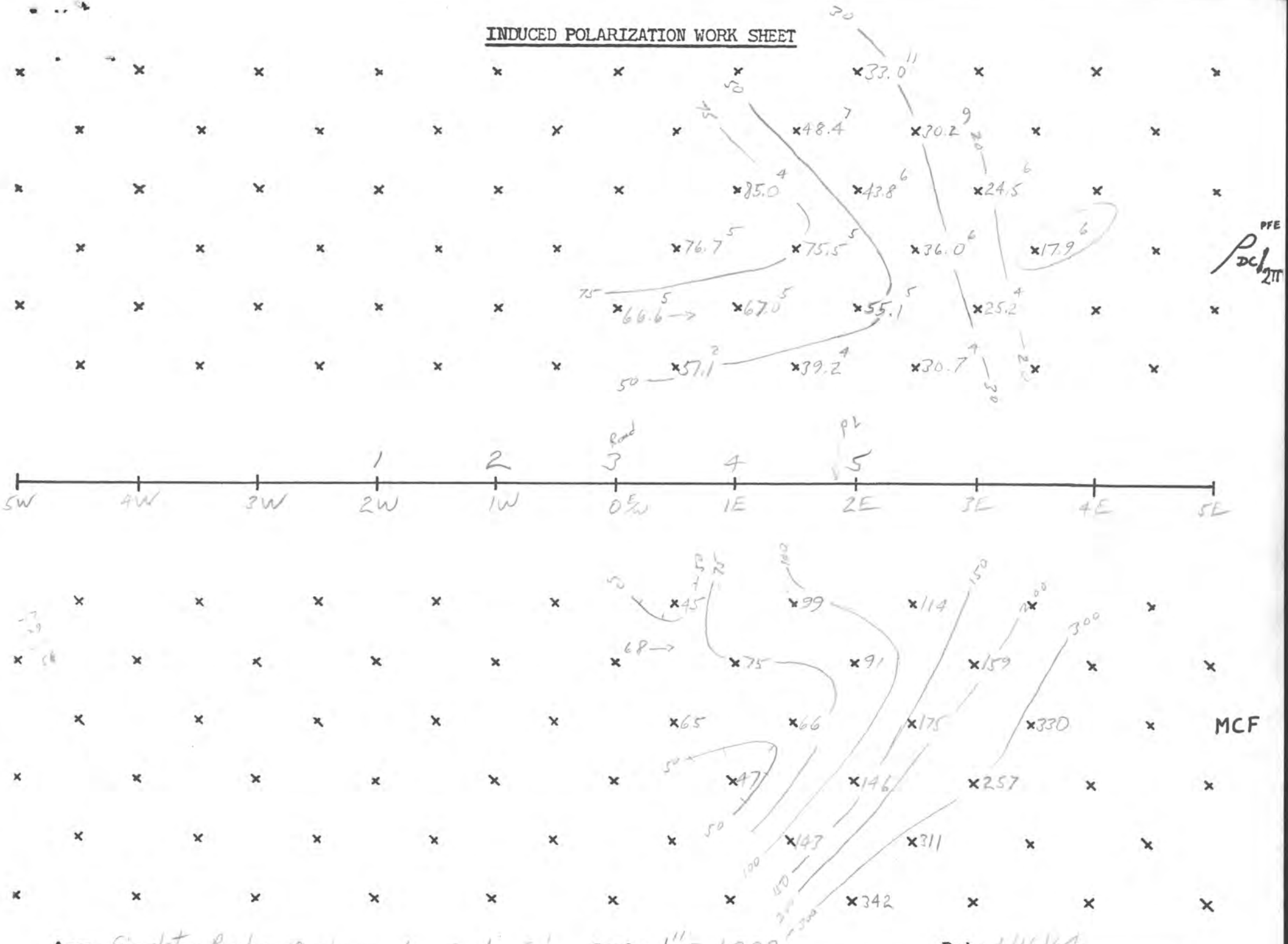
INDUCED POLARIZATION WORK SHEET



Area Simplot - Rockruge - Line 1 - Sec. 1 - E½ Scale 1" = 1000 Date 4/16/64

INDUCED POLARIZATION - RECEIVER NOTES

PAGE 1

Project: Simplot - Koskinen Line: I - E½ (N 80° E - 1850W) Int.Cal _____ Date: 4/16/84

Send	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2	4-5	3-4	2-3
Rec.	1-2E	→	2-3E	→	→	3-4E	→	→	→	4-5E	→	→
~~Range~~ Time	30	10	30	10	10	30	10	10	3	3	3	3
DC-1	14.3	4.75 4.76	10.8 10.6	8.66	2.20	9.0 9.1	3.95 3.91	2.12 2.11	1.18 1.26	1.72 1.92	1.02 1.03 1.03 1.9	.62 .54 .66 .72
DC-2	14.7	4.75 4.70	11.6 11.3	4.88	2.17	8.4 8.14	3.91 3.92	2.16 2.15	1.26 1.17	1.87 1.66	1.05 1.96 1.01 1.07	.64 .72 .59 .52
Σ	29.0	9.50 9.46	22.4 22.3	9.54	4.37	17.9 17.5	7.86 7.83	4.28 4.33	2.44 2.43	3.53 3.58	2.07 2.0 2.09 2.01	1.26 1.26 1.25 1.11
DC-3	14.8	4.73 4.70	11.6 11.7	4.88	2.22	8.9	3.92 3.90	2.15 2.17	1.17 1.11 1.23 1.26	1.67 1.95	1.03 .99	.59 .70
Dc-4	14.7	4.78 4.78	10.6 10.5	4.66	2.15	8.1	3.94 3.91	2.17 2.14	1.27 1.26 1.11 1.23	1.97 1.67	1.06 1.06	.65 .53
Σ	29.1	9.48 9.48	22.3 22.2	9.54	4.37	17.5	7.86 7.85	4.34 4.29	2.44 2.43 2.34 2.49	3.69 3.62	2.09 2.05	1.25 1.18
DC-AV	29.1	9.48	22.3	9.54	4.37	17.5	7.85	4.30	2.42	3.59	2.05	1.25
AC-1	13.7	4.39	10.4	4.39	2.01	8.15	3.61	1.98	1.13	1.68	0.93	0.57
AC-2	13.7	4.37	10.3	4.39	2.01	8.15	3.61	1.98	1.13	1.67	0.94	0.57
Σ	27.4	8.76	20.7	8.78	4.02	16.3	7.22	3.96	2.26	3.35	1.87	1.14
S. P.	+12.3	→	+9.5	→	→	+5.1	→	→	→	+10.5	→	→
AC-N	0.04	→	0.04	→	→	0.04	→	→	→	0.04	→	→
I.C.	50.0	→	50.0	→	→	50.0	→	→	→	50.0	→	→

INDUCED POLARIZATION - RECEIVER NOTES PAGE 2

Project: Simplot-Rockinger Line: 1 - E ½ Int. Cal _____ Date: 4/16/84

Send	1-2	4-5	3-4	2-3	1-2		CAL					
Rec.	→	5-6E	→	→	→		4-5					
Time	1	1	1	1	1		100	300				
DC-1	.395 .82 .346 .320	.520 .478 .375 .57	.255 .305 .300 .365	.250 .266 .250 .225	.150 .167 .140 .150		66.0	64.5				
DC-2	.385 .365 .405 .445	.495 .567 .520 .485	.328 .377 .356 .310	.268 .266 .217 .258	.177 .146 .142 .217		66.0	64.5				
Σ	.780 .790 .751 .765	1.015 1.041 .895 1.04	.683 .675 .696 .695	.518 .547 .497 .486	.327 .333 .322 .367		132	129				
DC-3	.416 .322 .435 .317	.540 .466 .440 .575	.354 .348 .353 .285	.245 .250 .262 .268	.184 .140 .143 .220		66.0	64.5				
Dc-4	.375 .364 .350 .450	.465 .465 .530 .434	.362 .360 .318 .317	.236 .245 .235 .204	.157 .158 .166 .135		66.0	64.5				
Σ	.791 .806 .785 .899	.905 .905 .970 1.02	.716 .728 .671 .702	.481 .493 .497 .490	.345 .328 .329 .355		132	129				
DC-AV	0.788	1.020	.697	.490	.335		132	129				
AC-1	.374	.485	.330	.227	.154		64.6	62				
AC-2	.372	.485	.330	.226	.155		64.4	62				
Σ	.746	.970	.660	.453	.309		129.0	124				
S. P.	→	-0.2	→	→	→							
AC-N	→	.03	→	→	→							
I.C.	→	49.9	→	→	→							

INDUCED POLARIZATION SENDER NOTES

Project: — Line: 1 Spr 1 E½ Date: 4-16-64

Send	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2	4-5	3-4	2-3
Receive	→		→		→	→			→	→		
Time	2x800	2x800	2x800	2x800	2x800	2x800	2x800	2x800	2x800	2x800	2x800	2x800
Range	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Current	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600

Send	1-2	4-5	3-4	2-3	1-2	CAL						
Receive	→	→			→	3-4						
Time	2x800	2x800	2x800	2x800	2x800	2x650						
Range	1.50	1.50	1.50	1.50	1.50	75						
Current	1600	1600	1600	1600	1600	1,700						

N-80°E — S80°W

30 x 3000 ~ 5
1000

HEINRICHS GEOEXPLORATION COMPANY
INDUCED POLARIZATION SURVEY COMPUTATION SHEET

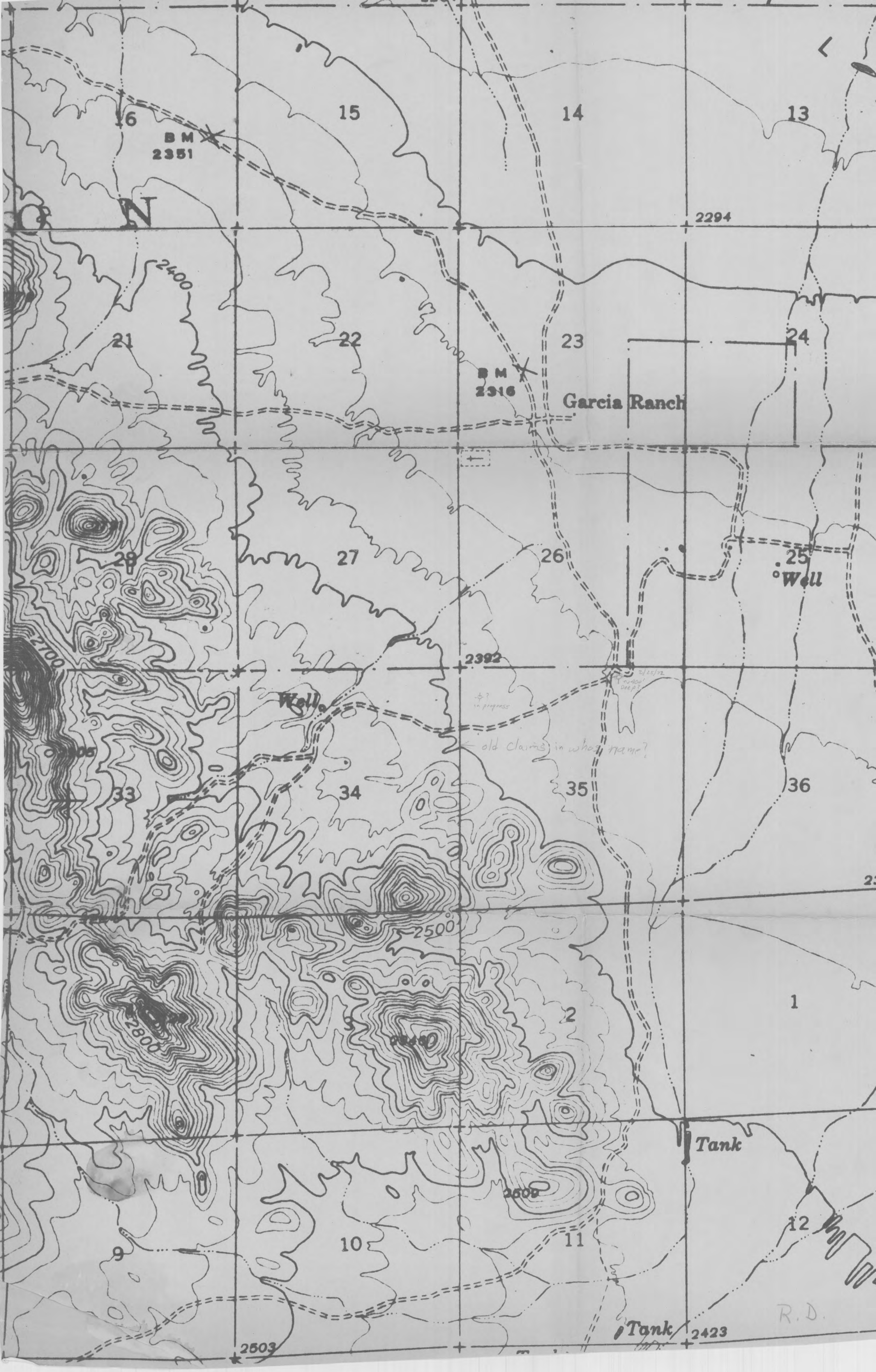
Page_____

Project Simplot - Roskruge Line 1-Spr.1-E½ Field date 4/16/64 Data page_____ Comp. date 4/16/64. Comp by C.S.L.

(A) Send	2-3	1-2	3-4	2-3	1-2	4-5	3-4	2-3	1-2	4-5	3-4	2-3
(B) Receive	1-2E	→	2-3E	→	→	3-4E	→	→	→	4-5E	→	→
(C) ~~n separation~~ Range	30	10	30	10	10	30	10	10	3	3	3	3
(D) I	1700	→	→	→	→	→	→	→	→	→	→	→
(E) Vdc (avg)	29.1	9.48	22.3	9.54	4.37	17.5	7.85	4.30	2.42	3.59	2.05	1.25
(F) DCcal USED	0.996	→	→	→	→	→	→	→	→	→	→	→
(G) Kn x 10^{-3}	3	12	3	12	30	3	12	30	60	12	30	60
(H) ρ dc=ExFxGx10^3/D	51.1	66.6	39.2	67.0	76.7	30.7	55.1	75.5	85.0	25.2	36.0	43.8
(I) Vac Σ	27.4	8.76	20.7	8.78	4.02	16.3	7.22	3.96	2.26	3.35	1.87	1.14
(J) AC noise x 2	OK	→	→	→	→	→	→	→	→	→	→	→
(K) Vac(corr) = $\sqrt{I^2 - J^2}$												
(L) AC-DC cal.	.964	.966	.964	.966	.966	.964	.966	.966	.970	.970	.970	.970
(M) ρ dc/ρac=ExL/K	1.023	1.045	1.039	1.050	1.050	1.035	1.050	1.050	1.040	1.040	1.063	1.064
(N) PFE=(M-1)(10^2)	2	5	4	5	5	4	5	5	4	4	6	6
(O) MCF=(M-1)(10^5)/H	45	68	99	75	65	114	91	66	47	159	175	146
	.5	.8	.7	.8	1.4	.9	.9	1.4	1.9	2.3	2.8	3.7
	1.835	56	82	49	47	85	74	48	25	68	97	62

Project_____ Line 35 Field date_____ Data page_____ Comp. date_____ Comp by_____

(A) Send	1-2	4-5	3-4	2-3	1-2		C+L					
(B) Receive	→	5-6E	→	→	→		4-5					
(C) n separation	1	1	1	1	1		100	300				
(D) I	→	→	→	→	→		1300	→				
(E) Vdc (avg)	0.788	1.020	0.697	0.490	0.335		132	129				
(F) DCcal	→	→	→	→	→		.986	1.008				
(G) Kn x 10^{-3}	105	30	60	105	168		~ .996					
(H) ρ dc=ExFxGx10^3/D	48.4	17.9	24.5	30.2	33.0							
(I) Vac Σ	0.746	0.970	0.660	0.453	0.309		129	124				
(J) AC noise x 2	0.08	OK	OK	0.06	0.06							
(K) Vac (corr) = $\sqrt{I^2 - J^2}$	0.742			0.450	0.303							
(L) AC-DC cal.	1.007	→	→	→	→		.978	.962				
(M) ρdc/ρac =ExL/K	1.069	1.059	1.063	1.099	1.113							
(N) PFE=(M-1)(10^2)	7	6	6	9	11							
(O) MCF=(M-1)(10^5)/H	143	330	257	311	342							
	4.8	5.8	6.8	7.9	10.3							
	43	6	-20	50	30							


15
14
13
16
BM
2351
N
2294
2400
21
22
23
24
BM
2316
Garcia Ranch
28
27
26
25
Well
2700
2392
Well
in progress
old claims in whose name?
33
34
35
36
2500
2800
2
1
Tank
2600
10
11
12
9
Tank
2423
2503
R.D.

BUREAU OF LAND MANAGEMENT
PHOENIX, ARIZONA
COPY ISSUED BY

1971 DEC 10 AM 11 45

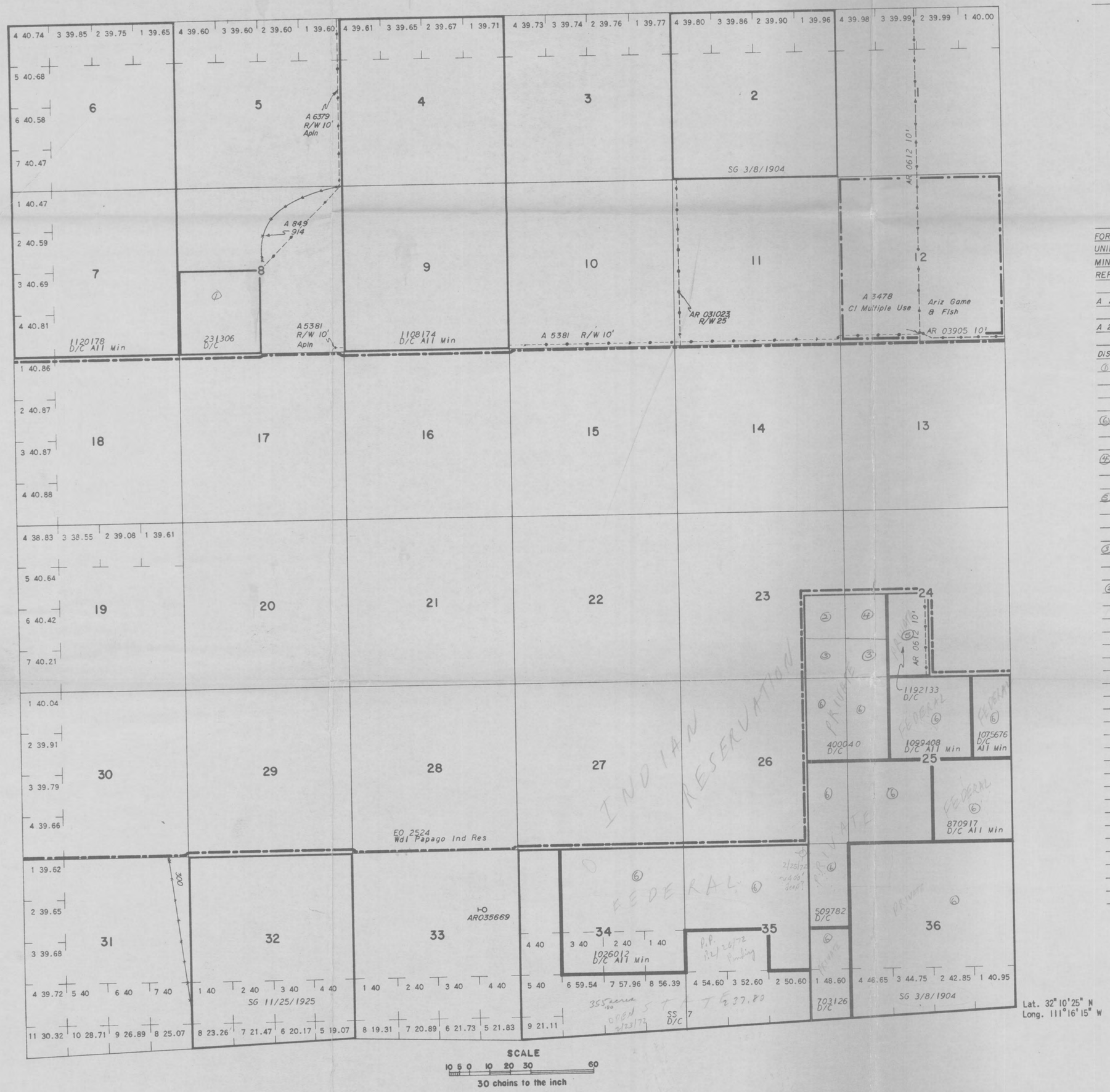
BOX 5564 TUCSON, ARIZONA 85703
Phone: (AREA 602) 623-0576

DEC 11 1971

TOWNSHIP 14 SOUTH RANGE 10 EAST OF THE GILA AND SALT RIVER MERIDIAN, ARIZONA

PIMA COUNTY

STATUS OF PUBLIC DOMAIN
LAND AND MINERAL TITLES



SCALE
10 5 0 10 20 30 60
30 chains to the inch

Lat. 32°10'25" N
Long. 111°16'15" W

INDEX TO SEGREGATED TRACTS				
RESURVEY	ORIGINAL SURVEY			
TRACT NO	T	R	SEC	SUBDIVISION

FOR ORDERS EFFECTING DISPOSAL OR USE OF UNIDENTIFIED LANDS WITHDRAWN FOR CLASSIFICATION, MINERALS, WATER AND/OR OTHER PUBLIC PURPOSES, REFER TO INDEX OF MISCELLANEOUS DOCUMENTS.

