appraisal simply because of their geographic position and lack of any positive and visual information. However, if similar conditions exist, a dollar value equivalent to 50% of the above figure, or $132,000,000.-, could be added to the above calculated value. 165,000,000.-

Mr. Frank Broes had advised the Department of Mineral Resources, Phoenix, Arizona, on or about February 4, 1965, that gold values of $30.00 to $35.00/ton of concentrates (magnetite) were indicated. The writer has no factual data or proof at hand to verify this conclusion, consequently, an appraisal of the gold content cannot be included in the appraisal value. If, however, the gold is present in the amounts indicated, it would more than double the "inferred" appraised or calculated dollar value of mineral wealth "in place."

Actual development of a proven, delimited ore reserve of specific grade by drilling, feasibility study of mining and beneficiation, economics and marketing are the next successive phases toward a complete evaluation prior to an operation.

Respectfully submitted,

Richard E. Mieritz,
Mining Consultant
Engineer and Geologist
Sun City, Arizona (now Phoenix)
(October 23, 1971)

NOTE:
The foregoing is an exact copy of the report completed by the writer dated October 23, 1971 except for Company name and address change and the use of the ~~April~~ 1975 E. & M. J. quotation of 44.5¢/LTU of pellets, replacing the September 1971 quotation. 55.5

Walter W. McMillen, etal.
4040 East McDowell Rd.
Phoenix, Arizona, 85008

Dear Mr. McMillen:

At your request and authorization, December 2, 1974, the writer visited the Magna Placer Claims, T. 4 N., R. 9 W., Maricopa County, Arizona on December 6 and 7, 1974 for the purpose of sampling several newly excavated discovery pits or test pits within the confines of the fourty 160 acre placer claims staked by yourself and others.

The following is therefor the writers report on how this work was completed and the results thereof.

PROPERTY, LOCATION and ACCESSIBILITY:

Your property consists of 40 - 160 acre Placer Claims known as Magna No. 1 through No. 40, being relocations, for the most part, of old claims known as the D. J and L. J. C. Placers. Your claims cover all or parts of Sections 19, 20, 21, 22, 23, 27, 28, 29, 30, 31 and 32, all in T. 4 N., R. 9 W., G. & S. R. B. & M., Maricopa County, Arizona.

Access to the property from Phoenix is not difficult and can be accomplished by passenger car. The property (Mill Area) is approximately 85 miles westerly of Downtown Phoenix through Buckeye and Tonopah. Travel to Tonopah is via U. S. Highway 80 and/or temporary I-10 towards Los Angeles. Using the Tonopah I-10 overpass (true start of route I-10) travel 13.0 miles westward on I-10 to the Salome Road Exit (Exit 81) and 0.5 miles on the Exit road. Travel northwesterly (to the right) 0.4 miles to junction of a northward trending desert road on the right (at a sign marked Salome - 31 miles). Making the right turn onto this road, travel 0.8 miles to another junction at which point a left turn is made. After 8.5 miles travel on this desert type road is another junction as a "Y". Taking the left arm of the "Y", the Mill Area is 0.5 miles distant. (See Map No. 2 for position of claims, mill area and roads.).

CLAIM VALIDATION:

The required discovery pits on the 40 placer claims have been dug

using a "back-hoe" excavator. For the most part, these discovery pits were dug near the common corner of four claims, one pit on each of the four claims. This work commenced on December 6 and continued through December 7 and 8, 1974. Map No. 2, SAMPLE LOCATION MAP, shows the position of those pits which were dug on December 6 and 7, while the writer was present on the property.

The discovery and/or test pits had dimensions of 5 to 6 feet deep, 4½ to 6 feet wide and 11 to 13 feet long with vertical or near vertical walls on 3 sides and a high degree sloping wall on the remaining side (permitting access to examine the gravel-sand stratas encountered and to take the samples decided upon.).

SAMPLING-GENERAL:

Nine samples were personally taken and prepared by the writer on December 6 and 7. The geology of the pit sampled was also examined and noted by the writer. Those pits which were sampled are shown on Map No. 2 and are designated by the writers sample numbers 1256 through 1264.

Although the taking of the samples is accurate and considered as good sampling proceedure, it must be remembered these samples are strictly preliminary in nature being indicative of present "surface trends" of mineralization and to a limited "depth factor" as penetrated by the pits.

SAMPLE TAKING and PREPARATION:

Proper sampling and preparation of placer material is a time consuming, tedious process involving measurements, large volumes and weights, as well as many calculations.

The following general proceedure was used by the writer for the taking and preparation of the samples from those pits designated on Map No. 2 as being sampled.

(1) - After the pit was dug by the back-hoe excavator, the most vertical, even planed wall parallel to the pit length was selected to be sampled.

(2) - This wall was "skimmed" by the writer to trim and even the wall.

(3) - A specific section of selected dimensions, area-wise, was marked using a geologists pick.

(4) - A large plastic sheet was spread on the floor of the pit to more than cover the length of the sample.

(5) - Using a shovel and pick, successive "layers" of the material were scaled from the wall from the top to the bottom and across the "marked area" until the volume obtained approximated the volume of the sample measuring box.

(6) - The sampled, loose material (sand, gravel, rocks, etc) was hoisted

to the surface and emptied into the measuring box until full to the corners. Some tamping was done.

(7) - The measuring box used and made by the writer has a 2.7 cubic foot volume level full, or one tenth (1/10) of a cubic yard.

(8) - After being filled and tamped, the material was shoveled from the box and screened using a ¼ inch size screen. The undersize was then usually seplit twice using a Jones type splitter.

(9) - The final quarter was then screened using an ordinary window screen mesh (about a 1/16th inch opening).

(10)- If the undersize was too much material, a third split was completed. A third split was necessary in all cases.

(11)- Half of this split (now 1/8th) of the original sample except for the plus ¼ inch discarded earlier, was panned using a standard gold pan until some of the very fine grained size "heavies" (magnetite, gold, etc.) started to move over the pan edge.

(12)- The final concentrate (sand grains and heavies) were low heat dried and packaged in sample envelopes after being properly identified by number.

(13)- Jacobs Assay Office, Tucson, Arizona, weighed each concentrate and assayed for natural iron (Fe), gold (Au) and silver (Ag). Five of the samples were assayed for Titanium (Ti) and one sample assayed for sulphur.

SAMPLE DISCRIPTIONS:

Nine samples were taken by the writer on December 6 and 7th, immediately after the discovery and/or test pit was excavated by the back-hoe equipment. The following sample discriptions include pit location, direction, size, size of sample block as measured by the writer and geological stratigraphy of the penetrated material, in that order.

Sample #1256 - Magna No. 5 (NW/4, Sec. 31) Pit at SE corner of claim, N. 45° W., 11 feet long, 4.5 feet wide, 6 feet deep. Sample 3.5 feet long, 2.5 feet high, ½ foot deep, NE wall, 2 feet NW of SE end and sample top is 3.6 feet below surface which contains soil, rocks up to 4 inches and some caliche..Sample area is successive layers of sand, magnetite, pebbles and some rocks up to 4 inches.

Sample #1257 - Magna No. 18 (SW/4, Sec. 32) Pit at NE corner of claim, N. 40° W, 12 feet long, 6 feet wide, 6 feet deep. Sample 4 feet long, 4 feet high and ¼ foot deep, NE wall, 2 feet NW of SE end and sample top is 1.5 feet below surface which contains soil and clay. Sample area is successive layers of sand, pebbles and some clay, possibly some magnetite.

Sample #1258 - Magna No. 4 (SW/4, Sec. 30) Pit at NE corner of claim, N. 45° W., 11 feet long, 4.5 feet wide, 6 feet deep. Sample 4.5 feet long, 4 feet high, 1/3 foot deep, NE wall, 2 feet NW of SE end and 1.8

feet below surface which contains soil and clay. Sample area is layers of sand, pebbles and rocks and about 4 inches of caliche. Some magnetite may be present.

Sample #1259 - Magna No. 21 (SE/4, Sec. 21) Pit at NW corner of claim, N. 25° W., 12 feet long, 5.5 feet wide, 5.5 feet deep. Sample 5 feet wide, 5.5 feet high and 2 inches deep, NE wall, 2 feet NW of SE end. Sample area is 3.5 feet magnetite, sand and pebbles above 2 feet of caliche and 4 inch rocks near bottom.

Sample #1260 - Magna No. 29 (SE/4, Sec. 28) Pit at NW corner of claim, N. 30° W., 11 feet long, 4.5 feet wide, 4.5 feet deep. Sample 5 feet long, 4.5 feet high and ½ foot deep, NE wall, 2 feet NW of SE end. Sample area is soil and silt for the top 4 inches, the balance being sand and pebbles and some rocks to 4 inches, but not necessarily layered whereas the magnetite does occur as discernable layers.

Sample #1261 - Magna No. 26 (SW/4, Sec. 21) Pit at SE corner of claim, S. 45° E., 11 feet long, 4.5 feet wide, 5.5 feet deep. Sample 4.5 feet long, 5 feet high, 3 inches deep, SW wall, 2 feet SE of NW end and ½ foot below surface which is soil and silt. Sample area is mostly sand with two layers of some pebbles and rocks to 4 inches at 1 foot and 3 feet above the pit bottom.

Sample #1262 - Magna No. 23 (SE/4, Sec. 20) Pit at SE corner of claim, N. 50° W., 11 feet long, 5.5 feet wide and 5.5 feet deep. Sample 5 feet long, 3.5 feet high, 3 inches deep, SW wall, 2 feet NW of SE end, 1.5 feet below surface which is soil and silt. Sample area is 3.5 feet sand and pebbles with ½ foot of sand, pebbles and rocks up to 3 inches, all with layers of magnetite, some quite coarse grained.

Sample #1263 - Magna No. 33 (NW/4, Sec. 27) Pit at NE corner of claim, N. 80° W., 12 feet long, 4.5 feet wide, 6 feet deep. Sample 4.5 feet long, 2 feet high, ½ foot deep, South wall, 4.5 feet West of East end and 4 feet below surface which is caliche. Sample area is sand, pebbles and some rock to 2 inches and minor amounts of fine grained magnetite.

Sample #1264 - Magna No. 40 (SE/4, Sec. 23) Pit at SE corner of claim, S. 70° W., 11.5 feet long, 4.5 feet wide and 6 feet deep. Sample 4 feet long, 5 feet high, ½ foot deep, North wall, 3 feet SW of NE end and 1 foot below surface which is soil and sand. Sample area is 1 foot sand below the soil, 2 feet of soft caliche containing rocks, pebbles and some sand and 2 feet of sand, clay and some pebbles above the pit floor.

SAMPLE DATA and RESULTS:

Sample data, calculations and assay results are exhibited in Table I and Table II. All data is self explanatory as identified by the column headings, however, as a matter of explanation and assumptions used, the following should be noted:

(1) - The natural iron content is considered to be derived completely from the iron mineral magnetite (Fe_3O_4, Fe = 72.4%, O = 27.6%, Sp. G. 5.17)

(2) - That the bulk of the material other than magnetite in the concentrate is sand grains (SiO_2, 100%, Sp. G. 2.65.
(3) - That the titanium oxide can be considered most likely as the mineral illmenite and/or rutile, wholly or in part as an admixture with the magnetite, and
(4) - That one cubic yard of sample averages 2,700 pounds, and
(5) - that the following calculations were used to determine the values of the columns shown in Table I. For absolute true values of the columns, mineralogical tests of the concentrates would be required, however, for the purpose of this work, the calculations as used are considered as being adequate and precise to the degree herewith required.

$$\text{Col. 5 (\% magnetite)} = \text{Col. 4 (\% natural Fe)} \times \frac{100\% \text{ (true magnetite)}}{72.4 \text{ (\% iron in true magnetite)}}$$

$$\text{Col. 6 (\% sand)} = 100\% \text{ (concentrate)} - \text{Col. 5 (\% magnetite)}$$

$$\text{Col. 7 (Sp.G. of Conc.)} = \text{Col. 5 (\% mag.)} \times 5.17 \text{ (Sp.G. mag)} + \text{(next line)} \frac{\text{Col. 6 (\% sand)} \times 2.65 \text{ (Sp.G. sand, } SiO_2\text{)}}{100\%}$$

Col. 8 (Wt mag/cu. yd) = Col 3 (Conc Wt.) X Col. 5 (% mag) X 80 (Split portion X sample volume portion, 10 X 8)

$$\text{Col. 9 (\% mag/cu. yd)} = \frac{\text{Col. 8 (Wt. of magnetite / cu. yd.)}}{2700 \text{ (Wt. of cu. yd. sand-gravel, assumed)}}$$

$$\text{Col. 10 (Cu. yds for 1 ton mag.)} = \frac{2000 \text{ (pounds/ton-short)}}{\text{Col. 8 (Wt. of magnetite/cu. yd.)}}$$

$$\text{Cols. 11, 12 and 13} = \frac{\text{Gold, Silver and Titanium Oxide Assays} \times 100}{\text{Col. 5 (\% magnetite in Conc.)}}$$

ANALYSIS of SAMPLE RESULTS:

It must be remembered that the completed sampling program is very preliminary in nature and basically only tests the material from the surface to a 5 or 6 foot depth. Material to this depth is usually constantly "working" (moving horizontally and vertically) due to the annual precipitation as rain - hard rains - (flash flooding) in many instances.

Such test work however accomplishes to a great extent - validation of claims - and provides information as to "trends" or channels of weak, moderate or strong mineralization, particularly as regards magnetite (Fe_3O_4), content.

The sampling program was wide spaced, therefor merely indicative in the particular areas.

The tabulated and calculated information of Table I strongly suggests that the magnetite content in the sand-gravel material is somewhat "weak", except in sample #1262, over most of the surface area and to a depth of 5 or 6 feet. The same is true for all the gold and silver values of the samples taken and their presence is most certainly part and parcel of, and being, in solid solution with the magnetite. Little to no gold or silver would or could be considered as "native - free". As can be seen in Table I, these values are quite low.

Those samples assayed for titanium oxide suggests that this mineral (probably all illmenite - $FeTiO_3$) is not totally dependent on the magnetite content - to wit - sample #1256 with 25.7% magnetite and 1.13%

TABLE I

Sample Number	Sample Volume Cu. Ft.	Number of Splits & Ratio	Weight of Conc. Pounds (3)	Natural Iron- % (4)	Magnetite % (5)	Sand % (6)	Specific Gravity of Conc. (7)	Magnetite per cubic yard Lbs. - % (8)	(9)	Cubic Yards Req'd for one ton Magnetite (10)
1256	2.7	3 (1/8)	0.563	18.6	25.69	74.31	3.297	11.60	0.43	172.4
1257	2.7	3 (1/8)	1.688	26.0	35.91	64.09	3.555	48.48	1.79	41.3
1258	2.7	3 (1/8)	0.688	23.4	32.32	67.68	3.464	17.79	0.66	112.4
1259	2.7	3 (1/8)	0.688	33.6	46.41	53.59	3.819	25.52	0.95	78.3
1260	2.7	3 (1/8)	1.188	30.2	41.71	58.29	3.701	39.68	1.47	50.4
1261	2.7	3 (1/8)	1.062	20.7	28.59	71.41	3.370	24.32	0.90	82.2
1262	2.7	3 (1/8)	2.062	39.4	54.42	45.58	4.021	89.76	3.32	22.3
1263	2.7	3 (1/8)	0.625	29.2	40.33	59.67	3.666	20.16	0.75	99.2
1264	2.7	3 (1/8)	0.625	24.4	33.70	66.30	3.499	16.88	0.63	118.5

TABLE I Cont'd

Sample Number	Assays of Original Concentrate: Natural Iron %	Gold Oz/Ton	Silver Oz/Ton	Titanium Oxide %	Sulphur %	Calculated Contents for 100% Pure Magnetite Concentrate: Gold Oz/Ton (11)	Silver Oz/Ton (12)	Titanium Oxide % (13)
1256	18.6	Tr.	0.15	1.13		Tr.	0.58	4.40
1257	26.0	Tr.	0.10			Tr.	0.28	
1258	23.4	0.005	0.05	1.55		0.015	0.15	4.80
1259	33.6	Tr.	0.05	1.31		Tr.	0.11	2.82
1260	30.2	Tr.	0.10	1.16		Tr.	0.24	2.78
1261	20.7	Tr.	0.10			Tr.	0.35	
1262	39.4	0.005	0.15	0.91	2.85	0.010	0.28	1.67
1263	29.2	Tr.	0.05			Tr.	0.12	
1264	24.4	Tr.	0.05			Tr.	0.15	

All calculations made by R. E. Mieritz, Mining Consultant.

For explanation as to how each column (numbered) was calculated, refer to page 5 of the report.

TiO_2 as compared to sample #1262 with 54.4% magnetite and only 0.91% TiO_2.

FUTURE EXPLORATION:

The sampling results indicate favorable trends or channels of strong mineralization in all or part of Claims No. 23, 15, 22, 16, 21, 8, 17, 7 and 18 as one trend and Claims No. 35, 33, 30, 27, 29 and 28 as a second trend.

The sand-gravels within these two trends should be explored to 40 foot depths initially to learn the stratification of the area and also to sample and test for the magnetite content.

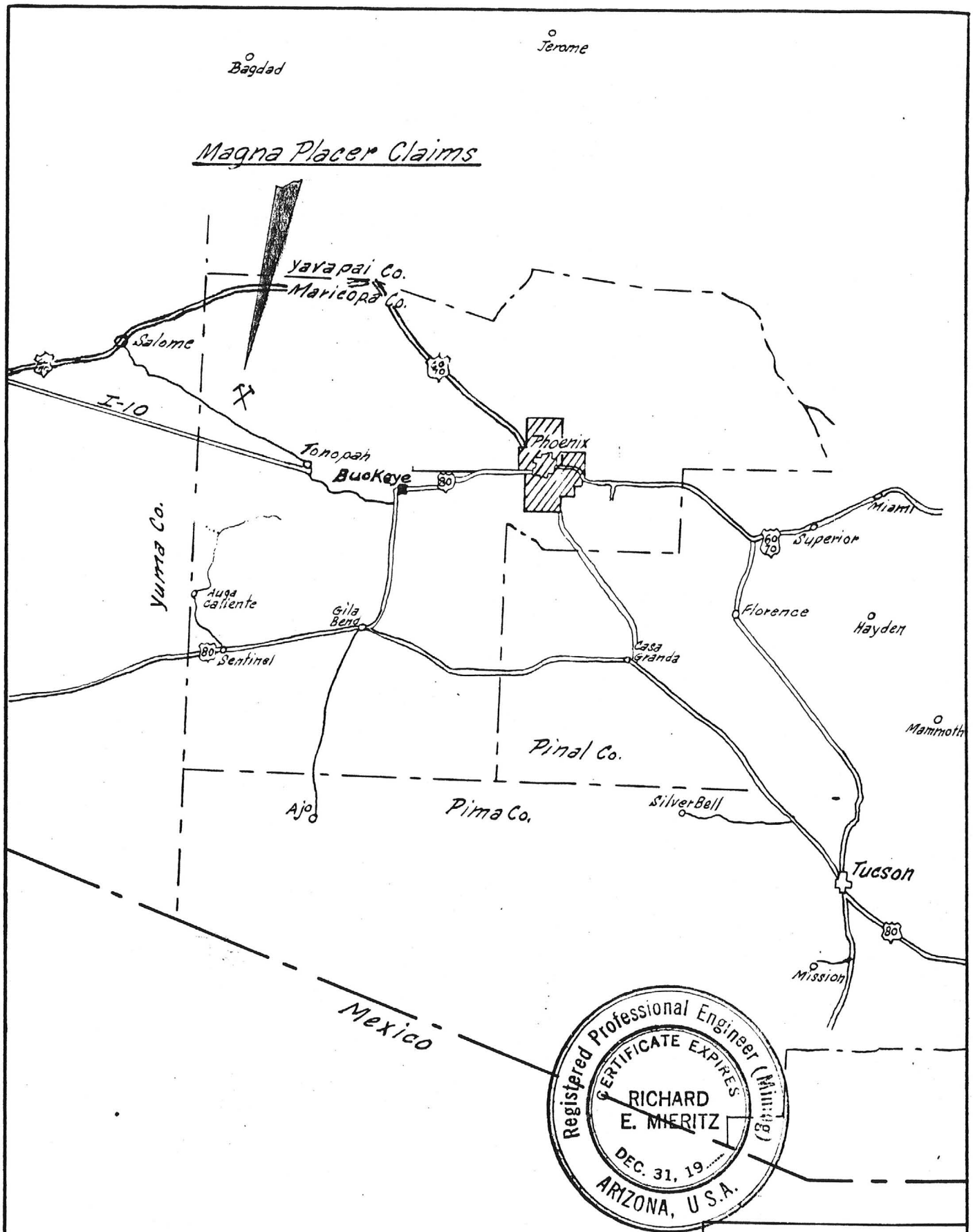
Placer sampling requires large volume samples which must be prepared like or similar to the method used by the writer. To obtain the necessary volume, large diameter drilling or shaft sinking is required. Placer sampling is an energetic program, both time-wise and financial-wise. Preparedness in both categories is a requirement for proper first phase development of the property.

The major trend - first mentioned in earlier paragraph - should be the first to be explored, particularly in the norther portion of the property because a coarser grained magnetite is suspected by the writer. Greater magnetite contents are also suspected.

Respectfully submitted,

R. E. Mierits,
Mining Consultant
Phoenix, Arizona.

January 2, 1975



INDEX MAP
SOUTHWEST ARIZONA

SCALE: 1" = 27.5 MILES

JAN., 1962

R. E. MIERITZ, P.E. PHX, ARIZ

MAP Nº 1

~~1433~~ S. 10th AVE.
P. O. BOX 1889

DUPLICATE

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

Certificate No. 59461

TUCSON, ARIZONA 85702 Dec. 31st 1974

Sample Submitted by Mr. R. E. Moritz

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	TiO2 Per cent Wet Assay	Fe Per cent Wet Assay
		$					
#1256						1.13	
1257							36.0
1258						1.55	33.0
1259						1.31	
1260						1.16	
1262						0.41	

* Gold Figured $35.00 per oz. Troy

Charges $ 25.00

Very respectfully,

Ben P. Jacobs

1435 S. 16th AVE.
P. O. BOX 1889

Jacobs Assay Office

Registered Assayers

PHONE 622-0313

Certificate No. 59454

TUCSON, ARIZONA 85702 Dec 17 1974

Sample Submitted by Mr. R. E. Muentz Jr.