A 2152 CL MULTIPLE USE

A 2153 CL TRANSFER PROPOSED

DIST. NO. 2

① Gilbert MARTINEZ, & Isola J.
201-52-001 822 W. Roger Rd, Tucson

⑥ 201-52-006 John Donaldson

④ Ben S. Pearl, & Lillian
29055 Lancaster DR. #201
Southfield, MI 48075

⑤ Lee J. BEAUDRY, ULA S.
Tucson

③ NANCY S. SIROTA
5131 Buffalo Ave Apt 2
Sherman Oaks, CALIF. 91403

②
SARAH SHANKER & NANCY SIROTA
2401 S. CEDAR
Lansing, MI 48910

CURRENT TO	BY

T. 14 S.
R. 10 E.

TOWNSHIP 15 SOUTH RANGE 10 EAST OF THE GILA AND SALT RIVER MERIDIAN, ARIZONA

BUREAU OF LAND MANAGEMENT
PHOENIX, ARIZONA
COPY ISSUED BY

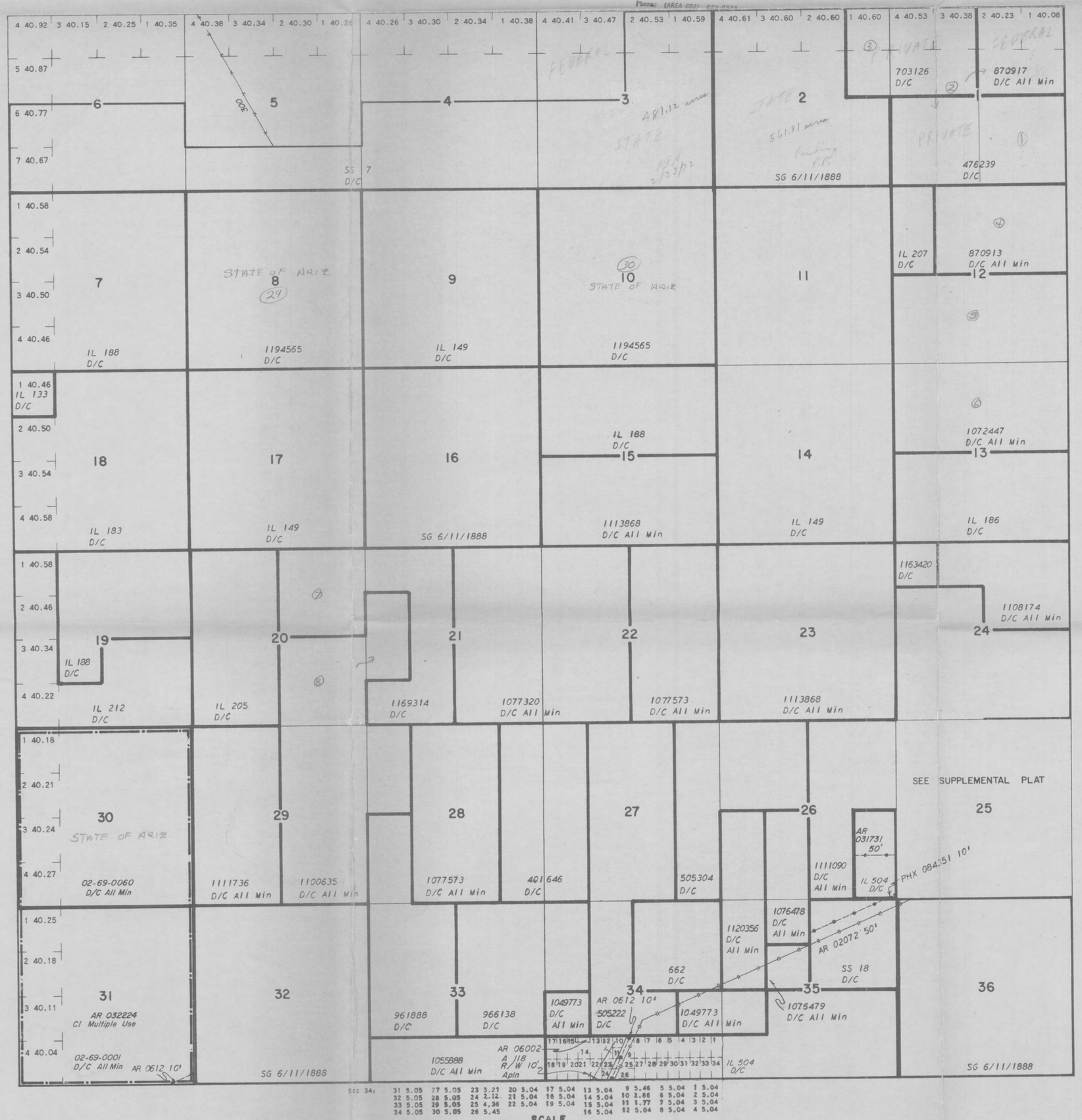
1971 DEC 10 AM 11 44

PIMA COUNTY

GROEX
BOX 5964 TUCSON, ARIZONA 85703
Phone: (AREA 602) 622-0575

REC'D DEC 11 1971

STATUS OF PUBLIC DOMAIN
LAND AND MINERAL TITLES



variegated

INDEX TO SEGREGATED TRACTS				
RESURVEY	ORIGINAL SURVEY			
TRACT NO	T	R	SEC	SUBDIVISION

FOR ORDERS EFFECTING DISPOSAL OR USE OF UNIDENTIFIED LANDS WITHDRAWN FOR CLASSIFICATION, MINERALS, WATER AND/OR OTHER PUBLIC PURPOSES, REFER TO INDEX OF MISCELLANEOUS DOCUMENTS.

DIST. NO. 2

A 2153 CL MULTIPLE USE

(1) Byley, Mary w/tt, Jessie w/tt, Nancy w/tt
201-57-001 2918 Blade Ave, Bakersfield, Calif.
(2) John Donaldson
201-57-002 5531 E. Ft. Lowell Rd, Tucson
(3) John Donaldson
201-57-003 "
(29) Records show State owns all 640 ac.
(30)
(4) John Donaldson "
(5) Vera K. Hurst, Robert E. & Julie Ann Hurst
201-57-005 1147 S. Robertson Blvd, Los Angeles, Calif. 90035
(6) " " "
(7) John H. Williams 162 Shore Dr. Winthrop Mass. 02152
(8) Lee James Berry, Box 26D Sells Star Rt.

CURRENT TO	BY

T. 15S
R. 10E

BUREAU OF LAND MANAGEMENT
PHOENIX, ARIZONA
COPY ISSUED BY

1971 DEC 10 AM 11 45

RECD DEC 11 1971

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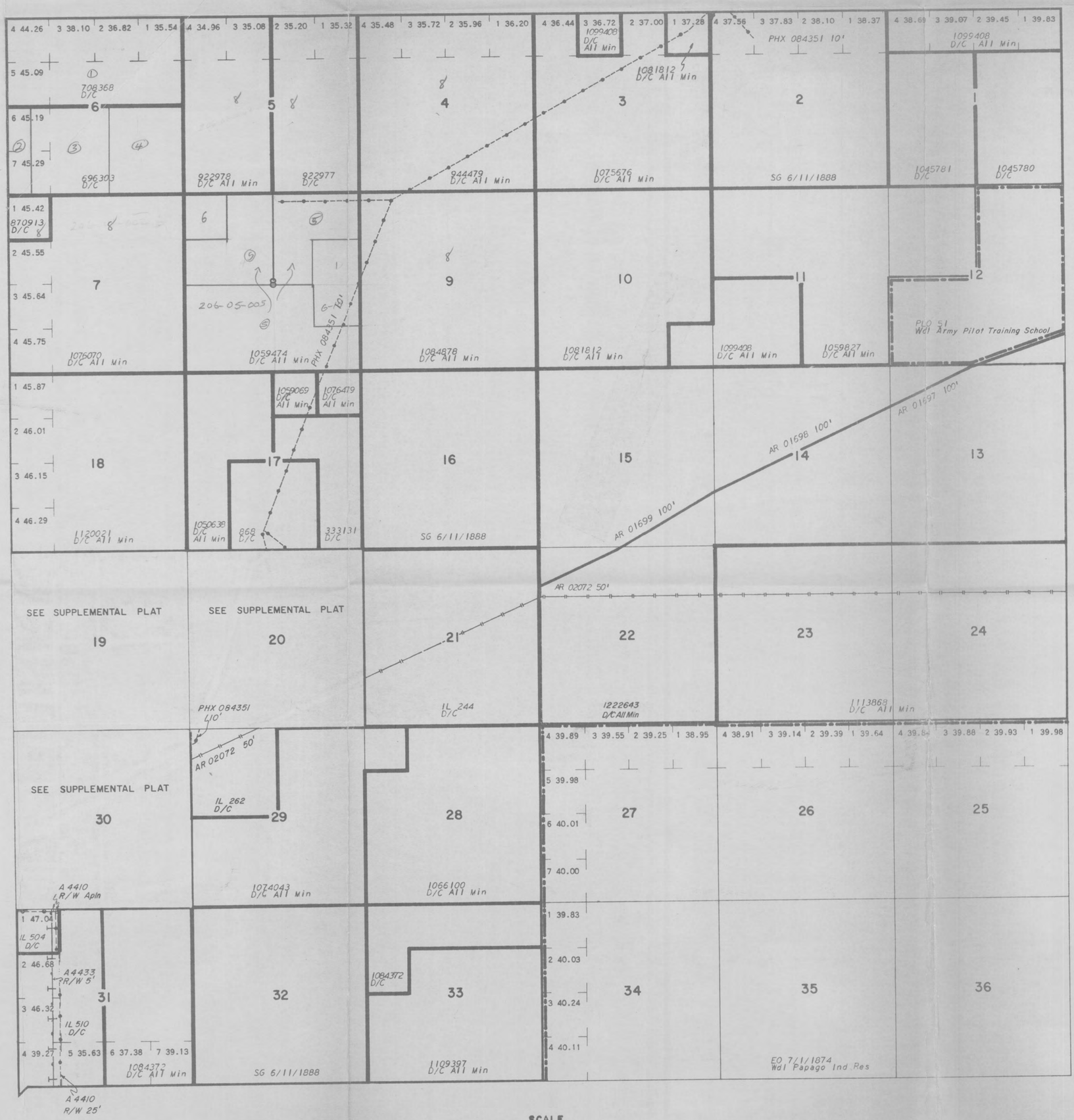
Phone: (AREA 602) 623-0578

TOWNSHIP 15 SOUTH RANGE 11 EAST OF THE GILA AND SALT RIVER MERIDIAN, ARIZONA

PIMA COUNTY

STATUS OF PUBLIC DOMAIN
LAND AND MINERAL TITLES



Lat. 32°05' N
Long. 111°10' W

SCALE
10 5 0 10 20 30 60
30 chains to the inch

INDEX TO SEGREGATED TRACTS				
RESURVEY	ORIGINAL SURVEY			
TRACT NO	T	R	SEC	SUBDIVISION

FOR ORDERS EFFECTING DISPOSAL OR USE OF UNIDENTIFIED LANDS WITHDRAWN FOR CLASSIFICATION, MINERALS, WATER AND/OR OTHER PUBLIC PURPOSES, REFER TO INDEX OF MISCELLANEOUS DOCUMENTS.

DIST. NO. 2

A 2153 CL MULTIPLE USE

① John Donaldson, 5531 E. FT Lowell RD.
206-04-001

② Briley, Mary witt, Myers, Jessie witt
Nancy witt, 2918 BLINE AVE
206-04-002 BAKERSFIELD, CALIF.

③ Paul H Cox, 1423 SCENIC AVE
206-04-003 BERKLEY, CALIF. 94708

④ Zirker, Agnes J. Cox
To AGNES J. DUNCAN
1207 S. VERMONT AVE # 1208
Los Angeles, CA 90006

⑤ TRANSAMERICA TITLE INSURANCE CO.
TI. NO. 26854

6 ZONA INVESTMENT CLUB.
P.O. BOX 12095
Tucson,

8 SWIG, BENJAMIN H.
FAIRMONT HOTEL
San Francisco, Calif 94106

CURRENT TO	BY

T. 15S
R. 11E

BUREAU OF LAND MANAGEMENT
PHOENIX, ARIZONA
COPY ISSUED BY
1971 DEC 10 AM 11 46

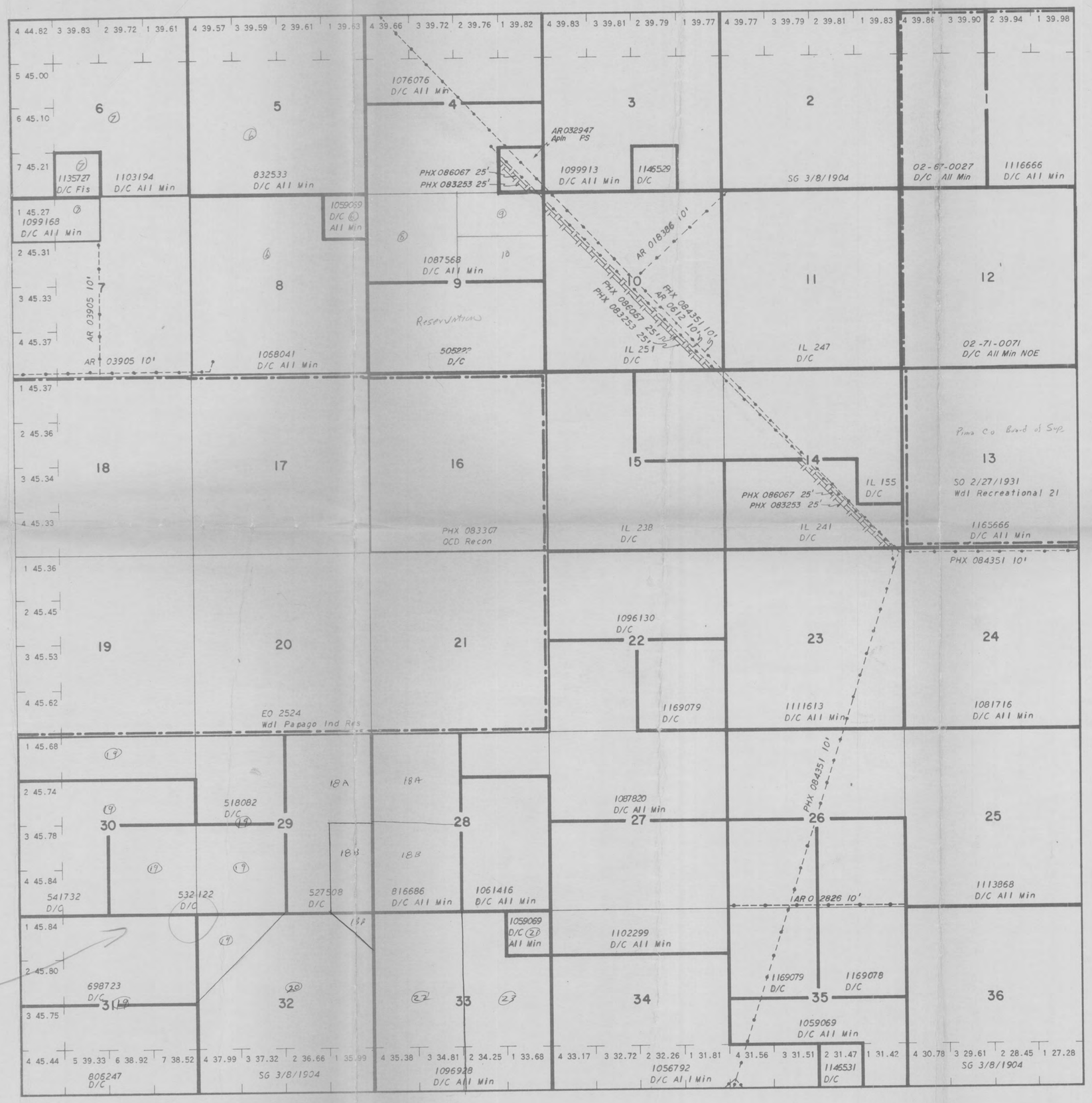
RECD DEC 11 1971

BOX 5964 TUCSON, ARIZONA 85703
Phone: (AREA 602) 623-0578

TOWNSHIP 14 SOUTH RANGE 11 EAST OF THE GILA AND SALT RIVER MERIDIAN, ARIZONA

PIMA COUNTY

STATUS OF PUBLIC DOMAIN
LAND AND MINERAL TITLES



SCALE
10 5 0 10 20 30 60
30 chains to the inch

Lat. 32°10' N
Long. 111°09'48" W

INDEX TO SEGREGATED TRACTS				
RESURVEY	ORIGINAL SURVEY			
TRACT NO	T	R	SEC	SUBDIVISION

FOR ORDERS EFFECTING DISPOSAL OR USE OF UNIDENTIFIED LANDS WITHDRAWN FOR CLASSIFICATION, MINERALS, WATER AND/OR OTHER PUBLIC PURPOSES, REFER TO INDEX OF MISCELLANEOUS DOCUMENTS.

A 2153 CL MULTIPLE USE

DIST. NO. 2
204-32-00L
(6) WILLIS FARMS INC.
435 E 9th, TUCSON.
(7) Growers Finance Co % Cotton Producers Assoc.
P.O. Box 158 MARANA, ARIZ.

(8) Harbour, CE & Geraldine M.
204-32-008 MARANA, ARIZ.

(9) Ungry, Kenneth R. & Eliz.
204-32-009 Stewart Title & Trust Tr. NO. 0151

(10) Chapel, Jessie M.
204-32-010 % ARIZ. LAND TITLE & TR
Tr. NO. 5971

18A = 204-32-018C
Charles L. Phillips & Solange J.
P.O. Box 7727
TUCSON, ARIZ 85713

18B = 204-32-018D
LUDD PAYNE & TOM HAY
P.O. BOX 337
MARANA, AZ 85238

(19) John Donaldson

(20) BENJAMIN H. SCHIG
FAIRMONT HOTEL
SAN FRANCISCO, CAL.
(22) BOYD M. MURSE
% A.T.&T. CO
(23) Double Z-S FARMS INC.