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~~ WEIGHT LBS-OZS	Fe Per cent Wet Assay	S Per cent Wet Assay
		$					
# 1256	Trace		0.15		0-9	18.6	
57	Trace		0.10		1-11	— 26.0	
58	0.005		0.05		0-11	— 23.4	
59	Trace		0.05		0-11	33.6	
60	Trace		0.10		1-3	30.2	
61	Trace		0.10		1-1	20.7	
62	0.005		0.15		2-1	39.4	2.85
63	Trace		0.05		0.10	29.2	
64	Trace		0.05		0.10	34.4	

REGISTERED ASSAYER
CERTIFICATE ASSAYER
1041
BENJAMIN P. JACOBS
DEC 31 19
ARIZONA 74

* Gold Figured $35.00 per oz. Troy

Charges $ 58.50

Very respectfully,

Ben P. Jacobs

TECHNICAL COMMERCIAL & INDUSTRIAL COMPANY
G. PANAS & G. PECLARIS

PARTNERS:
G. PANAS, B. COM.
G. PECLARIS, M. SC.

54, STADIOU STREET
ATHENS 131 - GREECE

CABLES: TECOMINCO
TELEPHONES: 315.614, 838.291, 252.768
WAREHOUSE TEL. 815.498

CORRESPONDENCE:
IN ENGLISH OR FRENCH.

TECHNICAL DEPARTMENT:
- NONDESTRUCTIVE PLATE THICKNESS MEASUREMENTS BY ULTRASONIC
- FREE GASING
- METALS AND ALLOYS ANALYSIS
- CRACKS DETECTION IN METALS BY LIQUID PENETRANT

ATHENS 2d August 1968
P.O.B. 1118 (OMONIA)

INTERNATIONAL IRON Co Ltd
71, Vassilissis Sofias St
Athens 140 - Greece

For attention of Mr FRANK BROES

Dear Sirs,

Re: Analysis of a sample of ore (mineral)

We have the honour to bring to your knowledge the results of the analysis effected on the sample submitted to us.

Description of sample: Coarse sand of a black grey metallic colour.

Analysis results:

Iron (Fe)	69,30 %
Silica (SiO_2)	1,82 %
Alumina (Al_2O_3)	2,25 %
Calcium oxide (CaO)	0,85 %
Magnesium oxide (MgO)	0,32 %

Always with pleasure at your service

Yours faithfully
TECHNICAL COMMERCIAL & INDUSTRIAL Co
G.PANAS & G.PECLARIS

G Peclaris

G.Peclaris
Chemical Engineer

RICHMOND 9-3411

FORM P-2 1-62 LC

SMITH-EMERY COMPANY

CHEMISTS • TESTING • INSPECTION • ENGINEERS

781 EAST WASHINGTON BOULEVARD

LOS ANGELES 21, CALIFORNIA

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FILE NO.: 4905-64
LABORATORY NO.: C-518443

DATE: JUNE 30, 1964

CALZONA DEVELOPMENT CO.
111 NO. 28TH STREET
PHOENIX, ARIZONA

ATTN: FRANK BROES

REPORT OF DETERMINATIONS

IN ACCORDANCE WITH YOUR INSTRUCTIONS THE SAMPLE OF MATERIAL WHICH YOU SUBMITTED TO US JUNE 25, 1964, MARKED AS ABOVE, WAS ANALYZED WITH THE FOLLOWING RESULTS:

SILICA (SiO_2)	1.12%
SULFUR (S)	TRACE
TOTAL IRON (FE)	69.30%
IRON CALCULATED AS Fe_2O_3	99.20%
IRON CALCULATED AS Fe_3O_4	95.70%
CARBONATES (CO_3)	NONE FOUND
SULFIDES	NONE FOUND

NOTE: THE ABOVE ANALYSIS INDICATES THE SAMPLE TO BE COMPOSED OF ALMOST ENTIRELY IRON IN SOME FORM. IT IS IMPOSSIBLE TO DETERMINE THE EXACT COMPOSITION OF THE MATERIAL DUE TO THE POSSIBILITY OF VARIOUS OXIDES OF IRON AS WELL AS SOME METALLIC IRON BEING PRESENT.

RESPECTFULLY SUBMITTED,

SMITH-EMERY COMPANY

BY P. E. Matheny
P. E. MATHENY

6 CALZONA DEVELOPMENT CO.
1 L.J.C. IRON CO.
TLL

RICHMOND 9-3411

FORM C-1(

SMITH-EMERY COMPANY

CHEMISTS • TESTING • INSPECTION • ENGINEERS

731 EAST WASHINGTON BOULEVARD

LOS ANGELES 21, CALIFORNIA

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FILE NO: 4905-64
LABORATORY NO: C-517653

DATE: JUNE 10, 1964
P. O. NO:
SUBMITTED BY: CLIENT
SAMPLE: MINERAL
MARKED: NO MARK

CLIENT: CALZONA DEVELOPMENT CO.
ADDRESS: 111 NO. 28TH ST., PHOENIX, ARIZONA
ATTENTION: MR. FRANK BROES

REPORT OF QUALITATIVE SPECTROGRAPHIC EXAMINATION

(SEE STATEMENT ATTACHED REGARDING EXAMINATION)

ELEMENT	APPROXIMATE QUANTITY
MAJOR CONSTITUENT	10% OR GREATER
IRON	
INTERMEDIATE CONSTITUENT	2% TO 10%
NONE FOUND	
MINOR CONSTITUENTS	
VANADIUM	1.0%
SILICON	0.1%
TITANIUM	0.1%
BORON	0.05%
ALUMINUM	0.05%
MAGNESIUM	0.05%
MANGANESE	0.05%
CALCIUM	0.05%
CHROMIUM	0.05%
COPPER	TRACE
OTHER ELEMENTS	NONE DETECTED

RESPECTFULLY SUBMITTED,

SMITH-EMERY COMPANY

BY P. E. Matheny
P. E. MATHENY

6 CALZONA DEVELOPMENT CO.
TLL

RICHMOND 9-3011

FORM P-2 1-62 LC

SMITH-EMERY COMPANY

CHEMISTS • TESTING • INSPECTION • ENGINEERS

751 EAST WASHINGTON BOULEVARD

LOS ANGELES 21, CALIFORNIA

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FILE NO.: 4905-64
LABORATORY NO.: C-517653

DATE: JUNE 10, 1964

CALZONA DEVELOPMENT CO.
111 NO. 28TH STREET
PHOENIX, ARIZONA

ATTN: MR. FRANK BROES

REPORT OF DETERMINATIONS

IN ACCORDANCE WITH YOUR INSTRUCTIONS THE SAMPLE OF MINERAL WHICH YOU SUBMITTED TO US JUNE 1, 1964, WAS TESTED TO DETERMINE THE CONSTITUENTS REPORTED BELOW:

ON MAGNETIC FRACTION
OF SAMPLE SUBMITTED

IRON (FE) ----------	68.97%
VANADIUM PENTOXIDE (V_2O_5) ------	0.33%

RESPECTFULLY SUBMITTED,

SMITH-EMERY COMPANY

BY P. E. Matheny
P. E. MATHENY

6 CALZONA DEVELOPMENT CO.
TLL

TECHNICAL, COMMERCIAL & INDUSTRIAL COMPANY
G. PANAS & G. PECLARIS
54, STADIOU STREET
ATHENS 131 - GREECE

CABLES: TECOMINCO
TELEPHONES: 315.614 / 838.291 / 252.763
WAREHOUSE TEL. 815.493

PANAS, B. Com.
PECLARIS, M. Sc.

CORRESPONDENCE
ENGLISH & FRENCH.

TECHNICAL DEPARTMENT:
NON-DESTRUCTIVE PLATE THICKNESS
MEASUREMENTS BY ULTRASONIC
FREE CASING
METALS AND ALLOYS ANALYSIS
FLAW DETECTION IN METALS BY
LIQUID PENETRANT

ATHENS 29th July 1963
P.O.B. 1118 (GRONIA)

INTERNATIONAL IRON Co Ltd
71, Vassilissis Sofias St
Athens 140 - Greece

For attention of Mr FRANK BROES

Dear Sirs,

Re: Analysis of a sample of ore(mineral)

We have the honour to bring to your knowledge the results of the analysis effected on the sample submitted to us.

Description of sample: Coarse sand of a black grey mettalic Colour

Analysis results:

Iron Fe	69,48%
Silica SiO_2	1,23%
Alumina Al_2O_3	0,68%
Calcium Magnesium CaO+MgO	0,54%

Always with pleasure at your service

Yours faithfully
TECHNICAL COMMERCIAL & INDUSTRIAL Co
G.PANAS & G.PECLARIS

G. Peclaris

G.Peclaris
Chemical Engineer

Report of Jan. 2, 1975

REPLY TO:
~~1634 W. HAZELWOOD STREET~~
PHOENIX, ARIZONA 8501~~3~~ 16
TELEPHONE (602) 277-6053
2940 N. Casa Tomas

Richard E. Mieritz

MINING CONSULTANT

ARIZONA REGISTERED
MINING ENGINEER AND GEOLOGIST

GEOLOGY
EXPLORATION
EVALUATION
FEASIBILITY
OPERATION

January 3, 1978

Mr. Frank Broes, Board Chairman
Stradco Iron Company
P. O. Box 96229
Houston, Texas, 77015

Dear Mr. Broes:

Thank you kindly for your telephone authorization of January 2nd to the retyping and updating of the original October 23, 1971 report which I completed on the D. J. & L. J. C. Placer claims, Maricopa County, Arizona.

Herewith then, the original and six copies of the report as you had requested.

As you had also requested, the Company address change has been made as compared to the original report as well as the use of the December, 1977 E. & M. J. quotation price for iron pellets which is now 55.5¢/ltu instead of 28¢ in September, 1971 and 44.5¢ in April, 1975- both previously used figures. Except for these changes, this retyping of the report is the same as the original report of October , 1971.

Sincerely yours,

Richard E. Mieritz

Richard E. Mieritz,
Mining Consultant
Phoenix, Arizona.

AN APPRAISAL

of

"IN PLACE" MINERAL WEALTH

of the

D. J. & L. J. C. PLACERS

in

Maricopa County, Arizona

by

Richard E. Mieritz
Mining Consultant
Engineer - Geologist
(Sun City, Arizona)
Phoenix, Arizona

October 23, 1971

TABLE of CONTENTS

	Page
Introduction.	1
Conclusions	1
Property, Location and Accessibility.	1
Geology..	2
Mineralization.	2
Property Development.	3
Potential Mineral Wealth.	4

Attachments:

Map No. 1, Index Map
Map No. 2, Property Map
Map No. 3, Surface Geology Map

Factual data submitted by Stradco Iron Company and reviewed by the writer.

Assay Sheet, Metallurgical Laboratories, May 6, 1964
Assay Sheet, Laboratory of Analytical Chemistry, July 18, 1968
Assay and Screening Sheet, part of above
Assay Sheet, Technical, Commercial & Industrial Co., July 29, 1968
Assay Sheet, Smith-Emery Company, June 10, 1964
Spectrographic Examination Sheet, Smith-Emery Co., June 10, 1964
Assay Sheet, Smith-Emery Company, June 30, 1964
Assay Sheet, Technical, Commercial & Industrial Co. August 2, 1968

INTRODUCTION:

At the written request of and authorization (dated October 19, 1971) by Mr. Frank Broes, Board Chairman of Stradco Iron Company, the address of which is P. O. Box 96229, Houston, Texas, 77015, the writer completed an appraisal of the D. J. and L. J. C. placer mining claims, Maricopa County, Arizona. The completed appraisal reported on herein factualizes to some extent and reflects the potential mineral wealth in situ within the property boundary.

The writer personally and physically examined a portion of the property in a general way on October 20, 1971, accompanied by a Mr. McMillen. Some of the physical exploratory efforts by International Iron Co. were observed on the ground during the visit. Unfortunately, no drill hole sample records, geologic or assay logs are available for study, consequently, no "ore reserve" as such can be calculated. A few assay records of "crude ore" and "concentrates" are available but sample descriptions, correlations, locations and other sample details are lacking.

In view of the above situation - lack of adequate, positive, identifiable information, the writer is required to rely on his experience with and knowledge of placer deposits of similar nature, characteristics and mineralization.

CONCLUSIONS:

The purpose of this report is but for a single objective - an appraisal of the placer claims mineral wealth "in place" - consequently but one conclusion is required. The conclusion is based on four assumptional factors. A variance of any one factor would revise the appraisal either upwards or downwards. Also, for the most part, the four assumptions are derived from the writer's experience and knowledge of similar deposits in Arizona. The limited factual data available on the property in question has been used solely as a guide, rather than actual proof, to establish the realistic assumptions used by the writer. The limited amount of factual data permits the writer but one categorical definition of the appraisal value - namely, inference, - thus, justifiably, the writer concludes that:

(1) - The area of consideration as described within the report would have an "inferred, in place" mineral wealth, as regards the mineral magnetite (Fe_3O_4) of 9,161,000 long tons at a possible market value of $330,525,000.-- at property.

PROPERTY, LOCATION and ACCESSIBILITY:

The property consists of fifty seven 160 acre placer claims totaling plus or minus 9,120 acres. Claims involved are the D. J. #1 through #34 and the L. J. C. #1 through #8, #25 through #31, #153 through #156 and #172 through #174. (34 D. J. claims and 23 L. J. C. claims) See Map No. 2.

All of the D. J. claims lie within T. 4 N., R. 9 W., covering all of

Sections 19, 20, 21, 26, 28, 29, 30, 32 and the N/2 of Section 27. The L. J. C. claims cover all of Section 31 in T. 4 N., R. 9 W., all of Sections 6, 7, 18 and 19 plus the N/2 and SE/4 of Section 30 in T. 3 N., R. 9 W., of the G. & S. R. B. & M. in western Maricopa County, Arizona.

Mr. F. Broes states that all claims are valid and current as regards annual assessment work.

Travel to the property can be accomplished by passenger auto from Phoenix via U. S. Highway 80 to Buckeye, thence westerly on the Buckeye-Hassayampa-Salome County Road. This route is paved to a point 29 miles westerly of Buckeye (the Mary E. farm road Junction). Beyond this junction the road is gravel but usually well maintained by the County Highway Department. Twenty miles past the Mary E. Junction in a northwesterly direction toward Salome, a northeasterly trending gravel road junctions on the right and leads to the town of Aguila located on U. S. Highway 60-70. Traveling 3.9 miles northeasterly on this road is an easterly trending desert road on the right. Travel on this desert road for 5.1 miles easterly, passing a rancher's fenced earth water tank, one intersects the west boundary (Range Line) of the property and onto claim D. J. #26, Section 30, T. 4 N., R. 9 W. See Maps No. 1 and No. 3.

Several ranch type desert roads make a portion of the property accessible by passenger auto. Access to other portions would possibly require a four wheel drive, high center vehicle to overcome some of the hazardous steep banked narrow type gullies in the area.

GEOLOGY:

For the most part, the claims cover a broad expanse of valley fill alluvium consisting of sand, pebbles, cobbles and boulders representing the exposed rocks of the surrounding area. A striking physical feature of the alluvium is the minimum amount of boulders (a four to six inch size or greater) and the abundance of sand and pebbles. This characteristic was also observed when viewing the walls of several 36 inch diameter drill holes.

Rocks in the surrounding area consist of Pre-Cambrian gneiss and granite, Cretaceous andesite and rhyolite and Quaternary basalt which is largely small remnants capping the ridges of the mounds and hills surrounding the placer property. See Map No. 3. Float-wise, white quartz fragments were noted as well as some pieces of pegmatite, not at all uncommon to the area.

MINERALIZATION:

The principal mineral of interest within the placer property is magnetite, Fe_3O_4, which has a magnetic characteristic and a usual constituent of many igneous rock types. Through the erosional processes, the magnetite has been removed from the rocks and transported to the valley fill alluvium where it concentrates in thin layers separated by barren or lean sand and pebble layers. To a lesser degree there may be dissemination of the magnetite in the aforementioned barren or lean layers.

Most magnetite occurring in placer deposits, particularly in Arizona, contains illmenite ($FeTiO_3$) as an admixture and a deleterious impurity when considering the magnetite as a raw material for production of iron and steel. Many of the Arizona magnetite sands contain this impurity. Removal of the titanium is a difficult and costly process and it is mostly for this reason that several of the magnetite placers in Arizona are not operative. Illmenite also occurs as a separate, divorced mineral and as such, because of its slight magnetic property, it can be almost wholly removed.

Available assay reports of ore samples and concentrates indicate that some of the titanium content can be removed by concentration of the magnetite and (2) that there is a very minimum amount of titanium married to the magnetite as an admixture, which, of course, is good from the standpoint of the material being concentrated and used as an iron ore.

All Arizona magnetite sands range from about 4% to 6% magnetite (2.8% to 4.2% iron). These percentages bear a direct relationship to the magnetite content of the surrounding rock outcrops from whence it came. The D. J. and L. J. C. placer group is no exception. All Arizona magnetite sands contain gold in varying amounts. Occasionally, the gold is free (pannable or amalgamable) but more often than not, the gold is married to the magnetite as an admixture - like the titanium - and in this occurrence would require a cyanide dissolution.

Summarizing, the potential mineral wealth of the property is in its magnetite content for use as an iron ore and possibly, just possibly, the gold content, if extractable.

PROPERTY DEVELOPMENT:

Available records indicate that the property was partially explored by 34 drill holes of 36 inch diameter and 20 to 30 feet deep. This is one hole on each of the 34 D. J. claims. (See Map No. 3.) It is assumed by the writer that most holes were located close to the center of each claim (as shown on the Map), however, it is thought that their location was determined more by accessibility of the truck mounted drill than by an exacting, equally spaced, surveyed grid drilling pattern. Thus, the drill hole locations on the map are merely pictorial for convenience.

Forty five 2 inch diameter drill holes were reported as drilled to an average of 30 feet. The location of such holes is not known, however, they were marked in the field by 2" x 2" x 5 foot stakes with the hole numbers and depth of hole marked on each stake. Again, accessibility appears to have determined their location.

While in the field, Mr. McMillen and the writer found six stakes (some upright, others on ground) (See Map No. 3) but none of the 2 inch holes could be located -- no doubt caved and filled in as a result of rain, etc.

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20 feet deep and the fourth visible hole was estimated at 30 feet deep. Observation of the hole walls in three of the holes indicated the alluvium penetrated consisted, for the most part, of sand, pebbles and cobbles with few boulders larger than 4 to 6 inches. The fourth hole observed (believed to be in Sec. 19, SE/4) contained a greater amount of boulders larger than 4 to 6 inches. This criteria was also noted on the surface in the immediate area. This criteria should be a significant indicator for determing particle sizes at depth.

Two water wells, approximately 800 feet deep are located near the plant building. See Map No.3. It is reported that water was encountered at 200 feet, however, the writer timed a falling stone and only a loud metallic sounding noise was heard at approximately 700 to 750 feet in both wells. No sound of water was heard.

POTENTIAL MINERAL WEALTH:

Unfortunately, as in many instances, the above described exploratory drilling and development has been for naught inasmuch as there are no geologic logs, sample descriptions or sample assay values available to and for the writer to review, study and correlate into a meaningful, accurate and positive type calculation to arrive at an "in place" potential mineral wealth appraisal. Records such as these, if taken, are usually lost or misplaced or else not taken during the exploratory program.

In view of the above status, the writer has little choice but to apply his experience and knowledge in and of deposits of similar nature and character and to sparingly apply the very limited and unidentifiable assay data and test work data to justify the conclusions and terms of the calculations herein presented. The mineral wealth appraisal, as presented, can achieve a level of no higher than an "inference" in terms of the industy's mineralization classifications of "inferred", "indicated" and "proven".

Lack of positive, orderly obtained, adequately identifiable information and records requires that certain assumptions be made, keeping in mind that these assumptions are not "unknowns" but substaniated facts as related to similar deposits in Arizona. These are:

(1) - Magnetite content averages 4.5% (3.1% Fe)
(Dept. of Mineral Resources data, writers experience)

(2) - Magnetite content continues to an average 21 foot depth.
(indicated by large diameter drill holes)

(3) - Magnetite recovery is possible in excess of 93%.
(Indicated by Laboratory of Analytical Chemistry, Athens, Greece)

(4) - Weight per cubic yard of material averages 3000 pounds.
(writers experience)

The area of mineralization under consideration in this instance is:

All of Sections 20, 21 and 30,	T. 4 N.,	R. 9 W.			1920 acres
90% of Sections 19 & 32	"	"	"	"	1150 " "
80% of Section 29	"	"	"	"	510 " "

65% of Sections 26 & 28, T. 4 N., R. 9 W.	830 acres
50% of Section 27 " " " "	320 "
Total area	4730 acres
Square yard factor (acres to yards)	x 4840
Square yards	22,893,200 sq. yds.
Factor for 21 foot depth, 7 yards	x 7
Cubic yards for 7 yard depth	160,252,400 cu. yds.
Factor, cubic yards to short tons	x 1.5
Short tons mineralized sand, gravel	240,378,600 S. Tons.
Magnetite content, 4.5% (assumed)	x 4.5
Magnetite, short tons	10,817,000 S. Tons.
Recovery factor (beneficiation), 93%	x .93
Marketable magnetite, 97%	10,260,000 S. Tons.
Conversion factor, Short to Long tons, (0.89287)	x .89287
Marketable Magnetite, long tons	9,160,900 L. Tons.
Marketable iron grade, 65% plus Fe.	
Pellet price, 55.5¢/LTU or $36.08 (E. & M. J. quotation, December, 1977	x $36.08
Inferred value of magnetite mineralization "in place" within D. J. placer claims to a depth of 21 feet below surface.	$330,525,000.--

The 23 L. J. C. claims have not been condisered in the above appraisal simply because of their geographic position and lack of any positive and visual information. However, if similar conditions exist, a dollar value equivalent to 50% of the above figure, or $165,000,000.--, could be added to the above calculated value, or a $495,000,000.-- total.

Mr. Frank Broes had advised the Department of Mineral Resources, Phoenix, Arizona, on or about February 4, 1965, that gold values of $30.00 to $35.00/ton of concentrates (magnetite) were indicated. The writer has no factual data or proof at hand to verify this conclusion, consequently, an appraisal of the gold content cannot be included in the appraised value. If, however, the gold is present in the amounts indicated, it would more than double the "inferred" appraised or calculated dollar value of mineral wealth "in place".

Actual development of a proven, delimited ore reserve of specific grade by drilling, feasibility study of mining and beneficiation, economics and marketing are the next successive phases toward a complete evaluation prior to an operation.