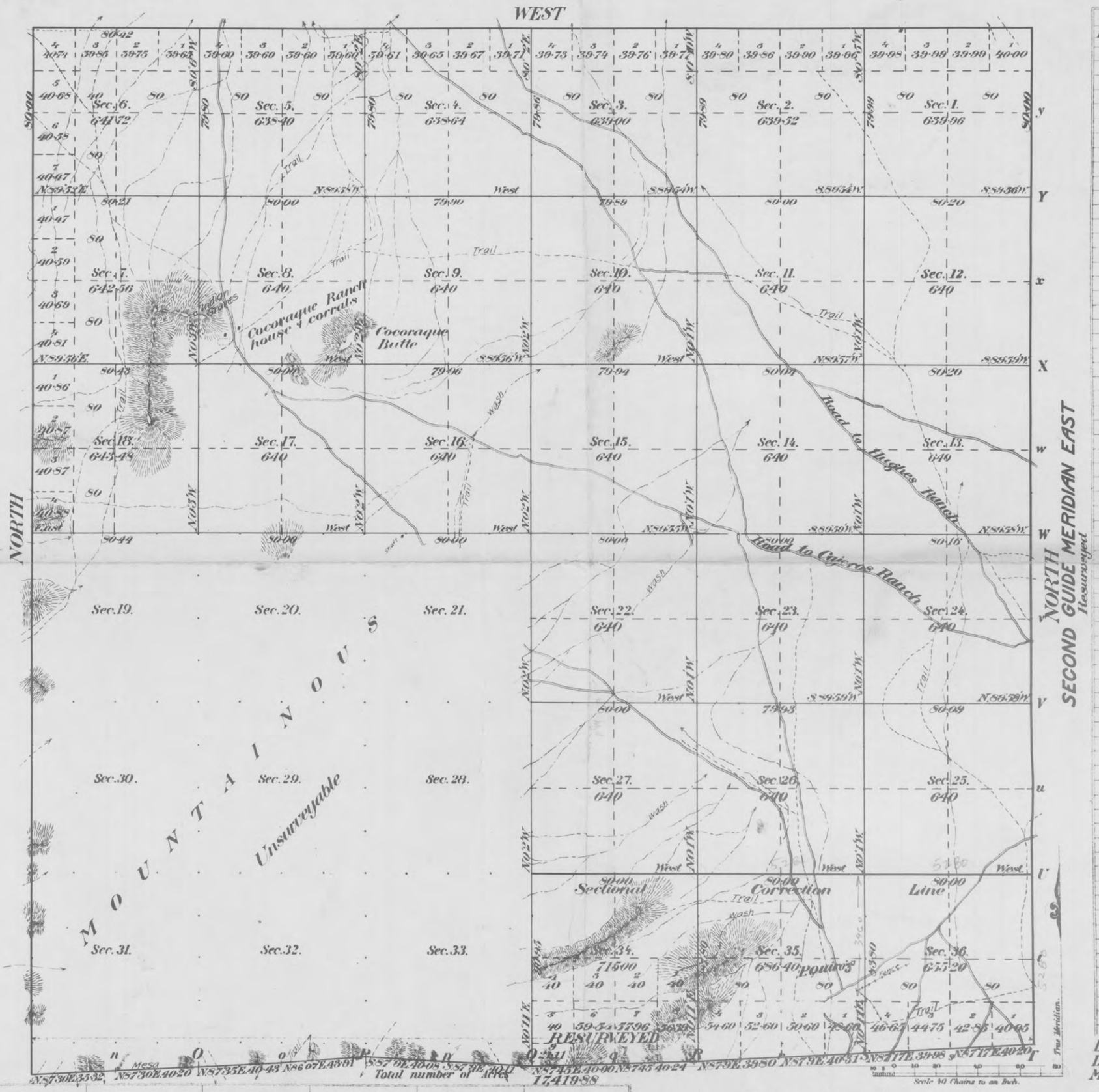
CURRENT TO	BY

T. 14 S
R. 11 E.

GARY

Approved and ordered filed by Dept. letter of date July 7 1904

Fracl Township No. 14 South Range No. 10 East, Gila and Salt River Meridian, Arizona.



Meanders of						
Posts	Courses	Ch.s Lk.s	Posts	Courses	Ch.s Lk.s	Po

Latitude 32°10'N.
Longitude 111°15'55"W.
Mean Mag. Decl. 13°05'E.

Surveys Designated	By Whom Surveyed	No. Date of Contract	Amount of Surveys M.	Ch.s	Lk.s	When Surveyed
N. & W. Bdys. Township lines	Philip Contzen	104 Nov. 13, 1902	12	15	42	Mar. 27-31, 1903.
Subdivisions	" "	" " " "	48	23	28	Apr. 1-10, "
Resur. S. Bdy.	" "	" Special Instructions Dated Apr. 24, 1903.	6	00	58	June 2, "
2nd Guide Mer. E. Resurveyed	" "	36 Feb. 5, 1895	6	00	00	" 25, 1895

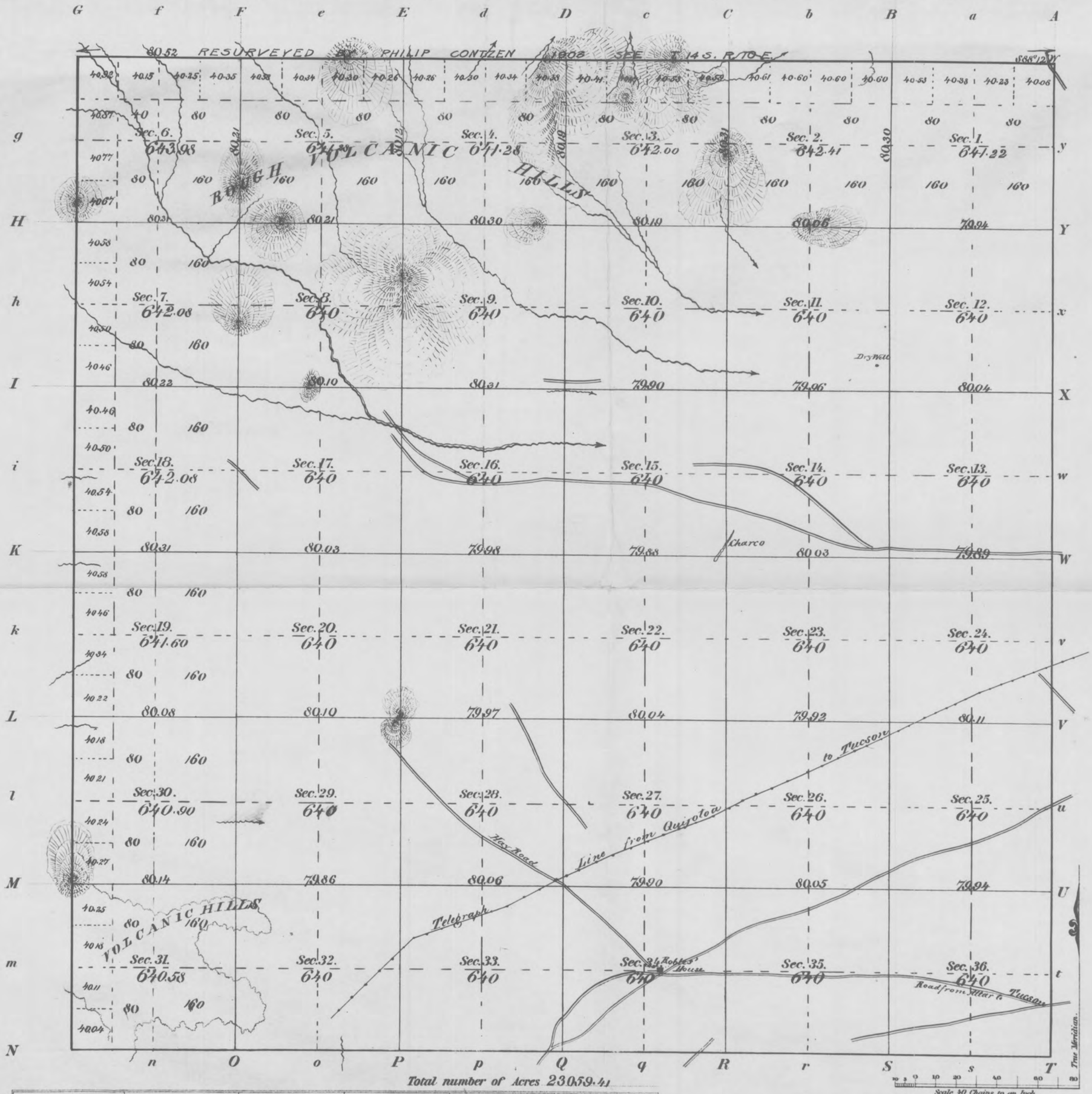
The above Map of Township No. 14 South of Range No. 10 East, Gila and Salt River Meridian, Arizona is strictly conformable to the field notes of the survey thereof on file in this Office, which have been examined and approved.

Surveyor General's Office.
Phoenix, Ariz. Mar. 8, 1904.

Frank A. Gaffey
Sur. Gen.

Index sheets filed Sept 24. 1890.

Township No. 15 South Range No. 10 East, Gila & Salt River Meridian



Total number of Acres 23059.41

Meanders of					
Posts	Courses	Ch.s Lk.s	Posts	Courses	Ch.s Lk.s

Surveys Designated	By Whom Surveyed	Date of Contract	Amount of Surveys M.	Ch.s	Lk.s	When Surveyed	Mean Variation
Township lines	Geo. J. Roskruge	June 16 1886	18	00	52	Jan 27 1887	13°05 E.
Subdivisions	" " "	"	60	02	96	Feb 15 to Feb 21 1887	
Standard	J. B. McLaughlin	June 18th 1883	6	00	00	Jan 8 to Feb 4 1884	

The above Map of Township No. 15 South of Range No. 10 East, Gila & Salt River Meridian, Arizona, is strictly conformable to the field notes of the survey thereof on file in this Office, which have been examined and approved.

Surveyor Generals Office.
Tucson, A.T. June 11th 1888

John Hise
Sur. Gen.

454-512-58

Standard Form No. 1114 B—revised
Form prescribed by Comptroller General, U. S.
October 1, 1953
(General Regulations No. 10)
(Amended January 25, 1955)

RECEIVED

OFFICIAL RECEIPT

Bill No. 454-433-58

Date 1/14/58

Interior-Indian Papago Agency
(Department or Establishment and Bureau or Office)

Sells, Arizona
(Address)

PAYER:

Mineral Exploration Company
P. O. Box 5671
Tucson, Arizona

To be issued as official receipt for cash remittances and when specifically requested if remittance is other than cash.

Date	DESCRIPTION	Quantity	Unit Price Cost	Unit Price Per	Amount
	Fee for cancellation of propsecting permit dated May 1, 1957 issued to Minerals Exploration Company.				1.00
				AMOUNT DUE THIS BILL,	$ 1.00

RECEIVED as payment on above bill, 91-11/1121, Ck#785, 12/18/57, a/c Minerals Exploration Co. $ 1.00

Date 1/14/58 Signature Eliza J. Mendez Title Authorized Collector

Eliza J. Mendez

NOTICE TO PAYER

If tender of payment of this bill is other than cash or United States postal money order, this receipt shall not become an acquittance until such tender has been cleared and the amount received by the Department or Establishment and Bureau or Office indicated above.

142592

16—38093-3 U. S. GOVERNMENT PRINTING OFFICE

20 January 1958

U. S. Department of the Interior
Office of Indian Affairs Field Service
Papago Indian Agency
Sells, Arizona

Re: Realty 331

Attn: Mr. Harry W. Gilmore, Supt.

Gentlemen:

We acknowledge, with thanks, your letter of 17 January 1958, and your notification of acceptance of our request for cancellation of our prospecting permit dated 1 May 1957 covering a portion of the Garcia strip area.

Your promptness and thoroughness in this matter is appreciated, and should the opportunity ever present itself in the future, we will look forward to doing business with you again.

Very truly yours,

Walter E. Heinrichs, Jr.
Manager

WEH/pr
bcc: Mr. Victor H. Verity
Mr. Earl W. Cairns
Mr. Allen M. Rugg, Jr.
Papago Agency File

UNITED STATES
DEPARTMENT OF THE INTERIOR

Realty
331

OFFICE OF INDIAN AFFAIRS

FIELD SERVICE

Papago Indian Agency,
Sells, Arizona.

January 17, 1958.

Minerals Exploration Co.,
P. O. Box 5671,
Tucson, Arizona.

Gentlemen:

Your letter of January 8, 1958, has been received requesting termination as of January 31, 1958, the non-exclusive permit dated May 1, 1957, for prospecting for minerals within a certain area on the Papago Indian Reservation, which was issued to your company.

As your company has complied with the requirements of the permit by paying the necessary fee and submitting a report of exploration, you are advised that the permit will be cancelled as of January 31, 1958. Your bonding company as well as interested Government agencies are being advised of this action by a copy of this letter.

It is regretted that the tests were not too encouraging, however, it is hoped that at some future date you may be interested in other areas on the reservation.

Very truly yours,

Harry W. Gilmore

Harry W. Gilmore,
Superintendent.

LP

RECEIVED JAN 20 1958

DELIVERING EMPLOYEE

☐ Deliver ONLY to addressee. (*Does not apply to Certified mail.*)

☐ Show address where delivered.

Received from the Postmaster the Registered, Certified, or Insured Article, the number of which appears on the face of this return receipt.

1. Papago Indian Agency
(Signature or name of addressee)

2. Louis A Hill
(*Signature of addressee's agent—Agent should enter addressee's name on line ONE above*)

Date of Delivery 1/10/, 1958

D O Bender

POST OFFICE DEPARTMENT

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE TO AVOID PAYMENT OF POSTAGE, $300 (GPO)

RECEIVED JAN 13 1958

POSTMARK OF DELIVERING OFFICE

JAN 10 1958 ARIZ.

RETURN TO

REGISTERED NO.	NAME OF SENDER Minerals Exploration Co.
CERTIFIED NO. 1276852	STREET AND NO. OR P. O. BOX P.O. Box 5671
INSURED NO.	POST OFFICE Tucson
	STATE Arizona

POD Form 3811
July 1955

☆ U. S. GOVERNMENT PRINTING OFFICE : 1955 350304-m

9 January 1958

U. S. Department of the Interior
Bureau of Indian Affairs
Papago Indian Agency
Sells, Arizona

Attn: Mr. Harry W. Gilmore, Supt.

Gentlemen:

This letter will serve as notice of our desire to terminate our Prospecting Permit, dated 1 May 1957, as of January 31, 1958.

In accordance with Clause 2 and Clause 10 of the permit, we are herewith enclosing two copies of our report of the results of work done, and our check number 785 in the amount of $1.00. In addition, we have also included one copy each of a composite map showing approximate, rough reconnaissance geology and geophysical results, and the log of the only hole drilled on the permit area.

This letter will also certify that we have conformed to the stipulations of Clause 3 of the permit.

Your acknowledgement of the receipt of this letter, and the attached data, and that we have properly complied with and completed the terms of the permit, and that we are hereby released from any further obligations, will be appreciated.

Very truly yours,
MINERALS EXPLORATION COMPANY

By: Walter H. Heinrichs, Jr.
Manager & Attorney in Fact

WHH/pr
Enclosures
cc: 1 enclosed
bcc: Mr. Victor H. Verity
Mr. Earl W. Cairns

RECONNAISSANCE EXPLORATION REPORT

OF A

PORTION OF ROSKRUGE MINING DISTRICT & GARCIA STRIP AREA
OF PAPAGO INDIAN RESERVATION, PIMA COUNTY, ARIZONA
February to June 1957

By Minerals Exploration Company
P.O. Box 5671, Tucson, Arizona

This report describes results of work done by Minerals Exploration Company on Papago Tribal lands under its Mineral Prospecting Permit with the Papago Indian Agency, dated 1 May 1957.

A general geologic study and geophysical reconnaissance survey was conducted only on a small part of the area covered by the prospecting permit. This was done in conjunction with evaluation of a group of mining claims lying just south of the Papago Reservation boundary. A composite map of the results of this survey, showing general features, geology, drill holes and relative total magnetic intensity mobile magnetometer contours, is attached to this report.

One diamond drill hole was drilled on Reservation property, indicated D.D.H. #5 on the map. This hole was located about 100 feet north of the south 1/4 corner, Section 27, T.14S., R.10E. and was drilled to test the magnetic high (see map) which occurred on the northwesterly projection of a geologic trend indicated by work done south of the Reservation boundary. This

drill hole penetrated a total thickness of 166 feet of relatively fresh, unmineralized, dark, basic, crystalline, igneous rock, tentatively identified as either diorite or dolerite. (See copy of drill log attached). This rock contained varying minor amounts of finely disseminated magnetite, which confirmed the magnetic high, but which indicated no economic significance, at least to that depth.

No economic mineralization was found in the area covered, however, the existence of sub-marginal mineralized garnet float and pyrite nearby to the south was established. From our evaluation, the significance of this is only suggestive of mineralization possibility in the area, and does not qualify any important known economic aspect. The chance exists for more favorable ore host rocks underlying the igneous rock cover at some greater, unknown depth. This was considered, but was felt to be beyond the prudent scope of our current effort and knowledge of over-all potential district favorability.

Norman Eastmoore Jr.
Norman Eastmoore, Jr.
Consulting Geologist

Walter E. Heinrichs Jr.
Walter E. Heinrichs, Jr.
Manager

FORM 28
PRINTED IN U.S.A.

RECEIVED
MAY 9 1957

OFFICE DELIVERY

TO Mr. Heinrichs

TO Bond as requested

RETURN TO A. E. Morrison

454-986-57

Standard Form No. 1114a—Revised
Form prescribed by Comptroller General, U. S.
October 4, 1943
(General Regulations No. 100)
(Amended January 25, 1955)

OFFICIAL RECEIPT

Prospecting permit

Bill No. 454-900-57

Date May 10, 1957

Interior-Indian Papago Agency
(Department or Establishment and Bureau or Office)

Sells, Arizona
(Address)

PAYER:

Minerals Exploration Company
P. O. Box 5671
Tucson, Arizona

To be issued as official receipt for cash remittances and when specifically requested if remittance is other than cash.

Date	DESCRIPTION	Quantity	Unit Price Cost	Unit Price Per	Amount
	Mineral prospecting permit between the Papago Tribe and Minerals Exploration Company (Deposit 1/2 to PT1A 1/2 to PT10 Schuk Toak District)				$ 200.00
				AMOUNT DUE THIS BILL,	$ 200.00

RECEIVED as payment on above bill, 91-11/1121, Ck#530, 5/6/57, a/c Minerals Exploration Co. $ 200.00

Date May 10, 1957 Signature Eliza J. Mendez Title Authorized Collector

Eliza J. Mendez

RECEIVED MAY 15 1957
MKB.

NOTICE TO PAYER

147409 - Proceeds, Rentals, Etc., Papago Indian Reservation, Arizona)

If tender of payment of this bill is other than cash or United States postal money order, this receipt shall not become an acquittance until such tender has been cleared and the amount received by the Department or Establishment and Bureau or Office indicated above.

16—38093-3 U. S. GOVERNMENT PRINTING OFFICE

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS
FIELD SERVICE
Papago Indian Agency,
Sells, Arizona.

Reply
331

RECEIVED MAY 1957

April 23, 1957.

Minerals Exploration Co.,
P. O. Box 5671,
Tucson, Arizona.

Gentlemen:

There are being transmitted herewith permit, in triplicate, and bond form, in triplicate, covering approximately one-half township in the Roskruge mining district and on which you have applied for prospecting rights for a period of one year.

If the conditions contained in the permit are satisfactory please sign and return all copies to this office. After completion of signatures one copy of the permit will be returned to you. The bond form should be executed for the amount shown thereon, the original transmitted to this office with the permit, one copy may be retained for your files, and one copy for the surety company.

A check payable to the Bureau of Indian Affairs in the amount of $200.00 should also be submitted, one-half to go to the Papago Tribe for the permit, and one-half to the Schuk Toak District as bonus as agreed upon at a meeting held with the district council.

If there are any points that need clarification with reference to the permit we shall be glad to do so.

Very truly yours,
Harry W. Gilmore

Harry W. Gilmore,
Superintendent.

LP

Encls.

RECEIVED MAY 8 1957

BOND NO. 302887

BOND

KNOW ALL MEN BY THESE PRESENTS, That we, MINERALS EXPLORATION COMPANY of the County of Pima, State of Arizona, as principal and UNITED PACIFIC INSURANCE COMPANY as sureties, are held and firmly bound unto the United States of America in the sum of One Thousand and 00/100---------- ($ 1,000.00) Dollars, lawful money of the United States to be paid to the Secretary of the Interior for the use and benefit of the Papago Indians, for payment of which, well and truly to be made, we bind ourselves and each of us, our heirs, executors, administrators, and assigns jointly and severally, firmly by these presents.

Signed with our seals and dated this 3rd day of May, 1957

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas above bounden principal has been awarded and is about to enter into a permit with Papago Agency (Indians) for mineral prospecting, and is required under the terms thereof to give bond in connection with the execution of said permit.

NOW, THEREFORE, if the above-named MINERALS EXPLORATION COMPANY, his heirs, executors, administrators, and assigns, do and shall in all things well and truly observe, perform, fulfull, accomplish and keep all and singular the covenants, conditions, and agreements whatsoever, which, on the part of the said MINERALS EXPLORATION COMPANY, his heirs, executors, administrators, and assigns, are, or ought to be observed, performed, fulfilled, accomplished, and kept, comprised, or mentioned in said prospecting permit bearing the date of 1st day of May, 1957, between the said Papago Agency (Indians) and the said MINERALS EXPLORATION COMPANY, concerning the use of certain lands on the Papago Indian Reservation according to the true intent and meaning of said permit then the above obligation to be void; otherwise, to remain in full force and effect.