Registered Professional Engineer (Mining) CERTIFICATE EXPIRES DEC. 31 RICHARD E. MIERITZ ARIZONA, U.S.A.

REGISTERED GEOLOGIST CERTIFICATE NO. 9784 RICHARD E. MIERITZ Date Signed ARIZONA, U.S.A.

Respectfully submitted,

Richard E. Mieritz
Mining Consultant
Engineer and Geologist
Sun City, Arizona (now Phoenix)
October 23, 1971

NOTE:
The foregoing is an exact retyped copy of the report completed by the writer dated October 23, 1971 except for Company name and address change and the use of the December, 1977 E. & M. J. quotation of 55.56/LTU of pellets, replacing the September, 1971 quotation.

typed 1-3-78

実際に弊社が取り寄せたサンプルの分析結果は次の通りである。

（品　位）

	Crude Ore (1)	Crude Ore (2)	half finished Ore	Finished Ore (精　鉱)
SiO_2	71.34 %		15.40	3.20
Al_2O_3	10.18		3.66	1.15
Fe	4.27	8.47 %	55.37	69.39
Cu	0.004		0.007	0.010
TiO_2	0.78		0.83	0.79
V_2O_5	0.021		0.17	0.18
S	0.014		0.045	0.020
P	0.047		0.098	0.036
As	0.0084		0.014	0.012

注：CRUDE ORE には Fe 4.27 のものと Fe 8.47 のものと二種類ある。
Fe 8.47 のものの Fe 以外の [illegible] の分析は現在依頼中であり、この二種類の関係については現在調査中であるが、同鉱区にはこの二種類の CRUDE ORE があると考えられる。

FeO 及び着磁率については下記の通り

	Crude Ore (1)	Crude Ore (2)	half finished ore	Finished Ore
FeO	1.45 %	2.18 %	15.26 %	19.77 %
percentage of magnetic collection (SIZE)	3.6 %	7.6 %	74.0 %	97.2%

Crude Ore (1)		Half Finished		Finished Ore	
10 mesh	4.4%	10 mesh	1.0%	50 mesh	3.6%
20 mesh	19.0%	20 mesh	7.5%	64 mesh	4.4%
40 mesh	8.5%	30 mesh	13.8%	80 mesh	5.8%
50 mesh	2.9%	40 mesh	2.6%	100 mesh	9.0%
64 mesh	12.3%	50 mesh	9.5%	120 mesh	4.8%
80 mesh	5.9%	64 mesh	20.1%	150 mesh	8.4%
100 mesh	3.8%	80 mesh	17.0%	200 mesh	2.4%
150 mesh	2.1%	100 mesh	13.5%	-200 mesh	61.6%
-150 mesh	2.9%	120 mesh	4.3%		
		150 mesh	7.0%		
		200 mesh	1.3%		
		-200 mesh	2.4%		

THEO. G. MOURABAS
CHEM. ENGINEER
G. TH. MOURABAS
CHEMIST

ATHENS, 18 - 7 - 1968

KILKIS 6, TEL. 533.567

LABORATORY OF ANALYTICAL CHEMISTRY

RESEARCH & ANALYSIS OF MINING PRODYCES
ORES - MINERALS - SOILS - MINERALS WATERS

INDEX OF ANALYSIS No 3767

SENDER Mr. TROTS, INTERNATIONAL IRON CO. LTD.

SAMPLE MAGNETIC IRON ORE

MARK OF SAMPLE

		Percentage			Percentage
Loss on Ignition			Manganese dioxide	MnO_2	
Moisture	OH_2		» Oxide	MnO	
Combined water	OH_2		» Total	Mn	0,17
Carbon dioxide	CO_2	0,05	Chromium Oxide	Cr_2O_3	0,007
Silica	SiO_2	1,80	Lead	Pb	
Titanium Oxide	TiO_2	0,005	Zinc	Zn	
Ferrous »	FeO		Copper	Cu	
Ferric »	Fe_2O_3		Antimony	Sb	
Iron Total	Fe	70,40	Nickel	Ni	0,002
Aluminium Oxide	AL_2O_3		Cobalt	Co	0,001
Calcium »	CaO	0,40	Phosphorus	P	0,055
Magnesium »	MGO	0,25	Arsenic	As	
Sulfur »	SO_3		Sulfur	S	
Sodium »	Na_2O				
Potassium »	K_2O				

Fe_3O_4 97,20

THE CHEMIST

ΑΗΜΑΝΩΝ ΕΡΕΥΝΗΤΗΡΙΟΝ
Γ. Θ. ΜΟΥΡΑΜΠΑΣ
ΚΙΛΚΙΣ 6 - Τ. 533
ΤΗΛ. 533-567

METALLURGICAL LABORATORIES

CHEMISTS • ASSAYERS • SPECTROGRAPHERS

1142 HOWARD STREET • SAN FRANCISCO 3, CALIFORNIA
UNDERHILL 3-8575

REPORT OF ANALYSIS

Date May 6, 1964

Submitted by Arizona Assay Office
P. O. Box 1148
Phoenix, Arizona

Sample of Mineral

LABORATORY NO.	MARK	PERCENTAGES	
1566	476-McCarthy	Titanium	0.54

METALLURGICAL LABORATORIES

By [signature]

AN APPRAISAL

of

"IN PLACE" MINERAL WEALTH

of the

D. J. & L. J. C. PLACERS

in

Maricopa County, Arizona

by

Richard E. Mieritz
Mining Consultant
Engineer - Geologist
(Sun City, Arizona)
Phoenix, Arizona

October 23, 1971

TABLE of CONTENTS

	Page
Introduction	1
Conclusions	1
Property, Location and Accessibility	1
Geology	2
Mineralization	2
Property Development	3
Potential Mineral Wealth	4

Attachments:

Map No. 1, Index Map
Map No. 2, Property Map
Map No. 3, Surface Geology Map

Factual data submitted by Stradco Iron Company and reviewed by the writer.

Assay Sheet, Metallurgical Laboratories, May 6, 1964
Assay Sheet, Laboratory of Analytical Chemistry, July 18, 1968
Assay and Screening Sheet, part of above
Assay Sheet, Technical, Commercial & Industrial Co., July 29, 1968
Assay Sheet, Smith-Emery Company, June 10, 1964
Spectrographic Examination Sheet, Smith-Emery Co., June 10, 1964
Assay Sheet, Smith-Emery Company, June 30, 1964
Assay Sheet, Technical, Commercial & Industrial Co., August 2, 1968

INTRODUCTION:

At the request of Mr. Walter W. McMillen, an associate of Stradco, Inc., and with written authorization from Mr. Frank Broes, Board Chairman of Stradco Iron Company, 1~~351 Airport Service Rd., P.O. Box 18189, Jacksonville, Florida, 32229~~, the writer completed an appraisal of the D. J. and L. J. C. placer mining claims, Maricopa County, Arizona. The completed appraisal reported on herein factualizes to some extent and reflects the potential mineral wealth in situ within the property boundary.

1640 Houston Avenue
Brownwood Imperial
350
P.O. Box 96229
Houston Tex
77015

The writer personally and physically examined a portion of the property in a general way on October 20, 1971, accompanied by Mr. McMillen. Some of the physical exploratory efforts by International Iron Co. were observed on the ground during the visit. Unfortunately, no drill hole sample records, geologic or assay, are available for study, consequently, no "ore reserve" as such can be calculated. A few assay records of "crude ore" and "concentrates" are available but sample descriptions, correlations, locations and other sample details are lacking.

In view of the above situation - lack of adequate, positive, identifiable information, the writer is required to rely on his experience with and knowledge of placer deposits of similar nature, characteristics and mineralization.

CONCLUSIONS:

The purpose of this report is but for a single objective - an appraisal of the placer claims mineral wealth "in place" - consequently but one conclusion is required. The conclusion is based on four assumptional factors. A variance of any one factor would revise the appraisal either upwards or downwards. Also, for the most part, the four assumptions are derived from the writer's experience and knowledge of similar deposits in Arizona. The limited factual data available on the property in question has been used solely as a guide, rather than actual proof, to establish the realistic assumptions used by the writer. The limited amount of factual data permits the writer but one categorical definition of the appraisal value - namely, inference, - thus justifiably, the writer concludes that:

(1) - The area of consideration as described within the report would have an "inferred, in place" mineral wealth, as regards the mineral magnetite (Fe_3O_4) of 9,161,000 long tons at a possible market value of $~~264,979,000~~. -- at property.
330,525,000, --

PROPERTY, LOCATION and ACCESSIBILITY:

The property consists of fifty seven 160 acre placer claims totaling plus or minus 9120 acres. Claims involved are the D. J. #1 through #34 and the L. J. C. #1 through #8, #25 through #31, #153 through #156 and #172 through #174. (34 D. J. claims and 23 L. J. C. claims) See Map No. 2.

All of the D. J. claims lie within T. 4 N., R. 9 W., covering all of

Sections 19, 20, 21, 26, 28, 29, 30, 32 and the N/2 of Section 27. The L. J. C. claims cover all of Section 31 in T. 4 N., R. 9 W., all of Sections 6, 7, 18 and 19 plus the N/2 and SE/4 of Section 30 in T. 3 N., R. 9 W., of the G. & S. R. B. & M. in western Maricopa County, Arizona.

Mr. McMillen states that all claims are valid and current as regards annual assessment work.

Travel to the property can be accomplished by passenger auto from Phoenix via U. S. highway 80 to Buckeye, thence westerly on the Buckeye-Hassayampa-Salome County road. This route is paved to a point 29 miles westerly of Buckeye (the Mary E. farm road Junction). Beyond this junction the road is gravel but usually well maintained by the County Highway Department. Twenty miles past the Mary E. Junction in a northwesterly direction toward Salome, a northeasterly trending gravel road junctions on the right and leads to the town of Aguila located on U. S. highway 60-70. Traveling 3.9 miles northeasterly on this road is an easterly trending desert road on the right. Travel on this desert road for 5.1 miles easterly, passing a rancher's fenced earth water tank, one intersects the west boundary (Range Line) of the property and onto claim D. J. #26, Section 30, T. 4 N., R. 9 W. See Maps No. 1 and No. 3.

Several ranch type desert roads make a portion of the property accessible by passenger auto. Access to other portions would possibly require a four wheel drive, high center vehicle to overcome some of the hazardous steep banked narrow type gullies in the area.

GEOLOGY:

For the most part, the claims cover a broad expanse of valley fill alluvium consisting of sand, pebbles, cobbles and boulders representing the exposed rocks of the surrounding area. A striking physical feature of the alluvium is the minimum amount of boulders (a four to six inch size or greater) and the abundance of sand and pebbles. This characteristic was also observed when viewing the walls of several 36 inch diameter drill holes.

Rocks in the surrounding area consist of Pre-Cambrian gneiss and granite, Cretaceous andesite and rhyolite and Quaternary basalt which is largely small remnants capping the ridges of the mounds and hills surrounding the placer property. See Map No. 3. Float-wise, white quartz fragments were noted as well as some pieces of pegmatite, not at all uncommon to the area.

MINERALIZATION:

The principal mineral of interest within the placer property is magnetite, Fe_3O_4, which has a magnetic characteristic and a usual constituent of many igneous rock types. Through the erosional processes, the magnetite has been removed from the rocks and transported to the valley fill alluvium where it concentrates in thin layers separated by barren or lean sand and pebble layers. To a lesser degree there may be dissemination of the magnetite in the aforementioned barren or lean layers.

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Summarizing, the potential mineral wealth of the property is in its magnetite content for use as an iron ore and possibly, just possibly, the gold content, if extractable.

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55.5¢ Pellet price, 44.5¢/LTU or ~~$28.92~~/LT 36.08 (E. & M. J. quotation, ~~April 1975~~) Dec. 1977	x ~~$28.92~~ 36.08
Inferred value of magnetite mineralization "in place" within D. J. placer claims to a depth of 21 feet below surface	330,525,000.- ~~$264,979,000.-~~

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Respectfully submitted,

Richard E. Mieritz
Mining Consultant
Engineer and Geologist
Sun City, Arizona (now Phoenix)
(October 23, 1971)

NOTE:
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December, 1977

E'

Magna № 34

H'

T.
4
N.

LEGEND

t Pits and/or Discovery Pits
dia. Drill Holes. (Found)(old).
dia. Drill Holes. (Found)(old).
lls drilled for water (deep).
t Pits and/or Discovery Pits
which were sampled.

SAMPLE LOCATION MA

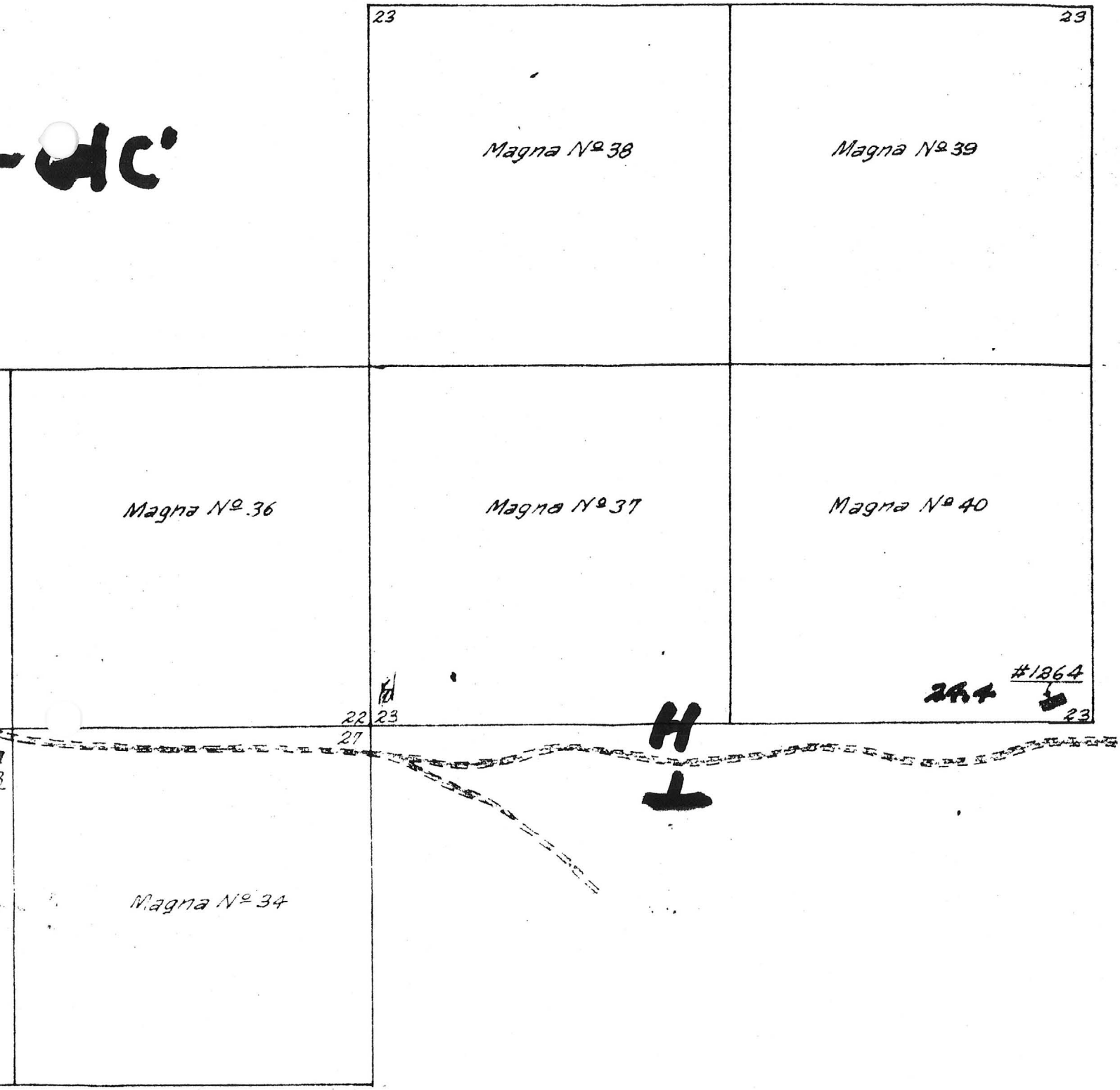
Magna Placer Claims

Big Horn Mining District

T. 4 N., R. 9 W.

Maricopa County, Arizona

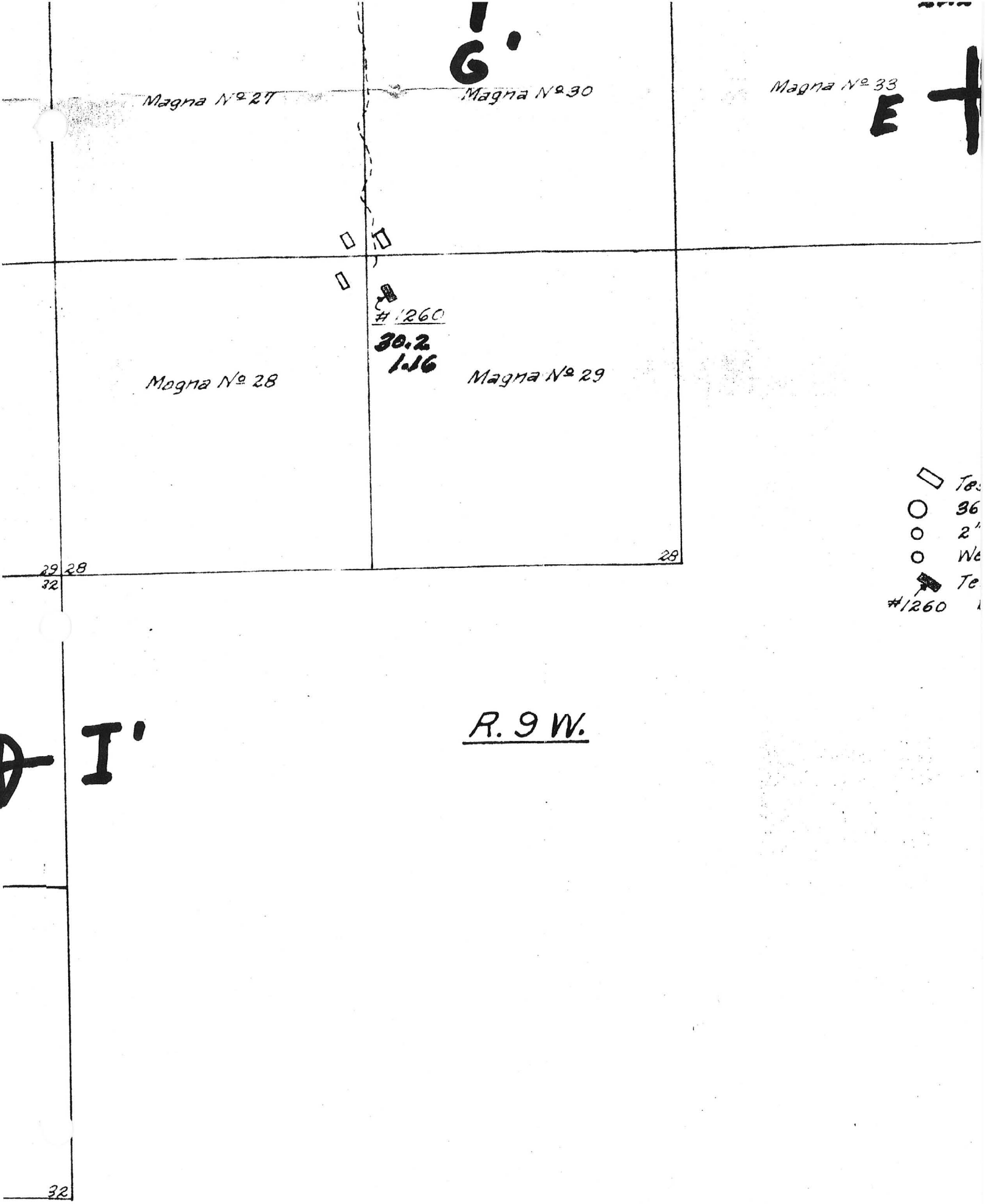
Scale: 1" = 1000 Ft.



T.
4
N.

LEGEND

st Pits and/or Discovery Pits
" dia. Drill Holes. (Found) (old).
dia. Drill Holes. (Found) (old).
lls drilled for water (deep).