Signed, sealed, and delivered in the presence of --

WITNESSES:

Patricia M. Routt
Patricia M. Routt
3045 N. Park, Tucson, Arizona
(Address)

Norman Eastmoore Jr.
Norman Eastmoore Jr.
6337 E. Eli Dr., Tucson, Arizona
(Address)

E. C. Volland
E. C. Volland, 5401 La Cresta Court,
Los Angeles, California
(Address)

Gearlen Parish
Gearlen Parish, 2503 West 124th St.
Gardena, California
(Address)

MINERALS EXPLORATION COMPANY

W. E. Heinrichs Jr.
By: Walter E. Heinrichs Jr.,
(Principal)
Manager & Attorney in Fact
806 West Grant Road
(Address)
P.O. Box 5671, Tucson, Arizona

UNITED PACIFIC INSURANCE COMPANY
(Surety)

616 So. Shatto Place, Los Angeles, Calif.
(Address)

Francis G. Jarvis Jr.
Francis G. Jarvis, Jr., Attorney-in-Fact

Premium $5.00 per annum

Realty
331

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS
FIELD SERVICE
Papago Indian Agency,
Sells, Arizona.

May 13, 1957.

Minerals Exploration Co.,
P. O. Box 5671,
Tucson, Arizona.

Gentlemen:

Enclosed herewith is a non-exclusive mineral prospecting permit for approximately one-half township in the Roskruge Mountains area on the Papago Indian Reservation. As will be noted the permit is issued for a period of one year.

There is also enclosed bond executed by you in the amount of $1,000.00. We shall appreciate it if you will have the surety company attach to the bond a certified copy of Attorney-in-Fact for Francis G. Jarvis, Jr., who signed the instrument for United Pacific Insurance Company, and return the papers to this office.

Very truly yours,

Harry W. Gilmore

Harry W. Gilmore,
Superintendent.

LP

Encls.

RECEIVED MAY 14 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Indian Affairs
Papago Indian Agency
Sells, Arizona

MINERAL PROSPECTING PERMIT

THIS AGREEMENT, made and entered into this 1st day of May, 1957, by and between Papago Indian Agency, party of the first part, hereinafter called Permitter, whose address is Sells, Arizona, and Minerals Exploration Company, whose address is Tucson, Arizona, party of the second part, hereinafter called Permittee.

In consideration of the sum of One hundred and 00/100---------- Dollars ($100.00), the receipt of which is hereby acknowledged, and the covenants, stipulations and conditions hereinafter contained, it is agreed:

Permitter hereby grants the Permittee a nonexclusive right for a period ending 1 May 1958, to prospect for gold, silver, copper, zinc, lead, tungsten, uranium and other metalliferous minerals upon the following described lands of Permitter, subject to valid existing rights, consisting of 10,480 acres, more or less to wit:

Sections 13 through 22, Section 27 through 30, and W½, and NE¼, and W½ ~~SW¼~~ SE¼, Section 23; E½, and NW¼, Section 24; W½, and W½ ~~NW¼~~ NE¼, and W½ ~~SW¼~~ SE¼, Section 26; T14S, R10E, G&SRM, Arizona.

WRB 5/1/57
Rec'd. 5/13/57

It is understood that this permit excludes all patented lands and valid mining claims lying within the area described above, and it shall be the responsibility of the Permittee to avoid trespassing upon such lands and claims.

Said permit is granted upon the following express terms, covenants and conditions:

1. No ores shall be removed from the premises except samples for examination and experimental purposes.

2. The Permittee shall within 30 days after the termination of the permit furnish the Superintendent and the Permitter written reports of the prospecting done and all information concerning the nature and value of the minerals.

3. The Permittee agrees that on termination of this permit, it will make provisions for conservation and protection of the property and leave all areas on which it has worked in a condition that will not be hazardous to life or limb.

4. Before this permit becomes effective, the Permittee shall furnish to the Superintendent of the Papago Agency an acceptable surety bond in the sum of $1,000.

5. It is understood and agreed that this permit does not give any preference right to a lease and that a lease on the land may be advertised for competitive bids.

6. No assignment of this permit shall be valid without the approval of the Superintendent of the Papago Agency.

6. The Permittee shall be permitted to go on the premises described to prospect for gold, silver, copper, zinc, lead, tungsten, uranium and other metalliferous minerals and for no other purpose. Permittee shall not knowingly permit any nuisance to be maintained on the premises nor consent to any intoxicating liquor to be sold or given away for any purpose on such premises and agrees not to use said premises for any purpose other than those authorized in this permit.

8. The Permittee agrees that members of the Papago Tribe shall have the right to use all surface areas not actually being used for exploration purposes, for grazing of livestock. The Permittee agrees to minimize all dangerous areas by erecting fences or other barriers around test holes and excavations, and to make remuneration for any injury or death occasioned to livestock as a result of Permittee's operations.

9. The Permittee agrees not to conduct exploration operations within 500 yards of any village or settlement nor within 100 yards of any cemetery, water well, spring or corral.

10. The Permittee may surrender this permit in writing at any time upon the performance of all the Permittee's obligations hereunder, upon the payment of $1.00 and upon a showing satisfactory to the Permitter and the Secretary of the Interior or his authorized representative that full provision has been made for the conservation and protection of the property.

11. This permit is granted pursuant to the Act of May 11, 1938 (52 Stat. 347); 25 U.S.C. 396 (a-f) as amended by the Act of May 27, 1955 (69 Stat. 67-68), and regulation 25 CFR 186, and is subject to all the laws and regulations applicable to mineral leases on tribal Indian lands.

12. When in the opinion of the Secretary of the Interior or his authorized representative, there has been a violation of any of the terms and conditions of this permit, or the applicable regulations, the Secretary or his authorized representative shall have the right at any time after thirty days' notice to the Permittee, specifying the violations, and after a hearing if the Permittee shall so request within thirty days of receipt of notice, to declare this permit null and void.

Exhibit A is attached hereto and made a part of this permit.

IN WITNESS WHEREOF, the said parties have hereunto subscribed their names and affixed their seals on the day and year first above mentioned.

WITNESSES:

Lyman Lucid
P.O. Sells, Arizona

Lewis Monical
P.O. Sells, Arizona

PAPAGO INDIAN AGENCY

Harry W. Gilmore
Harry W. Gilmore, Supt.

WITNESSES:

Norman Eastmoore Jr.
P.O. Tucson, Arizona

Patricia M Rutt
P.O. Tucson, Arizona

THE MINERALS EXPLORATION COMPANY

W E Heinrichs Jr.
(Permittee)
Walter E. Heinrichs Jr., Manager and Attorney in Fact

EXHIBIT A.

STIPULATIONS

1. The Permittee agrees that prospecting for minerals will be confined to drilling or testing by use of geophysical instruments and that old mine excavations in the area will not be obliterated or disturbed until a Bureau of Land Management survey team has the opportunity to investigate such claims.

2. In the event that Permittee's operations result in the validation or a claim of validation of any mining claim of any person or persons due to a mineral discovery made on such claim by Permittee, Permittee agrees to hold the Papago Tribe and the United States of America blameless, and to waive any claim of damages by reason of any conflict between this permit and said alleged validated mining claim; provided, however, that Permittee shall have the right to contest the validity of said alleged validated mining claim at his own expense, in which case Permittee shall protect and indemnify said Papago Tribe and the United States of America from all costs of such litigations.

3. The Papago Indian Agency has no knowledge of any mining claims in the area, however, this does not preclude the possible existence of such claim or claims in the area covered by this permit.

In agreement to the above stipulations the parties hereto affix their signatures.

PAPAGO INDIAN AGENCY

By Harry W. Gilmore
Harry W. Gilmore, Supt.

MINERALS EXPLORATION COMPANY

By W. E. Heinrichs Jr.
(Name and Title)
Walter E. Heinrichs Jr.,
Manager and Attorney in Fact

BOND NO. 302887

BOND

KNOW ALL MEN BY THESE PRESENTS, That we, MINERALS EXPLORATION COMPANY of the County of Pima, State of Arizona, as principal and UNITED PACIFIC INSURANCE COMPANY as sureties, are held and firmly bound unto the United States of America in the sum of One Thousand and 00/100 ($1,000.00) Dollars, lawful money of the United States to be paid to the Secretary of the Interior for the use and benefit of the Papago Indians, for payment of which, well and truly to be made, we bind ourselves and each of us, our heirs, executors, administrators, and assigns jointly and severally, firmly by these presents.

Signed with our seals and dated this 3rd day of May, 1957.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas above bounden principal has been awarded and is about to enter into a permit with Papago Agency (Indians) for mineral prospecting, and is required under the terms thereof to give bond in connection with the execution of said permit.

NOW, THEREFORE, if the above-named MINERALS EXPLORATION COMPANY, his heirs, executors, administrators, and assigns, do and shall in all things well and truly observe, perform, fulfull, accomplish and keep all and singular the covenants, conditions, and agreements whatsoever, which, on the part of the said MINERALS EXPLORATION COMPANY, his heirs, executors, administrators, and assigns, are, or ought to be observed, performed, fulfilled, accomplished, and kept, comprised, or mentioned in said prospecting permit bearing the date of 1st day of May, 1957, between the said Papago Agency (Indians) and the said MINERALS EXPLORATION COMPANY concerning the use of certain lands on the Papago Indian Reservation according to the true intent and meaning of said permit then the above obligation to be void; otherwise, to remain in full force and effect.

Signed, sealed, and delivered in the presence of --

WITNESSES:

Patricia M. Routt
Patricia M. Routt
3045 N. Park, Tucson, Arizona
(Address)

Norman Eastmoore Jr.
Norman Eastmoore Jr.
6337 E. Eli Dr., Tucson, Arizona
(Address)

E. C. Volland
E. C. Volland, 5401 La Cresta Court,
Los Angeles, California
(Address)

Gearlen Parish
Gearlen Parish, 2503 West 124th St.
Gardena, California
(Address)

MINERALS EXPLORATION COMPANY

W. E. Heinrichs Jr.
By: Walter E. Heinrichs Jr.,
(Principal)
Manager & Attorney in Fact
806 West Grant Road
(Address)
P.O. Box 5671, Tucson, Arizona

UNITED PACIFIC INSURANCE COMPANY
(Surety)

616 So. Shatto Place, Los Angeles, Calif.
(Address)

Francis G. Jarvis Jr.
Francis G. Jarvis, Jr., Attorney-in-Fact

Premium $5.00 per annum

24 May 1957

U. S. Department of the Interior
Office of Indian Affairs, Field Service
Papago Indian Agency
Sells, Arizona

Attn: Mr. Harry W. Gilmore,
Superintendent

Gentlemen:

Enclosed please find copy of certifiedtion of Attorney-in-Fact for Francis G. Jarvis, Jr., per your request of 13 May 1957.

Also please find Bond Number 302887 executed by us in the amount of $1,000.00.

We appreciate all your efforts on our behalf, and trust this is the proper instrument.

Very truly yours,

Walter E. Heinrichs Jr.
Exploration Manager

WEH/pr

Enclosures

Minerals Exploration Company

P.O. BOX 5671

TUCSON, ARIZONA

14 May 1957

U.S. Department of the Interior
Office of Indian Affairs, Field Service
Papago Indian Agency
Sells, Arizona

Attn: Mr. Harry W. Gilmore,
Superintendent

Gentlemen:

This is to acknowledge receipt of your letter dated 13 May 1957 and enclosures of the prospecting permit and bond number 302887.

We have forwarded a request to our home office for the certified copy of Attorney-in-Face for Mr. Jarvis, Jr., and upon receipt of same will return to you.

Very truly yours,

Walter E. Heinrichs Jr.
Exploration Manager

WEH/pr

EAGLE-A
Agawam Onion Skin
100% COTTON CONTENT

Agawam Onion Skin
100% COTTON CONTENT
U.S.A.

Minerals Exploration Company
P.O. BOX 5671
TUCSON, ARIZONA

14 May 1957

Insurance Department
Union Oil Co. of California
Union Oil Building
Los Angeles 17, California

Attn: Mr. A. E. Morrison,
Insurance Representative

Gentlemen:

Enclosed please find copy of letter from Mr. Harry W. Gilmore, Papago Indian Agency, Sells, Arizona, dated 13 May 1957, which is self-explanatory.

Regarding the second paragraph, also please be referred to bond number 302887 signed by Francis G. Jarvis, Jr.

Very truly yours,

Walter E. Heinrichs Jr.
Exploration Manager

WEH/pr

Enc: 1

Realty
331

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF INDIAN AFFAIRS
FIELD SERVICE
Papago Indian Agency,
Sells, Arizona.

May 13, 1957.

Minerals Exploration Co.,
P. O. Box 5671,
Tucson, Arizona.

Gentlemen:

Enclosed herewith is a non-exclusive mineral prospecting permit for approximately one-half township in the Roskruge Mountains area on the Papago Indian Reservation. As will be noted the permit is issued for a period of one year.

There is also enclosed bond executed by you in the amount of $1,000.00. We shall appreciate it if you will have the surety company attach to the bond a certified copy of Attorney-in-Fact for Francis G. Jarvis, Jr., who signed the instrument for United Pacific Insurance Company, and return the papers to this office.

Very truly yours,

Harry W. Gilmore

Harry W. Gilmore,
Superintendent.

LP

Encls.

RECEIVED MAY 14 1957

MINERALS EXPLORATION COMPANY

8 May 1957

U. S. Department of the Interior
Office of Indian Affairs Field Office
Papago Indian Agency
Sells, Arizona

Attn: Harry W. Gilmore, Supt.

Re: Prospecting permit & associated documents
Realty 331, your letter 23 April 1957.

Gentlemen:

Enclosed herewith please find the following as listed:

1. Mineral prospecting permit between the Papago Indian Agency, permitter, and Minerals Exploration Company, permittee, dates 1 May 1957, covering 1040 acres, described as;
   Section 13 through 22, Section 27 through 30, and w-1/2, and NE 1/4, and W1/2 SE 1/4, Section 23; E1/2, and NW 1/4, Section 24; W 1/2, and W 1/2 NE 1/4, and W 1/2 SE 1/4, Section 26; T14S, R10E, G&SRM, Arizona.
   Two pages executed and witnessed in triplicate, together with 1 page, Exhibit A, also in triplicate.

2. 1 original copy bond form, witnessed and executed, bond number 302887, issued for Minerals Exploration Company by United Pacific Insurance Company in favor of the United States of America, in the amount of $1,000.00.

3. 1 certified copy power of attorney from Minerals Exploration Company to Walter E. Heinrichs Jr.

4. 1 certified copy articles of incorporation, Minerals Exploration Company, 10 pages.

5. 1 certified copy, By - Laws of Minerals Exploration Company, 10 pages.

6. Our check #530 in the amount of $200.00, made payable to U.S. Bureau of Indian Affairs, which we understand one-half ($100.00) will go to the Papago Tribe for the permit, and one-half ($100.00) as bonus to the Schuk Toak District of the Papago Reservation.

It is our understanding, after completion of signatures, one copy of the permit will be returned for our files.

We trust everything will be found in order. You will note our changes, in ink, initialed and dated in the margin, on page 1 of the permit. This was to correct an error in the land description as originally described.

Very truly yours,

Walter E. Heinrichs Jr.
Exploration Manager

WEH/pr

Enclosures

cc: Mr. Victor H. Verity
Mr. Earl Cairns

Minerals Exploration Company

P.O. BOX 5671
TUCSON, ARIZONA

6 May 1957

Mr. Harry W. Gilmore, Superintendent
U.S. Department of the Interior
Office Of Indian Affairs
Papago Indian Agency
Sells, Arizona

Dear Mr. Gilmore:

This will confirm our telephone conversation of last week with Mr. Priest in which we acknowledged receipt of the bond forms and leases and the adjustments of typographical errors in the legal subdivision descriptions.

We are now awaiting receipt of executed bond forms from our head office in Los Angeles, and upon their arrival we will return to you all duly executed papers as requested.

Very truly yours,

Walter E. Heinrichs Jr.
Exploration Manager

WEH/pr

VICTOR H. VERITY
ATTORNEY AT LAW
2207 EAST WAVERLY STREET
TUCSON, ARIZONA
EAST 5-9448

RECEIVED APR 29 1957

F - Papago Exploration Agreement

April 28, 1957

Mr. Walter E. Heinrichs, Jr.
Exploration Manager
Minerals Exploration Company
P. O. Box 5671
Tucson, Arizona

Dear Walt:

Enclosed are the following documents relating to the Papago Reservation prospecting permit:

1. Mr. Gilmore's letter of April 23, 1957.
2. Mineral Prospecting Permit in triplicate.
3. Bond form in triplicate.
4. Power of Attorney from Minerals Exploration Company to yourself.

Also enclosed you will find two thermo-fax copies of the Gilmore letter, three copies of the permit, three copies of the bond form and one copy of the power of attorney. I have made a set of copies for my file.

For the purposes which you explained to me over the phone, the permit seems to be satisfactory, bearing in mind that it is not exclusive and does not give the permittee a preferential right to a lease. You should check the legal descriptions.

Clause (2) of the "Stipulations" which is Exhibit "A" attached to the Permit, seems to cover a situation where your drilling would discover mineral on a mining claim located prior to May 27, 1955, the date on which the Papago Reservation was closed to further mineral entry under the general mining laws. Such a discovery would not validate the mining location. If there was no discovery on the claim prior to closing of the Reservation, the claim was invalid and a discovery by you after May 27, 1955 would not relate back to validate the claim. It appears remote that a claimant would instigate litigation under those circumstances. Nevertheless, if such litigation should arise, Clause 2 would govern.

As for a bond in the amount of $1,000.00, I suggest that you arrange with your head office to obtain the bond. They undoubtedly have bonding connections established which will enable them to secure one without the necessity of furnishing a financial statement, etc., which would have to be done in Tucson, and in much less time. The bond must be furnished on the form supplied by the government.

I recommend that when you sign on behalf of Minerals Exploration Company, that you indicate under the signature line "Exploration Manager and Attorney in Fact". A copy of the power of attorney could be furnished the Superintendent of the Papago Indian Agency - certified, if he so requests.

Please advise me when the permit has been signed and the bond issued and also when the permit has been signed by the Papago Agency.

Very truly yours,

Victor H. Verity

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR

Realty
331

OFFICE OF INDIAN AFFAIRS
FIELD SERVICE
Papago Indian Agency,
Sells, Arizona.

RECEIVED APR 25 1957

April 23, 1957.

Minerals Exploration Co.,
P. O. Box 5671,
Tucson, Arizona.

Gentlemen:

There are being transmitted herewith permit, in triplicate, and bond form, in triplicate, covering approximately one-half township in the Roskruge mining district and on which you have applied for prospecting rights for a period of one year.

If the conditions contained in the permit are satisfactory please sign and return all copies to this office. After completion of signatures one copy of the permit will be returned to you. The bond form should be executed for the amount shown thereon, the original transmitted to this office with the permit, one copy may be retained for your files, and one copy for the surety company.

A check payable to the Bureau of Indian Affairs in the amount of $200.00 should also be submitted, one-half to go to the Papago Tribe for the permit, and one-half to the Schuk Toak District as bonus as agreed upon at a meeting held with the district council.

If there are any points that need clarification with reference to the permit we shall be glad to do so.

Very truly yours,

Harry W. Gilmore

Harry W. Gilmore,
Superintendent.

LP

Encls.

MINERALS EXPLORATION COMPANY

Papago Ind Reserv

MARCH 11, 1957

Mr. Priest

Papago Indian Agency called from Sells.

Re:

Disturbing old claim posts and pits, etc. for validation of invalidation of old mining claims on the reservation by U.S. Bureau of Land Management team who have scheduled checking our area in the very near future.

It was agreed we would not disturb such in any manner and any work of this nature would be preceeded by a photo for proof and would only be done in completely virgin ground so no possible conflict or confusion could arise.

Walter E. Heinrichs Jr.

CC:

Norman Eastmoore Jr.

Grover Heinrichs

2/6/57

Call to Sells #2901

Person to Mr. Jones, Papago Indian Agency, Agent.

Lyman Priest handling prospecting permit he said 2-3 Weeks ago to Phx then Wash.

requires both Bu Ind. Af. & Bu L.M. approval or scrutiny.

OK. from both Priest & Jones re: insulating boundary fence, guarantee no permanent damage & leave in condition as good as found.

Bond provision will protect them.

MRS.

Sunday 18 November 1956 10:00 A.M.