G'
Magna № 27
Magna № 30
Magna № 33
E
#1260
30.2
1.16
Magna № 28
Magna № 29
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R. 9 W.
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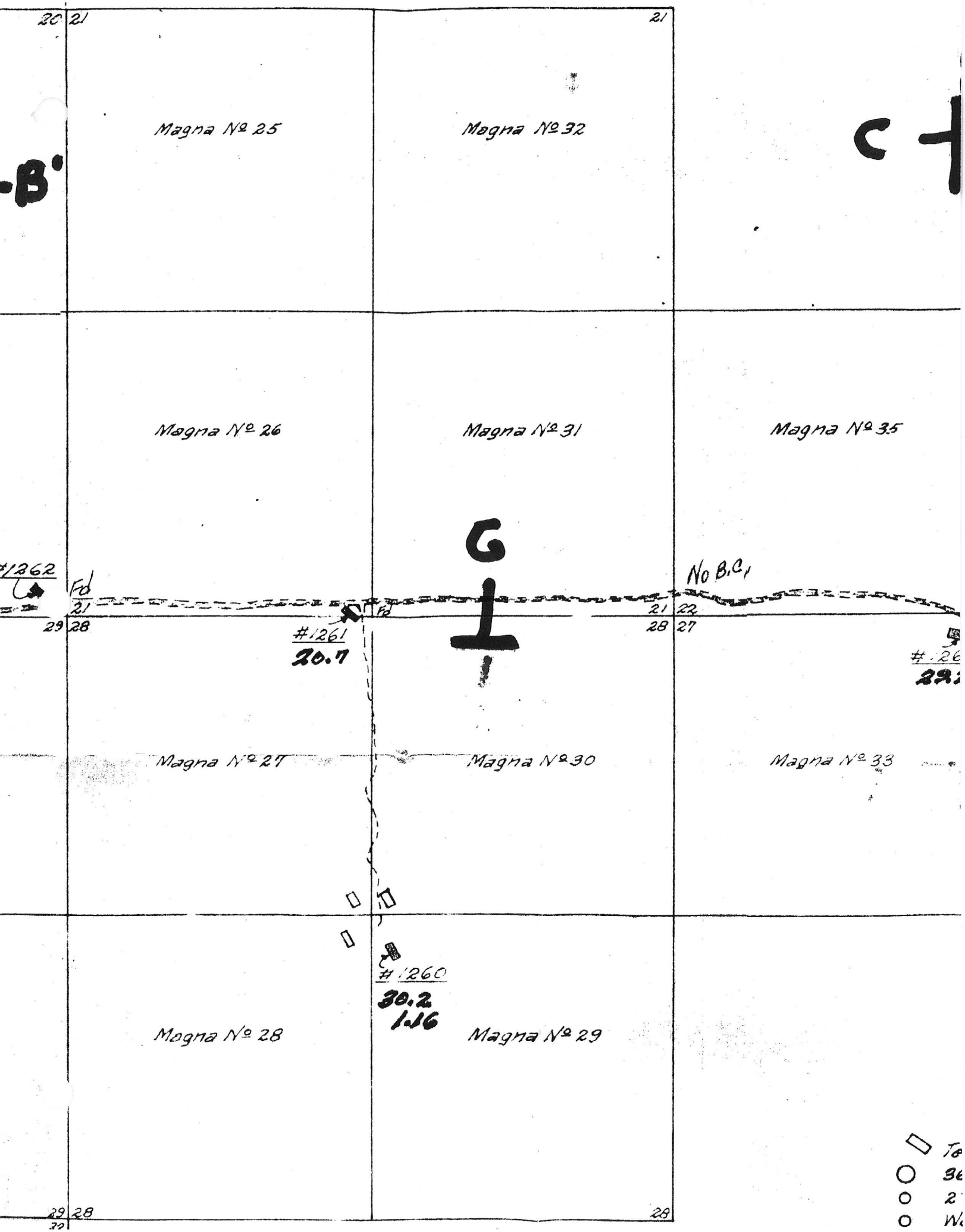
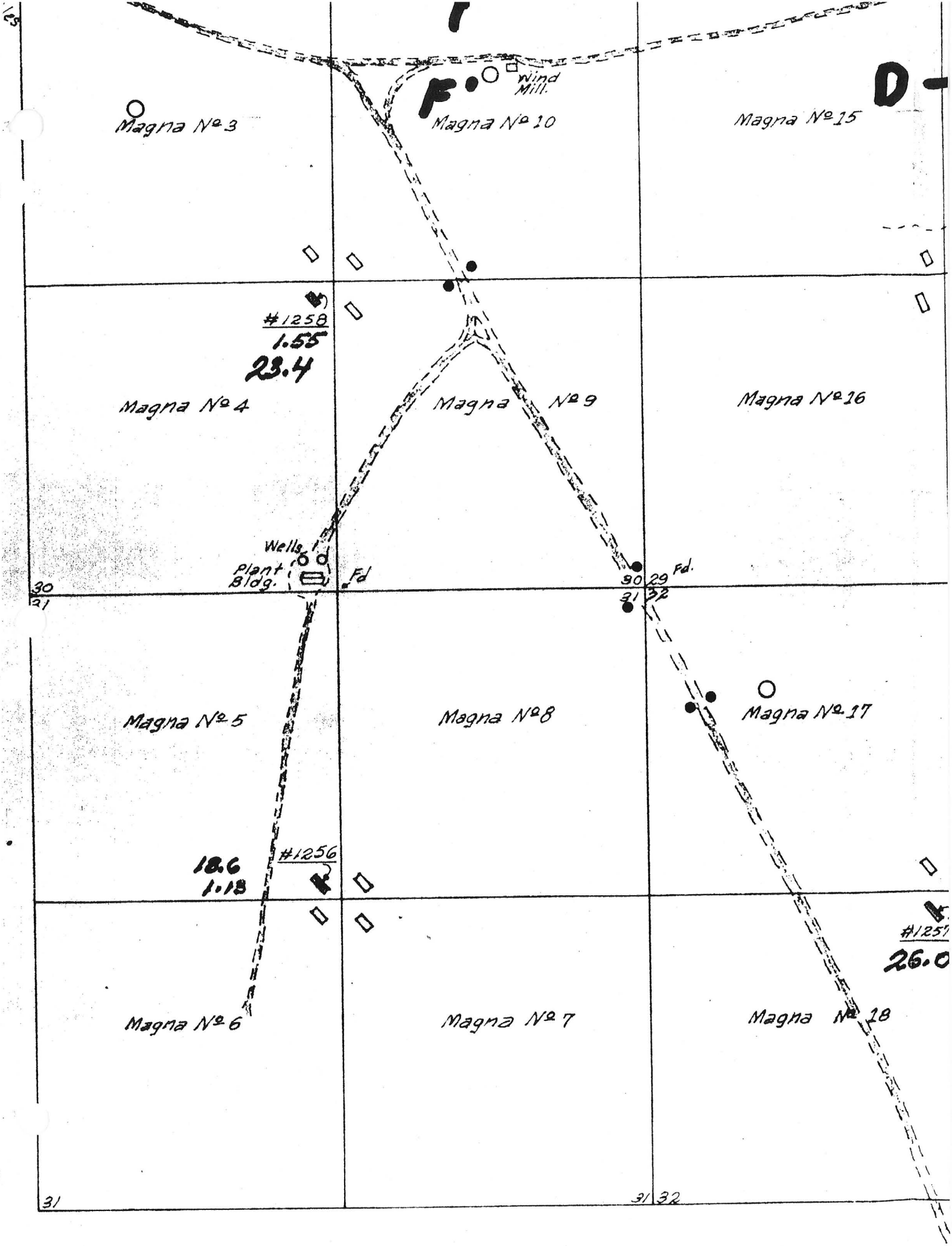
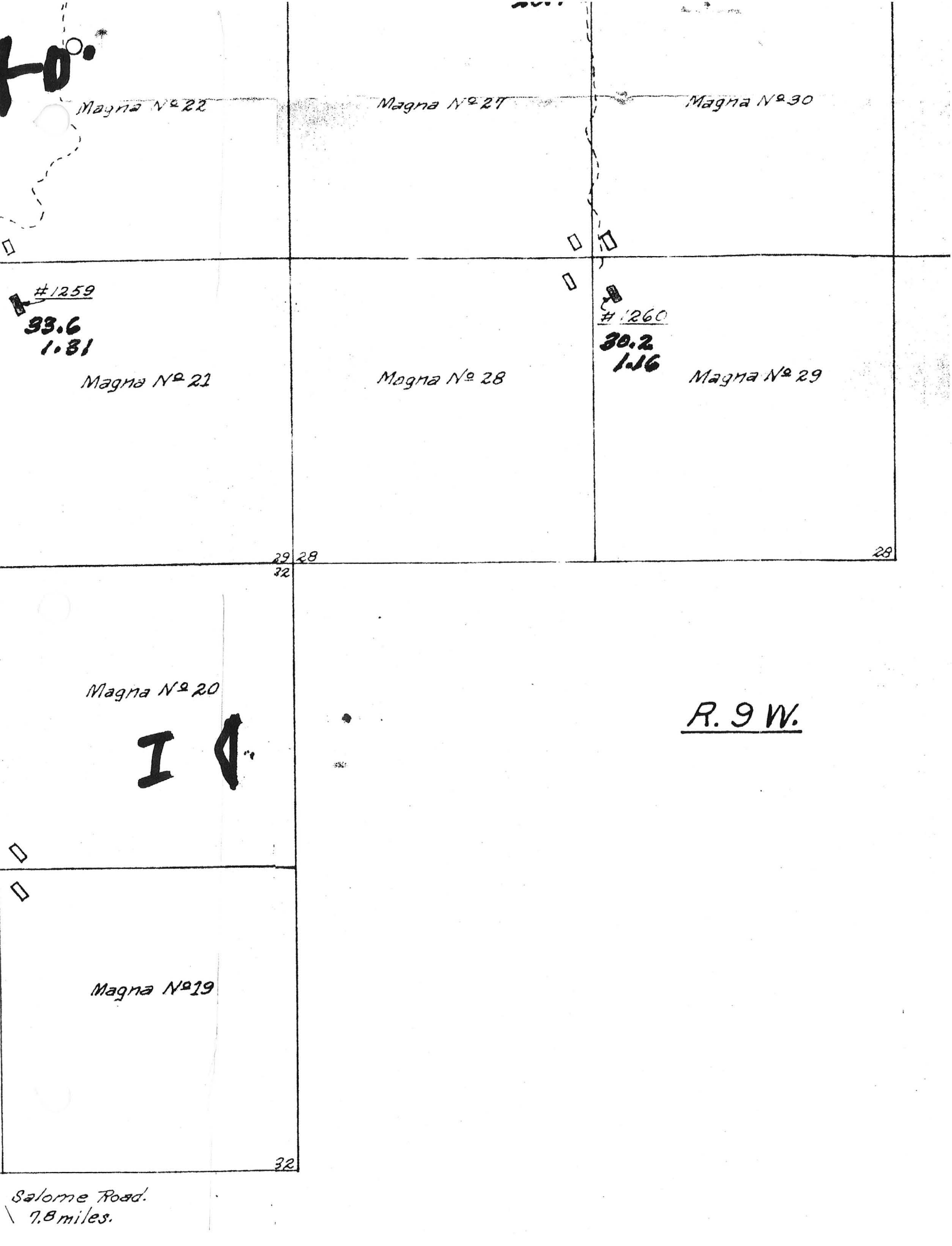
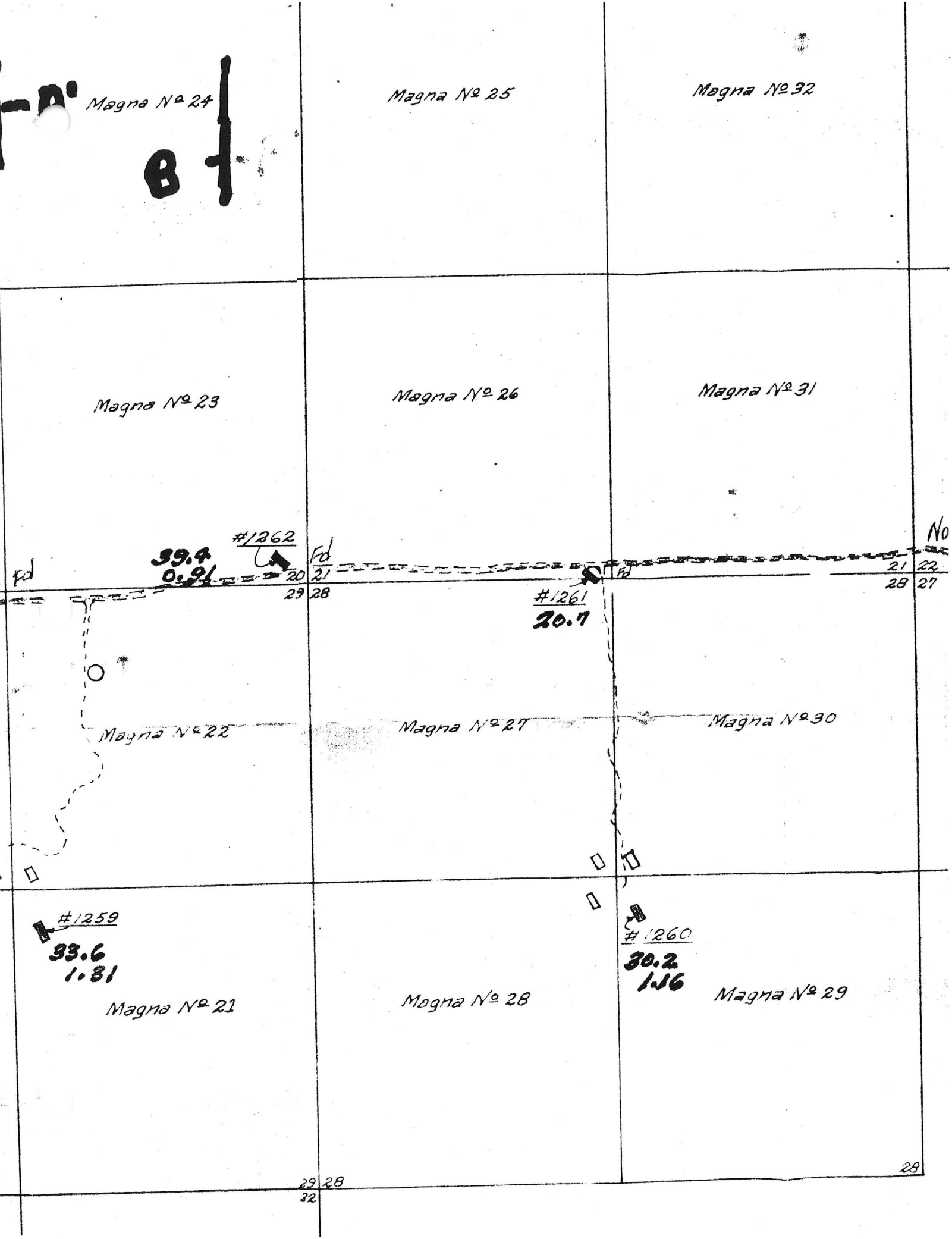
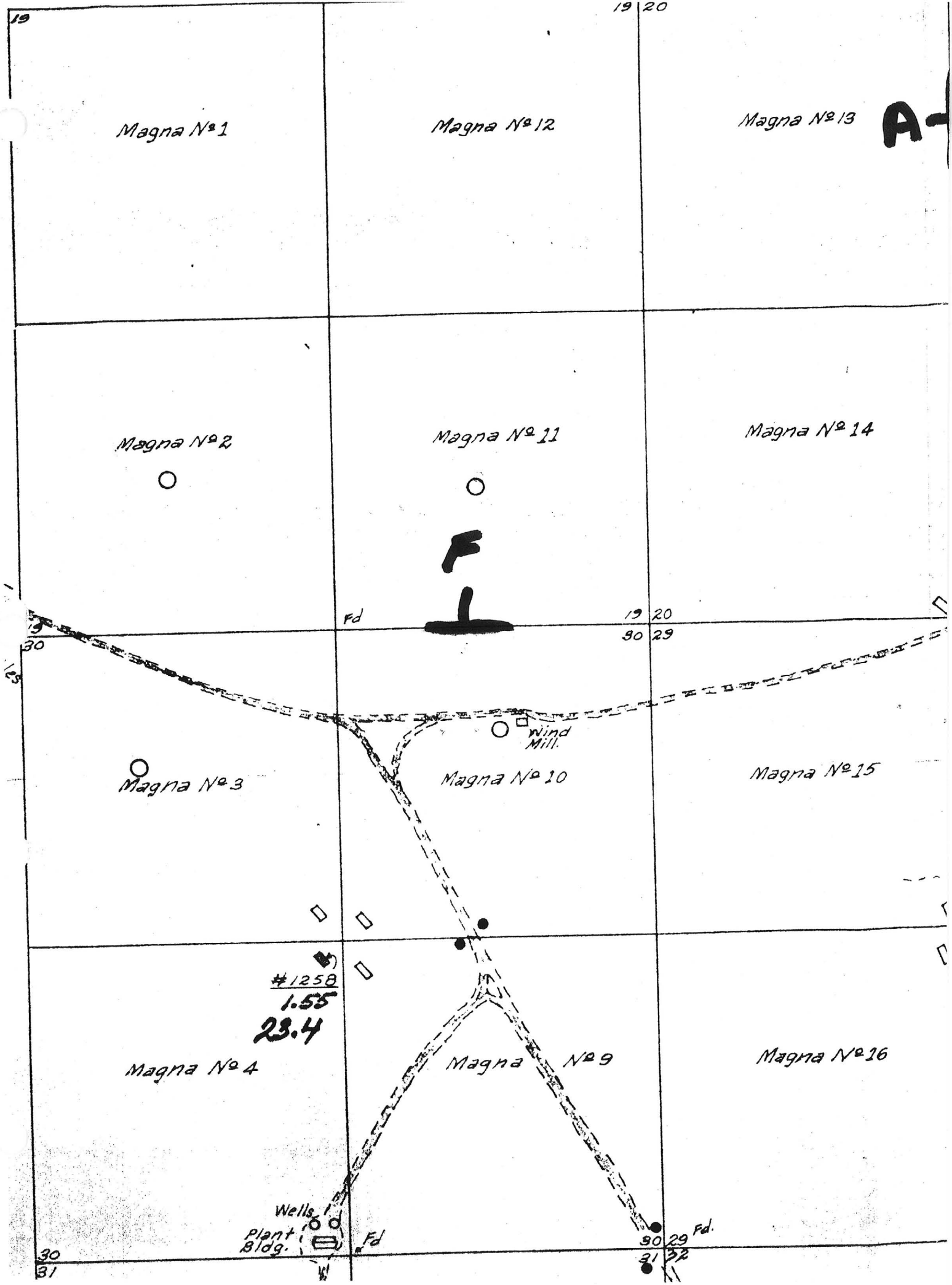
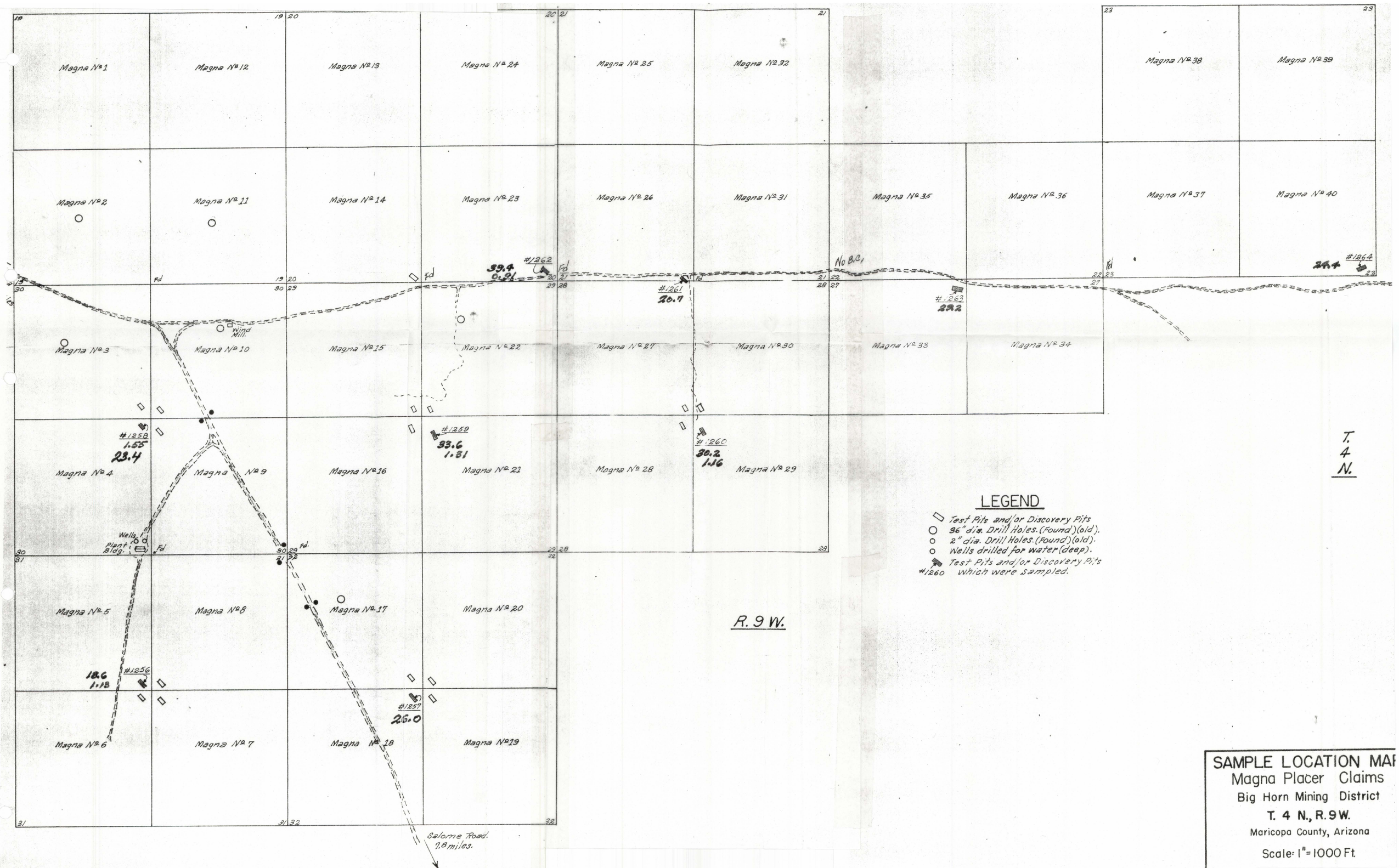

20
21
21
Magna № 25
Magna № 32
B
C
Magna № 26
Magna № 31
Magna № 35
G
#1262
Fd
21
29
28
#1261
20.7
Fd
21
28
No B.C.
22
27
#1260
30.2
1.16
Magna № 27
Magna № 30
Magna № 33
Magna № 28
Magna № 29
29
28
28


Wind Mill.
Magna No 3
Magna No 10
Magna No 15
#1258
1.55
23.4
Magna No 4
Magna No 9
Magna No 16
Wells
Plant Bldg.
Fd
Fd.
30
29
31
32
Magna No 5
Magna No 8
Magna No 17
18.6
1.18
#1256
#1257
26.0
Magna No 6
Magna No 7
Magna No 18
31
31
32


Magna No 22
Magna No 27
Magna No 30
#1259
33.6
1.81
Magna No 21
Magna No 28
#1260
30.2
1.16
Magna No 29
29
32
28
28
Magna No 20
I
R. 9 W.
Magna No 19
32
Salome Road.
7.8 miles.


Magna № 24
B
Magna № 25
Magna № 32
Magna № 23
Magna № 26
Magna № 31
#1262
39.4
0.91
Fd
Fd
Fd
20
21
29
28
#1261
20.7
No
21
22
28
27
Magna № 22
Magna № 27
Magna № 30
#1259
33.6
1.81
#1260
30.2
1.16
Magna № 21
Magna № 28
Magna № 29
29
28
32
28


19
19 20
Magna No 1
Magna No 12
Magna No 13
A-
Magna No 2
Magna No 11
Magna No 14
F
Fd
19 20
30 29
30
25
Wind Mill.
Magna No 3
Magna No 10
Magna No 15
#1258
1.55
23.4
Magna No 4
Magna No 9
Magna No 16
Wells
Plant Bldg.
Fd
30 29 Fd.
30
31
31 32



SAMPLE LOCATION MAP
Magna Placer Claims
Big Horn Mining District
T. 4 N., R. 9 W.
Maricopa County, Arizona
Scale: 1" = 1000 Ft.