Met Mr. Jones (Dept. Interior, Papago Indian Agency, Sells).
With Papago Dist. Council (Schuk Toak Dist.)
at Santa Rosa Ranch School House, first road N. (right) on Reservation after crossing boundary on road from Tucson, 7-8 miles North of San Xiconti or 17 miles N.E. of Sells. Phone line follows road North.

Meet with Tribal District Council, Papago Indian, Santa Rosa School House.
Angelo McGill in charge of meeting. (Interpretor)

Schuk Toak District: S 1/2 T 14S. R 10 E,
Tribe to lease or issue Prospect Permit 1/2 Township at a time.

Mr. Jones of Indian Agency present to present our application to council.

Only District can grant lease.
District gets 1/2 rental and Tribe gets other half.

According to Code, two ways minerals can be done.
1. Tribe set up area and give permits to prospect and then lease on a advertising basis, high bidder gets lease.
2. Before issue, prospect permit put area up for bid and give highest bidder permit (exclusive) which allows prospector to be sure of obtaining lease on ar a interested in.

Tribe has tried both ways.
1. Exclusive prospect. permit Four presently but only two have cleared Washington, D.C.
2. Next proposal, Sif Oidak, opened whole District to prospecting to anyone who would pay $100.00 per prospect permit. Lease application later when something found.

Now Jones presents Minerals Exploration Company Application for Schuk Toak District.
Mark Manuel usually signs and writes leases for Tribal Council.
Area as described by Jones:

Garcia Strip from where big wash croses Garcia strip to top of Roskrüge Mts.

Company now owns land south of strip and looks like minerals may run on to reservation and they want permit to prospect to see if they do.

Strip, 3 miles N-S, and 6 miles E-W. Want 1/2 Township 18 square miles ±.

Since we have land just south of Reservation and know what is there, we naturally do not want to wait so Jones suggestion to council (to avoid delay) that they open area for prospect (or on exclusive prospect permits) and issue prospect permits to any one that desires to prospect. Then if ore found on reservation, can apply for lease and present lease application to Washington.

Tribe can open area to non-exclusive prospecting without Washington approval.

Jones says:
Reason he suggests this method is that three other districts have decided to do this.
Sif Oidak District formed 33 prospect districts. (?)

District Council to pass resolution to do this and Tribe Council OK. Then grant prospect permit for one year ($100.00)

Jones put in plug for Minerals Exploration, mentioned Walts part in Pima discovery and that three fellows with Minerals would be doing work, and they looked like honest people.
Jones has suggested that ext a $100.00 to go direct to District, might expedite passing and O.K. prospect permit applecation

Introduced Walt to Council and he to speak.
Walt emphasized need to get started and Walt has offered to give District "bonus" (this at Jones suggestion) to District of $100.00, amount of prospect permit.

Jones threw open meeting to questions from members.

Federal regulation requires $1 00.00 bond to be posted to pay for any damages (surface, etc.).
Bond in favor of U. S. Government.
Jones is under $50,000.00 bond. Bonded by four bonding contracts.

Francisco spoke.

Jones pointed out to Council that no one had right to use any land for any purpose without permission from council.

Another old Indian spoke. (Pablo Francisco)
District Chairman talking about same thing as first Francisco talked about. That delegates must speak up.

Tribe Council meets next Dec. 7.
Jones to draw up resolution, present it to Angelo Tuesday and District delegate take it to Tribal Council for Tribe Council approval.
District chairman and secretary must sign resolution to show Council really passed the resolution.

Agency cannot do anything until council approves and resolution gives their authority. Then Jones to draw up necessary permit papers to be issued (and take care of bond arrangements, etc.)

Jones	N'Archco	Ranching in area of Inter. Ferman. (?)
Ramon	Al Veraz	

Minerals Exploration Company

P.O. BOX 5671
TUCSON, ARIZONA

October 18, 1956

Phone: Sells-2901

Sun Nov. 18th
10 A.M.
School house
Santa Rosa Ranch.
7-8 Mi N of San Vicente
17 Mi Toward Tucson.
1st road N from Res.

United States Department of Interior
Papago Indian Agency
Sells, Arizona

Attn: Mr. Gilmore or Mr. Jones

Gentlemen:

Reference is made to our recent communications and particularly our telephone conversation of this date.

Our company has interest in mining claims immediately adjoining Papago Reservation land south of Sections 26, 27, and 28 in Township 14 South, Range 10 East, situated in the Roskruge mining district, on the extreme eastern portion of the Reservation.

Our interest in the Reservation land is to obtain permission to conduct surface examinations and geological and geophysical studies for the purpose of determining the possible base metal potential, (copper, lead, zinc, and iron) in relation to our own adjoining property, and if favorable, to conduct further exploration such as drilling. Again, if favorable results were obtained in this work, it would be our intention to make application for bid and or lease for the purpose of developing any economic mineral discovered. We would be willing to accept such permission, if granted, on a non-exclusive basis, and if necessary, to expedite matters, on the basis of surface permission only.

For your information, our concern is thoroughly and adequately financed and competent for such an undertaking. Furthermore, we feel that the proposed work would be of definite potential advantage to the Papago Tribe in the event our efforts were successful. Copies of all reports and factual data obtained during the course of our operations, which we would agree to furnish, would be of value in any event, in adding to the geologic record, or for water or other resources development in which we have no direct interest.

Since our work immediately south of the Reservation is quite far along, we earnestly solicit the most rapid action and decision possible. At present we are in a position to undertake work immediately, however, if discouraging results are obtained from the area where we are presently working, it may eliminate our present interest in the Reservation land, although it is a fact, that no completely thorough appraisal of mineral land immediately on either side of the Boundary can be made without information on both

Sincerely yours,

Walter E. Heinrichs, Jr.
Exploration Manager

WEH/nnp

Minerals Exploration Company

P.O. BOX 5671

TUCSON, ARIZONA

October 18, 1956

United States Department of Interior
Papago Indian Agency
Sells, Arizona

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Walter E. Heinrichs, Jr.
Exploration Manager

WEH/nmp

October 18, 1956

United States Department of Interior
Papago Indian Agency
Sells, Arizona

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Sincerely yours,

Walter E. Heinrichs, Jr.
Exploration Manager

WEH/mmp

10/17/56

Call to Sells Indian Agency Papago.

week from Friday 26-28th. Rodeo.

Santa Rosa Ranch.

Royal Marks - Phx lawyer
" Dept. Inter.
Sykes Nelson & Caldwell.

BOND NO. 302887

BOND

KNOW ALL MEN BY THESE PRESENTS, That we, MINERALS EXPLORATION COMPANY of the County of Pima, State of Arizona, as principal and UNITED PACIFIC INSURANCE COMPANY as sureties, are held and firmly bound unto the United States of America in the sum of One Thousand and 00/100 ($1,000.00) Dollars, lawful money of the United States to be paid to the Secretary of the Interior for the use and benefit of the Papago Indians, for payment of which, well and truly to be made, we bind ourselves and each of us, our heirs, executors, administrators, and assigns jointly and severally, firmly by these presents.

Signed with our seals and dated this 3rd day of May, 1957

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas above bounden principal has been awarded and is about to enter into a permit with Papago Agency (Indians) for mineral prospecting, and is required under the terms thereof to give bond in connection with the execution of said permit.

NOW, THEREFORE, if the above-named MINERALS EXPLORATION COMPANY, his heirs, executors, administrators, and assigns, do and shall in all things well and truly observe, perform, fulfull, accomplish and keep all and singular the covenants, conditions, and agreements whatsoever, which, on the part of the said MINERALS EXPLORATION COMPANY, his heirs, executors, administrators, and assigns, are, or ought to be observed, performed, fulfilled, accomplished, and kept, comprised, or mentioned in said prospecting permit bearing the date of 1st day of May, 1957, between the said Papago Agency (Indians) and the said MINERALS EXPLORATION COMPANY concerning the use of certain lands on the Papago Indian Reservation according to the true intent and meaning of said permit then the above obligation to be void; otherwise, to remain in full force and effect.

Signed, sealed, and delivered in the presence of —

WITNESSES:

/s/ Patricia M. Routt
Patricia M. Routt
3045 N. Park, Tucson, Arizona
(Address)

/s/ Norman Eastmore, Jr.
Norman Eastmoore Jr.
6337 E. Eli, Tucson, Arizona
(Address)

/s/ E. C. Volland
E. C. Volland, 5401 La Cresta Court, Los Angeles, California
(Address)

/s/ Gearlen Parish
Gearlen Parish, 2503 West 144th St. Gardena, California
(Address)

MINERALS EXPLORATION COMPANY

W. E. Heinrichs Jr.
By: Walter E. Heinrichs Jr.
(Principal)
Manager & Attorney in Fact
806 W. Grant Road
(Address)
P.O. Box 5671, Tucson, Arizona

UNITED PACIFIC INSURANCE COMPANY
(Surety)

616 So. Shatto Place, Los Angeles, Calif.
(Address)

/s/ Francis G. Jarvis, Jr.
Francis G. Jarvis Jr., Attorney-in-Fact

(Seal)

Premium $5.00 per annum

BOND NO. 302887

BOND

KNOW ALL MEN BY THESE PRESENTS, That we, Minerals Exploration Company of the County of Pima, State of Arizona, as principal and UNITED PACIFIC INSURANCE COMPANY as sureties, are held and firmly bound unto the United States of America in the sum of One Thousand and 00/100 ($1,000.00) Dollars, lawful money of the United States to be paid to the Secretary of the Interior for the use and benefit of the Papago Indians, for payment of which, well and truly to be made, we bind ourselves and each of us, our heirs, executors, administrators, and assigns jointly and severally, firmly by these presents.

Signed with our seals and dated this 3rd day of May, 1957

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Signed, sealed, and delivered in the presence of --

WITNESSES:

/s/ Patricia M. Routt
Pat Routt
3045 N. Park, Tucson, Arizona
(Address)

/s/ Norman Eastmoore Jr.
Norman Eastmoore, Jr.
6337 E. Eli Dr., Tucson, Arizona
(Address)

/s/ E. C. Volland
E. C. Volland, 5401 La Cresta Court, Los Angeles, California
(Address)

/s/ Gearlen Parish
Gearlen, Parish, 2503 West 144th St. Gardena, California
(Address)

Minerals Exploration Company
by: Walter E. Heinrichs Jr., Manager & Attorney in Fact.
(Principal)
806 West Grant Road
P.O. Box 5671 Tucson, Arizona
(Address)

UNITED PACIFIC INSURANCE COMPANY
(Surety)

616 So. Shatto Place, Los Angeles, Calif.
(Address)

/s/ Francis G. Jarvis, Jr.
Francis G. Jarvis Jr., Attorney-in-Fact

Premium $5.00 per annum

(Seal)

Recd 9 May 1957
Papago Agency
Sells, Arizona

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Indian Affairs
Papago Indian Agency
Sells, Arizona

MINERAL PROSPECTING PERMIT

THIS AGREEMENT, made and entered into this 1st day of May, 1957, by and between Papago Indian Agency, party of the first part, hereinafter called Permitter, whose address is Sells, Arizona, and Minerals Exploration Company, whose address is Tucson, Arizona, party of the second part, hereinafter called Permittee.

In consideration of the sum of One hundred and 00/100 dollars ($100.00), the receipt of which is hereby acknowledged, and the covenants, stipulations and conditions hereinafter contained, it is agreed:

Permitter hereby grants the Permittee a nonexclusive right for a period ending 1 May 1958, to prospect for gold, silver, copper, zinc, lead, tungsten, uranium and other metalliferous minerals upon the following described lands of Permitter, subject to valid existing rights, consisting of 10,480 acres, more or less to wit:

Sections 13 through 22, Section 27 through 30, and W½, and NE¼ and W½ ~~SW¼~~ SE1/4, Section 23; E½, and NW¼, Section 24; W½, and W½ ~~SW¼~~ NE 1/4 and W½ ~~SW¼~~ SE 1/4, Section 26; T14S, R10E, G&SRM, Arizona.

MHH 5/1/57
/s/ H.W.E. 5/2/57

It is understood that this permit excludes all patented lands and valid mining claims lying within the area described above, and it shall be the responsibility of the Permittee to avoid trespassing upon such lands and claims.

Said permit is granted upon the following express terms, covenants and conditions:

1. No ores shall be removed from the premises except samples for examination and experimental purposes.

2. The Permittee shall within 30 days after the termination of the permit furnish the Superintendent and the Permitter written reports of the prospecting done and all information concerning the nature and value of the minerals.

3. The Permittee agrees that on termination of this permit, it will make provisions for conservation and protection of the property and leave all areas on which it has worked in a condition that will not be hazardous to life or limb.

4. Before this permit becomes effective, the Permittee shall furnish to the Superintendent of the Papago Agency an acceptable surety bond in the sum of $1,000.

5. It is understood and agreed that this permit does not give any preference right to a lease and that a lease on the land may be advertised for competitive bids.

6. No assignment of this permit shall be valid without the approval of the Superintendent of the Papago Agency.

6. The Permittee shall be permitted to go on the premises described to prospect for gold, silver, copper, zinc, lead, tungsten, uranium and other metalliferous minerals and for no other purpose. Permittee shall not knowingly permit any nuisance to be maintained on the premises nor consent to any intoxicating liquor to be sold or given away for any purpose on such premises and agrees not to use said premises for any purpose other than those authorized in this permit.

8. The Permittee agrees that members of the Papago Tribe shall have the right to use all surface areas not actually being used for exploration purposes, for grazing of livestock. The Permittee agrees to minimize all dangerous areas by erecting fences or other barriers around test holes and excavations, and to make compensation for any injury or death occasioned to livestock as a result of Permittee's operations.

9. The Permittee agrees not to conduct exploration operations within 500 yards of any village or settlement nor within 100 yards of any cemetery, water well, spring or corral.

10. The Permittee may surrender this permit in writing at any time upon the performance of all the Permittee's obligations hereunder, upon the payment of $1.00 and upon a showing satisfactory to the Permitter and the Secretary of the Interior or his authorized representative that full provision has been made for the conservation and protection of the property.

11. This permit is granted pursuant to the Act of May 11, 1938 (52 Stat. 347); 25 U.S.C. 396 (a-f) as amended by the Act of May 27, 1955 (69 Stat. 67-68), and regulation 25 CFR 186, and is subject to all the laws and regulations applicable to mineral leases on tribal Indian lands.

12. When in the opinion of the Secretary of the Interior or his authorized representative, there has been a violation of any of the terms and conditions of this permit, or the applicable regulations, the Secretary or his authorized representative shall have the right at any time after thirty days' notice to the Permittee, specifying the violations, and after a hearing if the Permittee shall so request within thirty days of receipt of notice, to declare this permit null and void.

Exhibit A is attached hereto and made a part of this permit.

IN WITNESS WHEREOF, the said parties have hereunto subscribed their names and affixed their seals on the day and year first above mentioned.

WITNESSES:

/s/ Lyman Priest
P.O. Sells, Arizona

/s/ J. Lewis Monical
P.O. Sells, Arizona

PAPAGO INDIAN AGENCY

/s/ Harry W. Gilmore
Harry W. Gilmore, Capt.

(stamp)
Rec'd 9 May 1957
Papago Agency
Sells, Arizona

WITNESSES:

/s/ Patricia M. Routt
P.O. Tucson, Arizona

/s/ Norman Eastmoore Jr.
P.O. Tucson, Arizona

THE MINERALS EXPLORATION COMPANY

/s/ Walter E. Heinrichs Jr.
Walter E. Heinrichs Jr., Manager
and Attorney In Fact
(Permittee)

EXHIBIT A.

STIPULATIONS

1. The Permittee agrees that prospecting for minerals will be confined to drilling or testing by use of geophysical instruments and that old mine excavations in the area will not be obliterated or disturbed until a Bureau of Land Management survey team has the opportunity to investigate such claims.

2. In the event that Permittee's operations result in the validation or a claim of validation of any mining claim of any person or persons due to a mineral discovery made on such claim by Permittee, Permittee agrees to hold the Papago Tribe and the United States of America blameless, and to waive any claim of damages by reason of any conflict between this permit and said alleged validated mining claim; provided, however, that Permittee shall have the right to contest the validity of said alleged validated mining claim at his own expense, in which case Permittee shall protect and indemnify said Papago Tribe and the United States of America from all costs of such litigations.

3. The Papago Indian Agency has no knowledge of any mining claims in the area, however, this does not preclude the possible existence of such claim or claims in the area covered by this permit.

In agreement to the above stipulations the parties hereto affix their signatures.

PAPAGO INDIAN AGENCY

By /s/ Harry W. Gilmore
Harry W. Gilmore, Supt.

MINERALS EXPLORATION COMPANY

By /s/ W. E. Heinrichs Jr.
(Name and Title)
Walter E. Heinrichs Jr., Manager
and Attorney in Fact

(Stamp)
9 May 1955
Received
Papago Agency.
Sells, Arizona

NEWMONT EXPLORATION LIMITED
OFFICE OF THE SECRETARY
300 PARK AVENUE
NEW YORK 22, N.Y.

JAN 1964 GEOEX

January 16, 1964

Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona

Gentlemen:

Reference is made to the letter agreement between yourselves and this Company relative to its exclusive use of certain information disclosed by you on areas in the vicinity of the Roskruge Mountains, Pima County, Arizona, and more particularly to Paragraph 1 thereof entitled "Option". You are hereby advised that Newmont Exploration Limited elects not to renew its option thereunder and concomitantly relinquishes all of its rights and interests under that agreement.

Very truly yours,

NEWMONT EXPLORATION LIMITED

By R. B. Fulton
R. B. Fulton
Vice President

RBF:uf

cc: Mr. W. H. Callahan

January 20, 1964

Sorry this area was not more attractive to you. Perhaps we can look forward to more and better things in the near future.

Best regards,

Sincerely,

Walter E. Heinrichs, Jr.

WEH:jh

C.C. U. H. Varty.

NEWMONT EXPLORATION LIMITED
OFFICE OF THE SECRETARY
300 PARK AVENUE
NEW YORK 22, N. Y.

January 16, 1964

Mr. John W. Donaldson, Jr.
5531 East Fort Lowell Road
Tucson, Arizona

Dear John:

As discussed during your recent visit here, we have now found our "anomaly" on your property to be spurious and have concluded that no further work there is warranted. We are accordingly terminating our understanding with Heinrichs Geoexploration Company which has the effect of removing the wraps on the use of their knowledge of the area.

As promised, I am forwarding a copy of our report describing this last work in which are also set forth the results interpreted therefrom. I think we left it that if you wish to have Heinrichs review this, we will have no objection to your doing so.

Very truly yours,

R. B. Fulton

R. B. Fulton

RBF:uf

Enc.

Feb. 12, 1964

M E M O:

To: Walter E. Heinrichs, Jr.

From: Chris S. Ludwig

Re: Comments on Newmont - New Jersey Zinc Report - Roskruge Area dated January 10, 1964

1. Anomaly (1) with a true M of 32, possibly representing 2% sulfides seems to me to be a better bet than they indicate.

2. One 2,000 ft. long 200 ft. a dipole-dipole over the area of Mexco's drilling doesn't seem sufficient to really check it out. It is somewhat surprising that they obtained completely negative results since the drilling seemed to indicate sufficient sulfide for at least a marginal anomaly!!

3. Magnetic results seem to correspond to our thinking and past work.

4. Gravity seems to have worked pretty well in determining sub-alluvial bedrock gradients.

5. I'd like to see several 750 ft. a dipole-dipole spreads in the vicinity of their Anomaly 1 and west to check out the western mag high on Mag Line 6.

6. Also like to see some 250 ft.-"a"-dipole-dipole spreads around Mexco's drilling and surrounding areas to possibly pick up any strong sulfide zones.

C. S. Ludwig
Geophysicist

Memo
TO: [illegible]
From -
[illegible]

C.S.L.

Re: Comments on Newmont - NJZ report - Roskruge Area:

1.) Anomaly (1) with a true M of 32, possibly representing 2% sulfides seems to me to be a better bet than they indicate

2.) One 2000' long 200'a dipole-dipole over the area of Mexco's drilling doesn't seem sufficient to really check it out. It is somewhat surprising that they obtained completely negative results since the drilling seemed to indicate sufficient sulfide for at least a marginal anomaly!!??

?

3.) Magnetic results seem to correspond to our thinking and past work.

4.) Gravity seems to have worked pretty well in determining sub-alluvial bedrock gradients.

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6.) Also like to see some 250'a dipole-dipole spreads around Mexco's drilling and surrounding areas to possibly pick up any strong sulfide zones.

— H Gevers 80 —

NEWMONT EXPLORATION LIMITED
OFFICE OF THE SECRETARY
300 PARK AVENUE
NEW YORK 22, N.Y.

NOV 1963
GEOEX

November 14, 1963

Mr. E. Grover Heinrichs, Vice President
Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona 85703

Dear Grover:

Re: Roskruge Project
Option Agreement

This will acknowledge your letter of October 29th accompanied by the captioned agreement signed by you as modified. As I advised you by telegram on the following day, the proposed changes are acceptable to us, in confirmation of which I am enclosing a fully initialled Xerox copy of the letter agreement for your records.

We have your professional capabilities in mind I can assure you and shall call on your services at the appropriate time.

Very truly yours,

NEWMONT EXPLORATION LIMITED

By R. B. Fulton
R. B. Fulton
Vice President

RBF:uf
Enc.

cc: Dr. A. A. Brant

NEWMONT EXPLORATION LIMITED
300 PARK AVENUE (19th Floor)
NEW YORK 22, N. Y.

GEOE

October 14, 1963

Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona

Gentlemen:

Reference is made to that certain letter agreement, dated February 13, 1959 between yourselves and the undersigned, Newmont Exploration Limited, under which Newmont Exploration in return for the exclusive disclosure by you to it of certain information in your possession concerning magnetic anomalies in the vicinity of the Roskruge Mountains, Pima County, Arizona, agreed to pay you a royalty on ores produced from the anomalous areas and sold by Newmont Exploration in the cumulative total amount of $150,000 and to grant you certain other valuable considerations. This agreement was terminated by letter, dated April 15, 1963, since which time the previous restriction with respect to the disclosure of this information to others as imposed under that agreement has been removed. The purpose of this letter is to advise you that Newmont Exploration wishes to undertake some additional geophysical work at least on certain parts of the anomalous areas, as previously considered and agreed to, and offers to compensate you for your services as finder thereof in the following manner:

1. Option - Newmont Exploration to have an option upon the payment of $100 to you for a period of three months commencing from the date ~~of acceptance to negotiate for~~, enter upon and explore any and all segments of the anomalous areas; this option to be renewable at Newmont Exploration's discretion for quarterly (three months) periods thereafter upon payment to you of ~~$250.00~~ $300.00 at the commencement of each such renewal period up to a maximum option period including the initial three month period of two years and three months from the date hereof. Upon the expiration of the aforesaid option period Newmont Exploration shall advise you if it wishes to continue its exploration of the area. If Newmont Exploration

as signed below

elects to continue ~~you may thereupon call for and receive from~~ Newmont Exploration WILL PAY the sum of $15,000 as advance royalty together with a royalty assignment of three per cent (3%) of net smelter returns after deduction of all freight and transportation costs on ores mined and sold by Newmont Exploration from one or more properties in the anomalous area, up to a maximum cumulative payment of such royalty of $150,000. All payments made to you hereunder including those during the option period as well as the above advance royalty payment, if called for, shall be credited to the said $150,000 cumulative total and upon the payment to you thereof by Newmont Exploration or its assigns, there shall be no further royalty or other obligations to you for your services.

2. You shall have no right or interest in any of the mining properties or interests acquired by Newmont Exploration, nor any right to participate with Newmont Exploration in its prospecting, exploration or mining activities within the area.

If the foregoing is acceptable to you, please so signify by signing and returning the attached copy of this letter.

Very truly yours,

NEWMONT EXPLORATION LIMITED

By R. B. Fulton
R. B. Fulton
Vice President

Confirmed and Accepted:
HEINRICHS GEOEXPLORATION COMPANY

M. Heinrichs Jr.
President

Date: Oct. 28, 1963

NEWMONT EXPLORATION LIMITED
OFFICE OF THE SECRETARY
300 PARK AVENUE
NEW YORK 22, N.Y.

OCT 1963
GEOEX

October 14, 1963

Mr. Walter E. Heinrichs, Jr.
President & General Manager
Heinrichs Geoexploration Co.
806-808 West Grant Road
Tucson, Arizona

Dear Walt:

Enclosed is our proposal for reinitiating some work in the Roskruge area. We proposed that you undertake the initial IP work for us, but our associates feel this might best be done by us jointly because of the possible magnitude of further work. We shall, of course, utilize your services when and where we can if this first work leads to more.

I think the terms we are proffering meet your stipulations and we'd appreciate an early response. I have discussed the scope of our undertakings with you with Mr. Donaldson who feels that we are equitably discharging our collateral as well as direct obligations with respect to his property under this procedure.

Very truly yours,

R. B. Fulton

R. B. Fulton

RBF:uf

NEWMONT EXPLORATION LIMITED
OFFICE OF THE SECRETARY
300 PARK AVENUE
NEW YORK 22, N.Y.

OCT 1963
GEOEX

October 14, 1963

Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona

Gentlemen:

Reference is made to that certain letter agreement, dated February 13, 1959 between yourselves and the undersigned, Newmont Exploration Limited, under which Newmont Exploration in return for the exclusive disclosure by you to it of certain information in your possession concerning magnetic anomalies in the vicinity of the Roskruge Mountains, Pima County, Arizona, agreed to pay you a royalty on ores produced from the anomalous areas and sold by Newmont Exploration in the cumulative total amount of $150,000 and to grant you certain other valuable considerations. This agreement was terminated by letter, dated April 15, 1963, since which time the previous restriction with respect to the disclosure of this information to others as imposed under that agreement has been removed. The purpose of this letter is to advise you that Newmont Exploration wishes to undertake some additional geophysical work at least on certain parts of the anomalous areas, as previously considered and agreed to, and offers to compensate you for your services as finder thereof in the following manner:

1. Option - Newmont Exploration to have an option upon the payment of $100 to you for a period of three months commencing from the date ~~of acceptance to negotiate for~~ as signed below, enter upon and explore any and all segments of the anomalous areas; this option to be renewable at Newmont Exploration's discretion for quarterly (three months) periods thereafter upon payment to you of ~~$250.00~~ $300.00 at the commencement of each such renewal period up to a maximum option period including the initial three month period of two years and three months from the date hereof. Upon the expiration of the aforesaid option period Newmont Exploration shall advise you if it wishes to continue its exploration of the area. If Newmont Exploration

WILL PAY WHH.

WHH. elects to continue ~~you may thereupon~~ ~~call for~~ ~~and receive from~~ Newmont Exploration the sum of $15,000 as advance royalty together with a royalty assignment of three per cent (3%) of net smelter returns after deduction of all freight and transportation costs on ores mined and sold by Newmont Exploration from one or more properties in the anomalous area, up to a maximum cumulative payment of such royalty of $150,000. All payments made to you hereunder including those during the option period as well as the above advance royalty payment, if called for, shall be credited to the said $150,000 cumulative total and upon the payment to you thereof by Newmont Exploration or its assigns, there shall be no further royalty or other obligations to you for your services.

2. You shall have no right or interest in any of the mining properties or interests acquired by Newmont Exploration, nor any right to participate with Newmont Exploration in its prospecting, exploration or mining activities within the area.

If the foregoing is acceptable to you, please so signify by signing and returning the attached copy of this letter.

Very truly yours,

NEWMONT EXPLORATION LIMITED

By R. B. Fulton

R. B. Fulton
Vice President

Confirmed & Accepted:
HEINRICHS GEOExploration Co.

W. H. Heinrichs Jr.

President

DATE Oct. 28, 1963

NEWMONT EXPLORATION LIMITED
OFFICE OF THE SECRETARY
300 PARK AVENUE
NEW YORK 22, N.Y.

APR 1963
GEOEX

April 15, 1963

Mr. Walter E. Heinrichs, Jr.
Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona

Dear Walt:

This will acknowledge your letter of April 12. The basis agreed to during our discussion in your office is the one we still believe best fits the situation. The only alternative I can suggest therefore, under the circumstances, is to terminate our undertakings under the earlier agreement. This procedure is agreeable with our associates. We shall, therefore, recognize hereafter that the restriction placed on yourselves concerning the disclosure of the data to others is no longer in effect.

Very truly yours,

R. B. Fulton

R. B. Fulton

RBF:uf

cc: Mr. W. H. Callahan

NEWMONT EXPLORATION LIMITED
OFFICE OF THE SECRETARY
300 PARK AVENUE
NEW YORK 22, N.Y.

APR 1963
GEOEX

March 26, 1963

Mr. Walter E. Heinrichs, Jr.
Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona

Dear Walt:

Pursuant to our discussion of last Wednesday,* enclosed herewith is a fresh third page of our proposed letter agreement, covering the R.D. data which incorporates the optional payment of $500 at the end of the initial six month period as agreed to. If you find this in form satisfactory, will you sign and return one copy to us.

Thanks.

Sincerely yours,

R. B. Fulton

R. B. Fulton

RBF:uf
Enclosures

* week

or forfeiture shall occur with respect thereto before such properties or interests shall be offered for transfer and assignment to Geoex as aforesaid; and

(7) In the event NEL elects to proceed under its option, as provided in paragraph 3 hereof, it shall, on or before September 15th, 1963, pay to Geoex the sum of Five Hundred ($500) Dollars, following which it shall have the unrestricted right to continue prospecting, exploration and mining activity within the said Sections; provided that upon the expiration of two years following September 15th, 1963, Geoex shall have the right to call for and receive from NEL the cash sum of $15,000, as advance royalty, together with a royalty assignment of three per cent of net smelter returns from minerals produced from the properties and interests then held by NEL within said Sections, said royalty to be subject to a cumulative maximum payment of $150,000. As an alternative to, and in lieu of said payment and royalty assignment, NEL may, at its option, execute and deliver to Geoex a general assignment of its right, title and interest in any and all of said mining properties and interests that may then be owned by NEL within the said Sections.

(8) That NEL may associate itself hereunder in joint venture with one or more other parties, in which event the provisions hereof shall inure and be binding upon such joint venture with equal effect as herein provided with respect to NEL.

When countersigned by you, this letter will evidence our complete understanding.

Very truly yours,

NEWMONT EXPLORATION LIMITED

By R. B. Fulton

R. B. Fulton
Vice President

March 15, 1963

or forfeiture shall occur with respect thereto before such properties or interests shall be offered for transfer and assignment to Geoex as aforesaid; and

(7) In the event NEL elects to proceed under its option, as provided in paragraph 3 hereof, it shall, on or before September 15th, 1963, pay to Geoex the sum of Five Hundred ($500) Dollars, following which it shall have the unrestricted right to continue prospecting, exploration and mining activity within the said Sections; provided that upon the expiration of two years following September 15th, 1963, Geoex shall have the right to call for and receive from NEL the cash sum of $15,000, as advance royalty, together with a royalty assignment of three per cent of net smelter returns from minerals produced from the properties and interests then held by NEL within said Sections, said royalty to be subject to a cumulative maximum payment of $150,000. As an alternative to, and in lieu of said payment and royalty assignment, NEL may, at its option, execute and deliver to Geoex a general assignment of its right, title and interest in any and all of said mining properties and interests that may then be owned by NEL within the said Sections.

(8) That NEL may associate itself hereunder in joint venture with one or more other parties, in which event the provisions hereof shall inure and be binding upon such joint venture with equal effect as herein provided with respect to NEL.

When countersigned by you, this letter will evidence our complete understanding.

Very truly yours,

NEWMONT EXPLORATION LIMITED

By R. B. Fulton

R. B. Fulton
Vice President

Confirmed and agreed:
HEINRICHS GEOEXPLORATION COMPANY

By_____
President

Date:

Vermont. R.D. 3/20/63

Bob Fulton

Art Brant

MRR.

$500.00 end of 6 Mos.?

15,000.00 " " ? otherwise similar.

3% royalty $150,000 end ft.

will write letter, see file

MR.

Newmont 3/18/63

Vic will call after while re: Newmont.

I took a machine copy
of this to Vic Today

3-14-63

so he can look it over &
you can talk to him about
it before Tuesday.

J.

NEWMONT EXPLORATION LIMITED
OFFICE OF THE SECRETARY
300 PARK AVENUE
NEW YORK 22, N.Y.

MAR 1963
GEOEX

March 12, 1963

Mr. Walter E. Heinrichs, Jr.
Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona

Dear Walt:

In response to your letter of February 20th, enclosed herewith is our proposal for the new understanding requested between yourselves and us concerning the R. D. Area.

I plan to be in Tucson next Tuesday and will call your office. Perhaps you can advise us then if this suits you.

Very truly yours,

R. B. Fulton

R. B. Fulton

3/19/63

Dear Bob: Almost identical to old agreement except now 6 Mos instead of 18 mos. What we need is Small monthly payment for performance incentive & consideration for Newmont's exclusive opportunity & our efforts on upward escalating basis. Not same situation as if our own property was being explored

RBF:uf
Encl.

NEWMONT EXPLORATION LIMITED
OFFICE OF THE SECRETARY
300 PARK AVENUE
NEW YORK 22, N.Y.

March 15, 1963

Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona

Gentlemen:

Reference is made to that certain letter agreement between the parties hereto, dated February 13, 1959, which agreement is hereby superseded by mutual consent of the said parties by the terms, conditions and covenants hereinafter set forth to wit:

(1) Heinrichs Geoexploration Company (Geoex) has heretofore disclosed certain information concerning magnetic anomalies to Newmont Exploration Limited (NEL) situated in Sections 22-29, and 34-36, Tnp 14S, Rge 10E, Pima County, Arizona; and (27?) (11E?)

(2) Geoex has undertaken and will continue to undertake not to divulge the existence or location of the said anomalies to any other party, nor engage directly or indirectly in any exploration, land acquisition, or mining activity within the said Sections prior to September 15th, 1965, unless sooner relieved from further obligations hereunder; and

(3) Geoex grants to NEL an option to further examine and explore the said Sections during a continuous six months period, commencing on the date hereof. Subject to its right to suspend all further activity and operations hereunder at any time and in such event to make an assignment of any interests acquired within said Sections to Geoex as provided in paragraph 6, NEL, with diligence, reasonable continuity, and at its own expense, shall proceed to carry on such prospecting, exploration, and mining activity within said Sections as it shall consider prudent and advisable. On or before September 15th, 1963

Nothing given. Zero commitment. property agreement protection

March 15, 1963

NEL shall advise Geoex whether it elects to proceed under this agreement or terminate it, in which latter event NEL shall simultaneously surrender all of its rights hereunder.

(4) Geoex shall have no right or interest in any of the mining properties or interests so acquired by NEL, nor any right to participate with NEL in its prospecting, exploration, and mining activities within said Sections; and

(5) Upon request by NEL from time to time, and to the extent and on such terms of compensation as may hereafter be mutually agreed, Geoex shall offer to assist NEL, and NEL shall endeavor to utilize Geoex in preference to other qualified contractors, in connection with its negotiations for mining properties, its surveying, mapping, geological and geophysical work, and drilling within said Sections; and

(6) In the event NEL desires, prior to the time for exercise by Geoex of its right described below in paragraph 7, to abandon or dispose of any one or more, or all of the properties or interests therein which it has previously acquired within said Sections, NEL shall first designate and offer to transfer and assign such properties or interests to Geoex, and Geoex shall have ten days following receipt of such offer within which to elect to accept such transfer and assignment. NEL shall do all things necessary to effect all such transfers and assignments without cost to Geoex promptly following its request therefor, but if any such offer be not accepted within the said ten-day period, NEL shall be free to abandon or otherwise dispose of the property or interest so designated, as it shall see fit. NEL shall endeavor to maintain the good standing of such properties and property interests acquired by it, but shall incur no liability or obligation to Geoex if an event of default

March 15, 1963

or forfeiture shall occur with respect thereto before such properties or interests shall be offered for transfer and assignment to Geoex as aforesaid; and

(7) In the event NEL elects to proceed under its option, as provided in paragraph 3 hereof, it shall have the unrestricted right to continue prospecting, exploration and mining activity within the said Sections; provided that upon the expiration of two years following September 15th, 1963, Geoex shall have the right to call for and receive from NEL the cash sum of $15,000, as advance royalty, together with a royalty assignment of three per cent of net smelter returns from minerals produced from the properties and interests then held by NEL within said Sections, said royalty to be subject to a cumulative maximum payment of $150,000. As an alternative to, and in lieu of said payment and royalty assignment, NEL may, at its option, execute and deliver to Geoex a general assignment of its right, title and interest in any and all of said mining properties and interests that may then be owned by NEL within the said Sections.

(8) That NEL may associate itself hereunder in joint venture with one or more other parties, in which event the provisions hereof shall inure and be binding upon such joint venture with equal effect as herein provided with respect to NEL.

When countersigned by you, this letter will evidence our complete understanding.

Very truly yours,

NEWMONT EXPLORATION LIMITED

By R. B. Fulton

R. B. Fulton
Vice President

NEWMONT EXPLORATION LIMITED
300 PARK AVENUE (19th Floor)
NEW YORK 22, N. Y.

March 15, 1963

Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona

Gentlemen:

Reference is made to that certain letter agreement between the parties hereto, dated February 13, 1959, which agreement is hereby superseded by mutual consent of the said parties by the terms, conditions and covenants hereinafter set forth, to wit:

(1) Heinrichs Geoexploration Company (Geoex) has heretofore disclosed certain information concerning magnetic anomalies to Newmont Exploration Limited (NEL) situated in Sections 22-29, and 34-36, Tnp 14S, Rge 10E, Pima County, Arizona; and

(2) Geoex has undertaken and will continue to undertake not to divulge the existence or location of the said anomalies to any other party, nor engage directly or indirectly in any exploration, land acquisition, or mining activity within the said Sections prior to September 15th, 1965, unless sooner relieved from further obligations hereunder; and

(3) Geoex grants to NEL an option to further examine and explore the said Sections during a continuous six months period, commencing on the date hereof. Subject to its right to suspend all further activity and operations hereunder at any time and in such event to make an assignment of any interests acquired within said Sections to Geoex as provided in paragraph 6, NEL, with diligence, reasonable continuity, and at its own expense, shall proceed to carry on such prospecting, exploration, and mining activity within said Sections as it shall consider prudent and advisable. On or before September 15th, 1963

March 15, 1963

NEL shall advise Geoex whether it elects to proceed under this agreement or terminate it, in which latter event NEL shall simultaneously surrender all of its rights hereunder.

(4) Geoex shall have no right or interest in any of the mining properties or interests so acquired by NEL, nor any right to participate with NEL in its prospecting, exploration, and mining activities within said Sections; and

(5) Upon request by NEL from time to time, and to the extent and on such terms of compensation as may hereafter be mutually agreed, Geoex shall offer to assist NEL, and NEL shall endeavor to utilize Geoex in preference to other qualified contractors, in connection with its negotiations for mining properties, its surveying, mapping, geological and geophysical work, and drilling within said Sections; and

(6) In the event NEL desires, prior to the time for exercise by Geoex of its right described below in paragraph 7, to abandon or dispose of any one or more, or all of the properties or interests therein which it has previously acquired within said Sections, NEL shall first designate and offer to transfer and assign such properties or interests to Geoex, and Geoex shall have ten days following receipt of such offer within which to elect to accept such transfer and assignment. NEL shall do all things necessary to effect all such transfers and assignments without cost to Geoex promptly following its request therefor, but if any such offer be not accepted within the said ten-day period, NEL shall be free to abandon or otherwise dispose of the property or interest so designated, as it shall see fit. NEL shall endeavor to maintain the good standing of such properties and property interests acquired by it, but shall incur no liability or obligation to Geoex if an event of default

March 15, 1963

or forfeiture shall occur with respect thereto before such properties or interests shall be offered for transfer and assignment to Geoex as aforesaid; and

(7) In the event NEL elects to proceed under its option, as provided in paragraph 3 hereof, it shall have the unrestricted right to continue prospecting, exploration and mining activity within the said Sections; provided that upon the expiration of two years following September 15th, 1963, Geoex shall have the right to call for and receive from NEL the cash sum of $15,000, as advance royalty, together with a royalty assignment of three per cent of net smelter returns from minerals produced from the properties and interests then held by NEL within said Sections, said royalty to be subject to a cumulative maximum payment of $150,000. As an alternative to, and in lieu of said payment and royalty assignment, NEL may, at its option, execute and deliver to Geoex a general assignment of its right, title and interest in any and all of said mining properties and interests that may then be owned by NEL within the said Sections.

(8) That NEL may associate itself hereunder in joint venture with one or more other parties, in which event the provisions hereof shall inure and be binding upon such joint venture with equal effect as herein provided with respect to NEL.

When countersigned by you, this letter will evidence our complete understanding.

Very truly yours,

NEWMONT EXPLORATION LIMITED

By R. B. Fulton
R. B. Fulton
Vice President

Confirmed and agreed:
HEINRICHS GEOEXPLORATION COMPANY

By_____
President

Date:

2/20/63

Newmont - Bob Fulton in Toron & Called —
May start in about 1 month at R.D.

Arthur Brant will get in touch w/us
(this week?)

They will submit new draft agreement for our
Consideration

W.

① Ne[illegible]mont –

"Suggest – – – – –

write a complete understanding

(agreement) set forth –

② [illegible]

③

Verify soon

NEWMONT EXPLORATION LIMITED
OFFICE OF THE SECRETARY
300 PARK AVENUE
NEW YORK 22, N.Y.

FEB 1963 GEOEX

February 13, 1963

Mr. Walter E. Heinrichs, Jr.
Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona

Dear Walt:

This will acknowledge your letter of February 11. I think your statements having to do with our observance of our obligations under our agreement with you are not warranted, but I won't dispute your assessment of our accomplishments. Certainly we did what paragraph 3 says we must do - proceed with diligence and reasonable continuity "to negotiate for and to endeavor to acquire ..... properties and interests ....., on terms acceptable to Newmont Ex". In this effort, we and Cyprus jointly expended $8,369.38 over the period 1959 - April 30, 1962, and, as you know, there were concurrent negotiations with the Papagos and also subsequent efforts by some of us here to work out something with Donaldson. We have also, I believe, endeavored to utilize the services of Geoex on work both on and off the R.D. area in preference to other contractors and indeed instead of using our own people in Arizona in a couple of instances. What neither of us did, as we should have, was to call the passing of February 13, 1962 to the others' attention so that the agreement could be terminated or suitably extended to accommodate the respective interests and positions thereafter of both parties.

The current plans for evaluating these anomalies are modest ones, contemplating a couple of IP expanders over the area you previously drilled for Mex Co. and two or three on Mr. Donaldson's property under the aegis of his verbal OK. These results will have some calibration value and probably little more, but the work just might help to move things along towards working out something concrete with Donaldson after which a more comprehensive survey may result. It is planned to stake about twenty claims in Sections 34 and 35 as a matter of form. We shall be pleased to have you undertake this staking for us. Arthur Brant prefers to do the pulse work with NEL designed equipment, but is willing to discuss this.

In order to cover the eventualities we suggest the above work and what might follow be done under a six months option agreement with you, whereby NEL may quit on or before the expiration thereof without further obligation by either party, except that if NEL has acquired a property interest, it shall assign it to Geoex free of charge upon such termination. If, on the other hand, NEL wishes to continue after the six months period, the terms of paragraph 7 of the old agreement would apply appropriately updated and modified to limit the period prior to payment of the advance royalty to two years after the option period. Will you let us know fairly soon if this is satisfactory to you?

Our information on the mineral ownership in the SW 1/4 of Section 25 came via Don Bulmer from Phoenix Title and Trust Company and Donaldson confirmed their finding to Bob Searls over the phone the other day.

We don't have any basis for thinking the Papagos will modify their lease royalty terms. Hunting et al are apparently hoping they will, but Mr. Stebbins to date can show no concrete evidence of this.

Very truly yours,

R. B. Fulton

R. B. Fulton

RBF:uf

NEWMONT EXPLORATION LIMITED
OFFICE OF THE SECRETARY
300 PARK AVENUE
NEW YORK 22, N.Y.

FEB 1963
GEOEX

January 30, 1963

Mr. Walter E. Heinrichs, Jr.
President and General Manager
Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona

Dear Walt:

This will acknowledge your letter of January 22nd, reminding us of our undertakings under our agreement with your company with respect to the R. D. Anomaly and calling on us to declare our intentions hence forward. Your restraint and present feelings are appreciated and understood, by us at least, if not by the property owners involved. It appears to me, however, that your complaint arises from an omission in our agreement rather than one by ourselves because it does not cover what has actually occurred - namely that no land acquisitions whatever have been made by us in the specified sections during the period stipulated in paragraph 7 of our agreement.

I think you know the extent of our efforts with both Mr. Donaldson and the Papagos Tribal Council to effect such acquisitions and of course the results to date. We are not actively pursuing either of these at the moment because of this experience and I think, as a consequence, we should properly relinquish all the exclusive rights to the information you previously gave to us under our agreement and consider this document outdated. As a corollary of this, we also should recognize your position as the finder in the event we were to acquire properties in the area sometime in the future. I might add this seems not altogether impossible, in the case of Donaldson's ownership anyway, for a couple of reasons:

1. He initiated a reopening of negotiations the other day with Bob Searls and we are now awaiting a look at his terms.

2. He does not own the minerals in at least part of the anomalous area lying outside the Reservation, i.e. in the SW 1/4 of Sec. 25.

Since inviting the New Jersey Zinc Company to review the Roskruge country with us as a part of our Joint Venture with them in Arizona, there has been, as you know, some renewal of interest in the western anomaly in Tnp 14 S, Rge 10 E, previously tested by surface drilling by others. It is our present plan to restake a part of this area and do some pulse work there. You may have some feelings about this since the land involved falls within the sections enumerated in the agreement. (Somehow Range 11 rather than the intended Range 10 appears in the property description.) It is my understanding that you have considered this feature adequately tested already and of no further interest.

May we have your views on all of this?

Sincerely yours,

R. B. Fulton

R. B. Fulton

RBF:uf

cc: Mr. R.B. Searls

ROBERT J. SEARLS
300 PARK AVENUE
NEW YORK 22, N.Y.

July 6, 1962

JUL 1962
GEOEX

Mr. Walter E. Heinrichs, Jr.
Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona

Dear Walt:

Thank you for your note of July 3rd.

We gave Donaldson until July 1 to get his cards on the table. He hasn't made this move.

Cyprus have indicated they do not want to deal with the Papago Indians without first completing a deal with Donaldson. We don't agree.

Bob Fulton is planning to change our tactics when he returns next week. He will probably sever the Cyprus connection and put the project on a new footing which will entail an approach to the Indians in short order.

I will keep you informed.

Best wishes to you and Jean.

Sincerely,

Robert J. Searls

RJS:eb

NEWMONT MINING CORPORATION
300 PARK AVENUE
NEW YORK 22, N.Y.

APR 1962
GEOEX

April 9, 1962

Mr. Walter Heinrichs, Jr.
Heinrich Geoexploration Company
806-808 West Grant Road
Tuscon, Arizona

Dear Walt:

I just want to report that we are still talking with Donaldson. I saw him briefly on a rush trip through Tuscon on Saturday.

We are getting closer to arriving at terms to satisfy his requirements and the high valuation he puts on his real estate. We ought to know more about this by the end of this week.

Sorry I didn't have time to call you.

Best wishes,

Sincerely,

Bob

Robert J. Searls

RJS:eb

6/30/62 Dear Bob:

Very sorry to miss you on your rapid jaunts thru town. However I am at least glad I got to see you even if I didn't. Am also happy she reported you in reasonable fettle.

Lately, I have tried a time or two to reach Donaldson's feelings out, but he was always out of town. Also haven't heard anything lately from Cyprus.

Many thanks for the copy of Newmont's last annual report. I appreciate receiving these very much & hope someday to become a f

bonafide stockholder (so I can attend meetings to raise hell in general - for example like why you don't president yet or something).

We're busy as hell here - in fact have been all year so far - for a change. Think we may be getting some pretty good results with our I.P. gear.

Hope this finds you all fine.

Our Best to everyone,

Regards,

NEWMONT EXPLORATION LIMITED
OFFICE OF THE SECRETARY
300 PARK AVENUE
NEW YORK 22, N.Y.

RECEIVED APR 4 1959

March 30, 1959

Mr. E. Grover Heinrichs
Vice President & Field Manager
Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona

Dear Mr. Heinrichs:

This will acknowledge receipt of your report dated March 26th on the results of the property ownership investigation of a portion of the R-D anomaly area undertaken at our request. I note that all of the lands in secs 25, 26 and 35 are recorded as being owned, both surface and mineral, by Mr. John Donaldson of Tucson who has, as well, grazing rights on State Section 36. It is further noted the records do not show transfer of title in two instances. In the case of tract 3, however, your chain of title data indicate the deficient record of ownership of this tract by d'Autremont at the time of transferring it to Rancho Santa Elena Inc. was later corrected by the instrument dated 3/25/46. These gaps, in any event, can probably be safely overlooked at this stage and gone into more thoroughly later on, if warranted. Enclosed in payment for services rendered to date is our check in the amount of $248.00 per your statement.

We have submitted a prospecting permit-lease proposal to the Papago Tribe for its consideration but as yet have not received their reply. We shall advise you concerning additional work on this Project in due course.

I also wish to acknowledge and thank you for your letter of March 27th accompanied by the release on the Roskruge District property signed by Mr. Rubel in behalf of Minerals Exploration Co.

Thank you for your cooperation.

Very truly yours,

R. B. Fulton

R. B. Fulton

RBF:mmp
cc: R. J. Searls

Enc.

NEWMONT EXPLORATION LIMITED
OFFICE OF THE SECRETARY
300 PARK AVENUE
NEW YORK 22, N.Y.

RECEIVED MAR 11 1959

March 9, 1959

Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona

Gentlemen:

This will acknowledge receipt of a countersigned copy of our letter of agreement dated February 13th, 1959 accompanied by the copies of Mr. Rubel's letter and the agreement between your company and Mexco. With reference to these latter documents, I am enclosing a memorandum from Mr. Grunow of our Legal Department which amplifies the intent of paragraph (1) of our agreement and offers language for the consideration of yourselves and Mexco specifically covering this point.

Having your assurance that we will eventually receive a more definitive letter from Mexco along the lines suggested and in order to not unduly delay its examination of the R.D. anomaly and surrounding areas, Newmont Exploration hereby requests the services of Geoex for the investigation of property ownerships, both surface and mineral, of lands adjoining a portion of the Papago Indian Reservation and more particularly described as follows:

- The E 1/2 of the E 1/2 of Sec. 26, Tnp 14S Rge 10 E; G & SR B & M;
- The N 1/2 of the E 1/2 of the E 1/2 of Sec. 35, Tnp 14 S Rge 10 E; G & SR B & M;
- The W 1/2 of the W 1/2; and the E 1/2 of the SW' 1/4 of Sec. 25, Tnp 14S, Rge 10E; G & SR B & M;
- The NW 1/4 of Sec. 36, Tnp 14S Rge 10E; G & SR B & M;

for which services Geoex shall be compensated on mutually agreeable terms. The aforesaid investigation to commence at your early convenience and to include an ownership synopsis and summary of the pertinent County records, and where indicated, a search of mineral ownerships having their origin in grants antedating U.S. sovereignty.

For its part, Newmont Exploration is agreeable to paying Geoex as full compensation for the above services a sum based on a rate of $10.00 per hour of investigative work;

provided that such work will not exceed four working days. In the event additional work beyond this four-day period is warranted, in the opinion of Geoex, it would agree to consult with Newmont Exploration prior to proceeding with the additional work and request its authorization therefor.

Please confirm your willingness to perform the services outlined and your terms for compensation therefor.

Very truly yours,

NEWMONT EXPLORATION LIMITED

R. B. Fulton

R. B. Fulton, Vice President

RBF:mmp

MEMORANDUM

TO: Mr. R. B. Fulton

RE: ROSKRUGE AREA, PIMA COUNTY, ARIZONA

I have reviewed the material furnished by Mr. Walter E. Heinrichs, Jr., consisting of the letter dated February 24, 1959, signed by Mr. Rubel, President of Minerals Exploration Company, and also the Letter Agreement dated January 31, 1959, between the latter company and Heinrichs Geo-Exploration Company, Walter E. Heinrichs, Jr., and E. Grover Heinrichs.

This material seems to indicate that Minerals Exploration Company has relinquished further interest in Sections 22-27, 34-36, T 14 S, R 11 E, Pima County, and that its files relating to such properties are included among those being transferred to Heinrichs Geo-Exploration Company. However, the material is not, in my opinion, sufficiently specific to respond to the requirement set forth in paragraph 1 of our letter dated February 13, 1959, which was accepted by Heinrichs Geo-Exploration Company on March 3rd.

I suggest, therefore, that you ask Mr. Heinrichs for a letter signed by Minerals Exploration Company, containing substantially the following:

"Heinrichs Geo-Exploration Company

Gentlemen:

This will confirm that Minerals Exploration Company is not presently interested in mineral properties in T 14 S, R 11 E, Pima County, Arizona, and that we have released you from any obligation with respect to properties and property interests formerly held by us within said Township.

We consent and agree that any material or maps in our files relating to our past efforts and mineral interests acquired within said Township, may be disclosed by you to third parties, without further obligation on your or their part to the undersigned.

Very truly yours,

MINERALS EXPLORATION COMPANY

By_____
A. C. Rubel
President "

R J.E.D.Grunow
March 6, 1959

Fulton of Newmont called re:
to Roskruge Area Land status
3/30/59.

Says negotiations are proceeding with Papagos on R.D. Area with a remote possibility of reducing the royalty.

Also stated that our services my be used shortly again. How ?

They may proceed with negotiations on Donaldson Mineral Rights.

Minerals Exploration Company

P. O. BOX 5671

TUCSON, ARIZONA

Union Oil Center
Los Angeles 17, California

March 11, 1959

Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona

Gentlemen:

This will confirm that Minerals Exploration Company is not presently interested in mineral properties in T 14 S, R 11 E, Pima County, Arizona, and that we have released you from any obligation with respect to properties and property interests formerly held by us within said township.

We consent and agree that any material or maps in our files relating to our past efforts and mineral interests acquired within said Township, may be disclosed by you to third parties, without further obligation on your or their part to the undersigned.

Very truly yours,

MINERALS EXPLORATION COMPANY

By: _____

A. C. Rubel, President

NEWMONT EXPLORATION LIMITED
OFFICE OF THE SECRETARY
300 PARK AVENUE
NEW YORK 22, N.Y.

RECEIVED FEB 21 1959

February 13, 1959

Heinrichs Geoexploration Company
P. O. Box 5871
Tucson, Arizona

Gentlemen:

You have voluntarily disclosed to Newmont Exploration Limited the existence and location of the magnetic anomalies indicated in red on your Magnetic Recon Survey chart designated "R. D. Area", and dated January 5, 1957. This will confirm our understanding and agreement as follows:

(1) That Geoex represents it has the right to disclose information concerning such anomalies, and undertakes to deliver promptly to Newmont Ex a letter signed by or on behalf of Mineral Exploration Company, a subsidiary of Union Oil Company, confirming that said Company has no further interest in Sections 22-27, 34-36, T 14 S, R 11 E, Pima County, Arizona, and consenting to the review by Newmont Ex of any of its files or maps that may be furnished by Geoex relating to work heretofore done or interests acquired within said Sections;

(2) That Geoex will not, prior to February 13, 1963, or until sooner released by Newmont Ex from further obligation hereunder, divulge the existence or location of said anomalies to any other party, nor engage directly or indirectly in any exploration, land acquisition, or mining activity within said nine Sections;

(3) That subject to its right to suspend all further activity and operations hereunder at any time and in such event to make an assignment of its interests acquired within said Sections [illegible] as provided in paragraph [illegible], Newmont Ex, [illegible] reasonable [illegible], and at its own expense, shall proceed to secure information [illegible] the ownership of properties on the [illegible] of said anomalies, to negotiate for and to endeavor to [illegible] properties and information therein [illegible] terms and conditions acceptable to Newmont Ex, and [illegible]

February 13, 195[illegible]

carry on such prospecting, exploration, and mining activity within said Sections as it shall consider prudent and advisable;

(4) That Geoex shall have no right or interest in any of the mining properties or interests so acquired by Newmont Ex, nor any right to participate with Newmont Ex in its prospecting, exploration, and mining activities within said Sections;

(5) That upon request by Newmont Ex from time to time, and to the extent and on such terms of compensation as may hereafter be mutually agreed, Geoex shall offer to assist Newmont Ex, and Newmont Ex shall endeavor to utilize Geoex in preference to other qualified contractors, in connection with its negotiations for mining properties, its surveying, mapping, geological and geophysical work, and drilling within said Sections;

(6) That in the event Newmont Ex desires, prior to the time for exercise by Geoex of its right described below in paragraph 7, to abandon or dispose of any one or more, or all of the properties or interests therein which it has previously acquired within said Sections, Newmont Ex shall first designate and offer to transfer and assign such properties or interests to Geoex, and Geoex shall have ten days following receipt of such offer within which to elect to accept such transfer and assignment. Newmont Ex shall do all things necessary to effect all such transfers and assignments without cost to Geoex promptly following its request therefor, but if any such offer is not accepted within the said ten day period, Newmont Ex shall be free to abandon or otherwise dispose of the property or interest so designated, as it shall see fit. Newmont Ex shall endeavor to maintain the good standing of such properties and property interests acquired by it, but shall incur no liability or obligation to Geoex if an event of default or forfeit [illegible] shall occur with respect [illegible] properties or interests shall be offered to transfer and assignment to Geoex as [illegible]

February 19[illegible]

Heinrichs Geoex [illegible] Page Three

That Newmont Ex and Geoex shall endeavor to agree and specify in writing the date [illegible] which the land acquisitions within said Sections are substantially completed. Upon the expiration of [illegible] months following said date, but not later than February 13, 1962, Geoex shall, within ten days thereafter, have the right to [illegible] for and receive from Newmont Ex the [illegible] of $15,000, as advance royalty. [illegible] royalty assignment of [illegible] smelter returns from [illegible] the properties and [illegible] Newmont Ex within said [illegible] to be subject to a cumulative maximum payment of $[illegible]. As an alternative to, and in lieu of said payment and royalty assignment, Newmont Ex may, at its option, execute and deliver to Geoex a general assignment of its right, title and interest in any and all of said mining properties and interests [illegible] be owned by Newmont [illegible]

That Newmont Ex may associate itself hereunder in joint venture with one or more other parties, in which event the provisions hereof shall inure and be binding upon such joint venture with equal effect as herein provided with respect to Newmont Ex.

When countersigned by you, this letter will evidence our complete understanding.

Very truly yours,

NEWMONT EXPLORATION LIMITED

By R. B. Pulton

R. B. Pulton
Vice President

R

Confirmed as agreed: 3/3/59

[illegible]

By [illegible]

NEWMONT EXPLORATION LIMITED
OFFICE OF THE SECRETARY
300 PARK AVENUE
NEW YORK 22, N.Y.

RECEIVED FEB 21 1959

February 13, 1959

Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona

Gentlemen:

You have voluntarily disclosed to Newmont Exploration Limited the existence and location of the magnetic anomalies indicated in red on your Magnetic Recon Survey chart designated "R. D. Area", and dated January 5, 1957. This will confirm our understanding and agreement as follows:

(1) That Geoex represents it has the right to disclose information concerning such anomalies, and undertakes to deliver promptly to Newmont Ex a letter signed by or on behalf of Mineral Exploration Company, a subsidiary of Union Oil Company, confirming that said Company has no further interest in Sections 22-27, 34-36, T 14 S, R 11 E, Pima County, Arizona, and consenting to the review by Newmont Ex of any of its files or maps that may be furnished by Geoex relating to work heretofore done or interests acquired within said Sections;

(2) That Geoex will not, prior to February 13, 1963, or until sooner released by Newmont Ex from further obligation hereunder, divulge the existence or location of said anomalies to any other party, nor engage directly or indirectly in any exploration, land acquisition, or mining activity within said nine Sections;

(3) That subject to its right to suspend all further activity and operations hereunder at any time and in such event to make an assignment of any interests acquired within said Sections to Geoex as provided in paragraph 6, Newmont Ex, with diligence, reasonable continuity, and at its own expense, shall proceed to secure information concerning the ownership of properties in the vicinity of said anomalies, to negotiate for and to endeavor to acquire such properties and interests therein, on terms and conditions acceptable to Newmont Ex, and thereafter to

February 13, 1959

carry on such prospecting, exploration, and mining activity within said Sections as it shall consider prudent and advisable;

(4) That Geoex shall have no right or interest in any of the mining properties or interests so acquired by Newmont Ex, nor any right to participate with Newmont Ex in its prospecting, exploration, and mining activities within said Sections;

(5) That upon request by Newmont Ex from time to time, and to the extent and on such terms of compensation as may hereafter be mutually agreed, Geoex shall offer to assist Newmont Ex, and Newmont Ex shall endeavor to utilize Geoex in preference to other qualified contractors, in connection with its negotiations for mining properties, its surveying, mapping, geological and geophysical work, and drilling within said Sections;

(6) That in the event Newmont Ex desires, prior to the time for exercise by Geoex of its right described below in paragraph 7, to abandon or dispose of any one or more, or all of the properties or interests therein which it has previously acquired within said Sections, Newmont Ex shall first designate and offer to transfer and assign such properties or interests to Geoex, and Geoex shall have ten days following receipt of such offer within which to elect to accept such transfer and assignment. Newmont Ex shall do all things necessary to effect all such transfers and assignments without cost to Geoex promptly following its request therefor, but if any such offer be not accepted within the said ten-day period, Newmont Ex shall be free to abandon or otherwise dispose of the property or interest so designated, as it shall see fit. Newmont Ex shall endeavor to maintain the good standing of such properties and property interests acquired by it, but shall incur no liability or obligation to Geoex if an event of default or forfeiture shall occur with respect thereto before such properties or interests shall be offered for transfer and assignment to Geoex as aforesaid;

February 13, 1959

(7) That Newmont Ex and Geoex shall endeavor to agree and specify in writing the date as of which the land acquisitions within said Sections are substantially completed. Upon the expiration of 18 months following said date, but not later than February 13, 1962, Geoex shall, within ten days thereafter, have the right to call for and receive from Newmont Ex the cash sum of $15,000, as advance royalty, together with a royalty assignment of three per cent of net smelter returns from minerals produced from the properties and interests then held by Newmont Ex within said Sections, said royalty to be subject to a cumulative maximum payment of $150,000. As an alternative to, and in lieu of said payment and royalty assignment, Newmont Ex may, at its option, execute and deliver to Geoex a general assignment of its right, title and interest in any and all of said mining properties and interests that may then be owned by Newmont Ex within the said Sections.

(8) That Newmont Ex may associate itself hereunder in joint venture with one or more other parties, in which event the provisions hereof shall inure and be binding upon such joint venture with equal effect as herein provided with respect to Newmont Ex.

When countersigned by you, this letter will evidence our complete understanding.

Very truly yours,

NEWMONT EXPLORATION LIMITED

By R. B. Fulton
R. B. Fulton
Vice President

R

Confirmed and agreed: 3/3/59

HEINRICHS GEOEXPLORATION COMPANY

By W. E. Heinrichs Jr.
W. E. HEINRICHS, JR President

3/5/59

Vic says we might should record a "Memo of Newmont agreement" as evidence to 3rd parties to protect us from them "taking from Newmont without notice" and thereby not being liable to the conditions of our agreement with Newmont.

WEA.

ROBERT J. SEARLS
300 PARK AVENUE
NEW YORK 22, N.Y.

RECEIVED FEB 5 1959

February 3, 1959

AIR MAIL

Mr. E. Grover Heinrichs
Heinrichs Geoexploration Company
P. O. Box 5671
Tucson, Arizona

Dear Grover:

Thank you for your letter of January 29, 1959, with the accompanying data on the RD area, and for your proposal to explore this anomaly for Newmont Mining Corporation. I have taken the liberty of withholding this proposal from the officials here hoping to first clear up some points and make some suggestions.

First of all, I think it would be to your advantage if you accompanied your proposal with a statement making clear what your stand would be in the event Newmont did not accept this proposal. In other words, I think you should protect yourselves by asking, if Newmont decides not to accept your terms, that Newmont so state with the assurance they will not either disclose the location or prospect the area for a period of three or six months after rejecting your offer. At the same time, Newmont must be released from Geoex in the event it should, say two years from now, wish to independently explore this area.

A second suggestion would be that Geoex take preliminary measures to locate or tie up some of the critical ground and assure the property is available to Newmont. You will then be in a position to negotiate on the basis of offering material contribution to the venture. My experience in consulting was that people don't pay much for ideas and information, but sometimes they will pay more than its worth for a couple of well placed mining claims.

A third point is a suggestion that Geoex offer to take a 5% carried interest up to say the first $200,000.00 expenditure, and either carry their interest or suffer dilution thereafter. In return for this interest Geoex would:

(1) Complete according to mutually agreeable terms, the negotiations for the land acquisition at cost;

(2) Perform services according to mutually agreeable terms along the lines of items (2) and (3) of your proposal

If at all possible, I would like to get a modified proposal before Newmont prior to my leaving for San Francisco, February 15th. This would give Walt and me a grounds for final discussion when I see him in San Francisco. Also it would be helpful if I could arrange to stop by Tucson on my return and briefly examine the property and the work "MEXCO" did nearby.

I personally hope that we will be able to work something out with you and Walt.

With very best wishes,

Sincerely,

Bob

Robert J. Searls

RJS:dl

October 29, 1963

Mr. Robert B. Fulton, Vice President
Newmont Exploration Limited
300 Park Avenue (19th Floor)
New York 22, N. Y.

Re: Roskruge Project
Option Agreement

Dear Bob:

Enclosed is your proposal with a few minor changes, which reflect our needs and desires.

Essentially we agree with the time element of two years and three months. This part is all right although in my discussions with Walt on this matter, six months was the only time factor originally considered between you.

You people will still have three months to explore for the $100 figure and will likely be able to evaluate in a reconnaissance fashion, the magnetic anomaly.

Naturally, we are disappointed that our I. P. crew will not be employed immediately, but trust it will continue to be considered. A comparison of your time domain results with our frequency equipment would provide a very definate and important technical advantage in a completely objective appraisal of the potential of the area as Dr. Brant has probably already mentioned.

Very truly yours,

HEINRICHS GEOEXPLORATION CO.

E. Grover Heinrichs
Vice President

EGH:jh

Enclosure

HEINRICHS GEOEXPLORATION COMPANY
MINERAL ENGINEERING CONSULTANTS AND CONTRACTORS
GEOPHYSICAL, GEOLOGICAL AND ECONOMIC APPRAISALS
TUCSON, ARIZONA, 85703

WALTER E. HEINRICHS, JR.
E. GROVER HEINRICHS

AREA CODE 602
PHONES: 622-4202, 623-6541
806-808 WEST GRANT ROAD
MAIL: P. O. BOX 5671

October 29, 1963

Mr. Robert B. Fulton, Vice President
Newmont Exploration Limited
300 Park Avenue (19th Floor)
New York 22, N. Y.

Re: Roskruge Project
Option Agreement

Dear Bob:

Enclosed is your proposal with a few minor changes, which reflect our needs and desires.

Essentially we agree with the time element of two years and three months. This part is all right although in my discussions with Walt on this matter, six months was the only time factor originally considered between you.

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Very truly yours,

HEINRICHS GEOEXPLORATION CO.

E. Grover Heinrichs
Vice President

EGH:jh

Enclosure

DOMESTIC SERVICE	
Check the class of service desired; otherwise this message will be sent as a fast telegram	
TELEGRAM	
DAY LETTER	
NIGHT LETTER	

$ S E

WESTERN UNION
TELEGRAM

W. P. MARSHALL, PRESIDENT

1207 (4-55)

INTERNATIONAL SERVICE	
Check the class of service desired; otherwise the message will be sent at the full rate	
FULL RATE	
LETTER TELEGRAM	
SHORE-SHIP	

NO. WDS.-CL. OF SVC.	PD. OR COLL.	CASH NO.	CHARGE TO THE ACCOUNT OF	TIME FILED
	PAID		GEOEX-NEWMONT	3:30 p.m.

Send the following message, subject to the terms on back hereof, which are hereby agreed to

To Robert B. Fulton, Vice President October 28 1963

Street and No. Newmont Exploration Limited

Care of or Apt. No. 300 Park Avenue (19th Floor) *Place* New York 22, N. Y.

OPTION AGREEMENT ACCEPTABLE WITH FOLLOWING EXCEPTIONS:

1. $300 PER QUARTER IN PLACE OF $250 PER QUARTER
   $100 FOR FIRST QUARTER O.K.
2. LAST SENTENCE PAGE ONE CHANGED TO "IF NEWMONT ELECTS TO CONTINUE, NEWMONE EXPLORATION WILL PAY THE SUM OF $15,000 AS ADVANCE ROYALTY, ETC...

WE WILL AGREE WITH TIME PERIOD OF TWO YEARS AND THREE MONTHS.

Copy

E. GROVER HEINRICHS

Senders's name and address (For reference)

Sender's telephone number

April 12, 1963

Mr. R. B. Fulton
Newmont Exploration Limited
300 Park Avenue
New York 22, New York

Dear Bob:

Somehow it just doesn't seem to make sense for us to unilaterally tie ourselves up on the area for potentially two and a half years for perhaps $500.00 in six months and I am sorry this is contrary to the discussion in our office, but, after further thought and seeing the fresh page 3 which accompanied your letter of 26 March this seems to be the only reasonable conclusion we can come to.

$500.00 cash for six months or $100.00 per month indefinitely is about the only reasonable incentive to us that I can think of under present circumstances. At the moment I am out of ideas if this is unreasonable from your standpoint and you have no other alternative suggestions.

Sincerely,

Walter E. Heinrichs, Jr.

WEH:jh

bcc: V1HH. Verity

COPY

W. E. HEINRICHS, JR
P. O. Box 5671
Tucson, Arizona
Phone MAin 2-4202

4/6/63

Vic:

Attached is redo page 3 of proposed Vermont agreement for your files. When convenient let me (us) know your thoughts. I am personally dubious -

WEH.

3/19/63

[illegible]

625

15,000 625

144

60

48

120

24

5

120

24

6

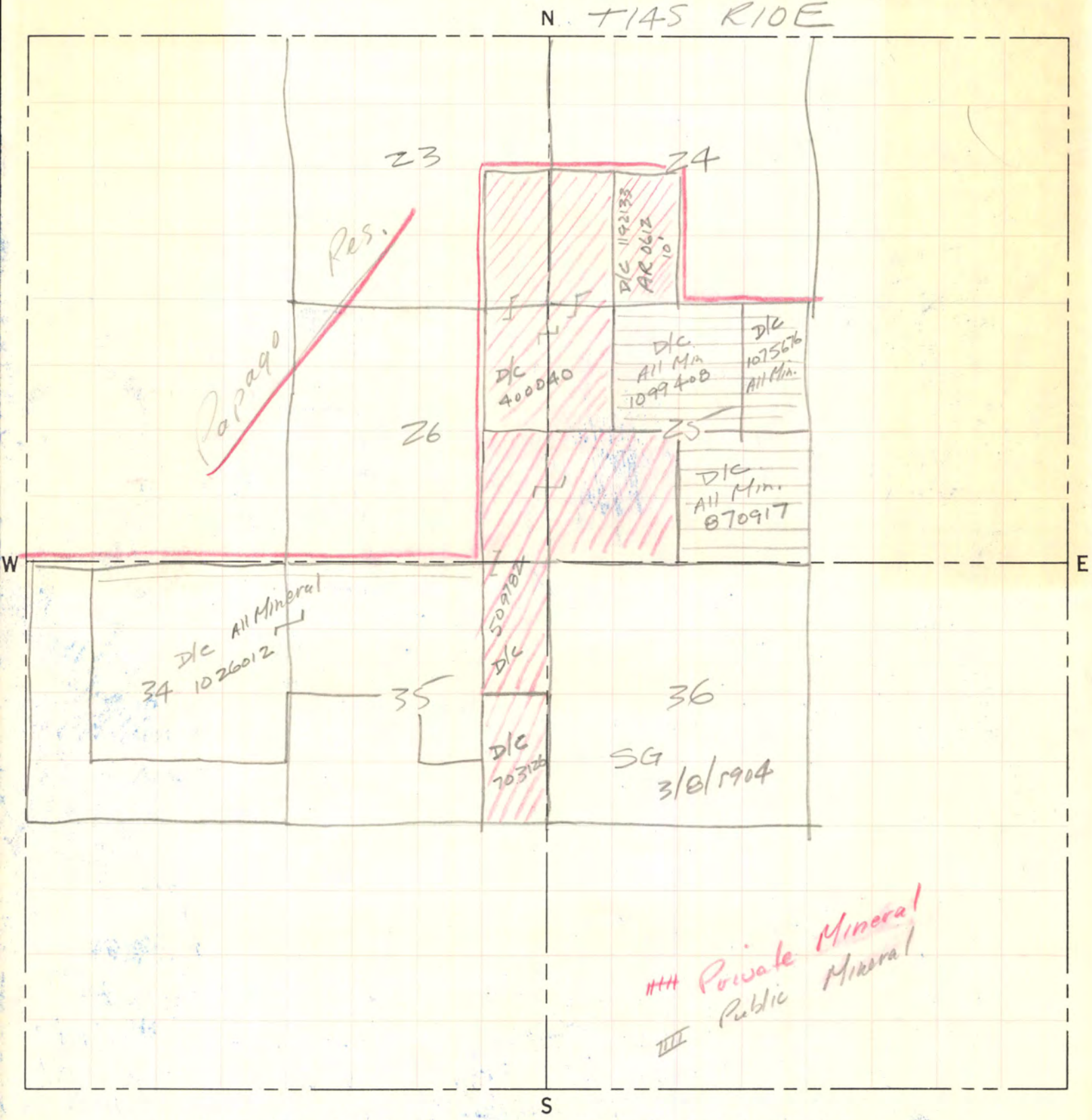
144

John Donaldson

AX 82443

RD AREA

SCALE FOR SECTION, 660 Ft.=1 Inch. { Each side large blue squares = 20 chains, 80 rods, 1320 feet; area of square 40 acres.
Each side small red squares = 5 chains, 20 rods, 330 feet; area of square 2½ acres.



SCALE FOR QUARTER SECTION, 330 Ft.=1 Inch. { Each side large blue squares = 10 chains, 40 rods, 660 feet; area of square 10 acres.
Each side small red squares = 2½ chains, 10 rods, 165 feet; area of square .625 of 1 acre.

PRONTO LAND MEASURE 660 - 330 MAP SHEET

PRONTO LAND MEASURE

Copyright, 1950, James Hamilton Adair, Flint, Michigan

R-D Area

SCALE FOR SECTION, 660 Ft.=1 Inch. { Each side large blue squares = 20 chains, 80 rods, 1320 feet; area of square 40 acres.
Each side small red squares = 5 chains, 20 rods, 330 feet; area of square 2½ acres.

N T14S R10E

W E

AR 030048 Apln HE

4 d/c all min.

3

2 SG 3/8/1904

1

9

10

11

Wild Life research 5/31/62 Ariz. Son. Desert Museum

12

AR 031778 Rec & P.P. BLM Motion

Papago Res

S

SCALE FOR QUARTER SECTION, 330 Ft.=1 Inch. { Each side large blue squares = 10 chains, 40 rods, 660 feet; area of square 10 acres.
Each side small red squares = 2½ chains, 10 rods, 165 feet; area of square .625 of 1 acre.

PRONTO LAND MEASURE 660 - 330 MAP SHEET

PRONTO LAND MEASURE

Copyright, 1950, James Hamilton Adair, Flint, Michigan

2/21/63

Lookup deeds D'Autremont grantee. &
Felix Valdez Grantor.

B254-499
Sept 24, 1942

Felix Valdez to D'Autremont — & 261 - 167
~~260 - 637~~
~~" " "~~

both together.

See above & B260 p637
D'Autremont. probably got minerals & all to parcels 1, 2 & 3
Rancho Santa Elena Inc. also probably got all minerals (B300 - p239)
Seems doubtful
Donaldson has mineral on parcel #1 but not #2 & 3
~~[illegible]~~
Therefore check Rancho Santa Elena conveyances 1st for any reservations on #1, 2, or 3.

then Locke's next. & Kai's last?

See Newmont Job file. Land status
[illegible]

R.O.

2/21/63

Sec 25 } SE 1/4 open.
SW 1/4 } NE " "
E 1/2 NW 1/4 "

Private mineral.

Rest of Sec 26 out of reservation & 23 & 24

W 1/2 NW 1/4 of 25 all private

what law or statute

Original patent issued.

Sec. 25 — E 1/2 E 1/2 private mineral
Elmadson (?)

Sec. 36 State lease.

Grover call to Wolt.

February 20, 1963

Mr. R. B. Fulton, Vice President
Newmont Exploration Limited
300 Park Avenue
New York 22, N. Y.

Dear Bob:

My being out of town a couple of days delayed response to your 13 February letter.

I think the suggestions you make may be essentially satisfactory if we understand them correctly. In order to be sure they are clear to us and that we agree, how about having a complete new understanding drafted and submitted for us to look over?

We don't know what to think about the mineral ownership status of SW¼ of Sec. 25, T 14 S, R 10 E (Donaldson surface). Your information sounds correct and ours could be in error, even though it appears conclusive. We will look into this further if we get a chance.

You may be interested that ASARCo's Casa Grande thing looks optimistic to me--very small (one acre) but lively looking gossan outcrop of leached granite porphyry, surrounded by a sea of apparently deep alluvium. They have just resumed drilling with three Sprague & Henwood rotaries on full shifts. I saw it for the first time yesterday.

Very truly yours,

WEH:jh

Walter E. Heinrichs, Jr.

bcc: V. H. Verity
E. G. Heinrichs

Memo from
WALTER E. HEINRICHS, JR.

2/15/63

Vic (13 Feb 1963 letter from Fulton of Vermont)

Any Comment?

W.

Machine copy to V.H.V. 2-15-63 - JT.

HAWLEY & HAWLEY
ASSAYERS AND CHEMISTS, INC.
DOUGLAS, ARIZONA

February 11, 1963

Newmont Exploration Limited
300 Park Avenue
New York 22, New York

Re: Heinrichs Geoexploration Co.
Agreement dated 13 Feb. 1959
Roskruge District, Pima County
Arizona

Attn: Mr. Robert B. Fulton, Vice President

Dear Bob:

Thanks for your letter of 30 January 1963.

We are glad you recognize our situation as we do yours--including the factor of property owner reluctance. However, although we might concede to a degree that both of us may have underestimated the problems, or the time required for solution, or over-estimated what you might or could do, we do not concede any omission on the agreement, or change in its basic principles and mutual intent.

Obviously, it was exactly in specific anticipation of the property problem that we provided for a long term of 18 months plus 18 months additional grace period, then a cash payment protection to us or an escape clause for you. Thus, it is clear that in 1959 we both bargained in good faith and figured at the time, regardless of property status, that a mutually fair and ample "shoot, give up the musket, or continue shooting" condition has been established.

Meanwhile, for the three original years plus effectively one more or now a total of four years, you have had sole and exclusive rights to our data and the area and our full cooperation and assistance. During this time your interest continued and the situation provided the potential related to the successful enlisting of interest and aid of two joint venture parties: first, Cyprus Mining Company and now currently The New Jersey Zinc Company.

Originally, we both agreed it probably would all have been worth the equivalent of about $5,000 per year within three years, or you would have easily made a determination to abandon. Now at four years, with still an active interest in the area you have done neither, but you suggest abandoning our agreement, and recognizing a permanent (?) finders fee right. This, we submit is not really in the best interest of any parties concerned. Certainly the present instrument could have been phrased differently but, in our opinion, matters will be most properly served for all concerned by extending the present agreement and re-negotiation for more specific new terms based on the principle already clearly established, and on present ideas, conditions and the mutual enlightenment since accrued by both of us.

We would assume that our contract services should and are being at least considered for the contemplated staking and pulse work in conjunction with the New Jersey Zinc Company according to Article 5 of the agreement. Furthermore, we feel new terms should include and generally provide for payment of specific amounts on specific dates as under Article 7.

As far as we are concerned, regardless of past efforts, nothing within the area of our agreement was necessarily adequately tested and that is why you were given all of our data and why the area is so designated. The only relative point here is merely that portions of the area have had some testing, or more testing than others.

We will be interested in hearing more about Donaldson's offers, and contrary to your letter, but what you may have intended to say, our records show he does own mineral rights in SW¼ Sec. 25. Incidently, do the rash of recently announced Indian lands exploration activity suggest new and better opportunities exist now than before?

Sincerely,

Walter E. Heinrichs, Jr.

WEH:jh
cc: V. H. Verity

January 22, 1963

Newmont Exploration Limited
300 Park Avenue
New York 22, New York

Re: Heinrichs Geoexploration Co.
Agreement dated 13 Feb. 1959
Roskruge District, Pima County
Arizona

Attn: Mr. Robert B. Fulton, Vice President

Dear Bob:

Your attention is invited to the above reference and inquiry made regarding your current intentions.

At the time of executing the agreement, you will recall our mutual intent was for a long period with reasonable time incentive and protection which ended up being three years and $15,000.00. Since we understand and appreciate the situation, and are fully aware of the problems and your endeavors to date, we do not wish to be unreasonable. On the other hand, the time will soon be four years this coming 13 February 1963 which, I am sure you will agree, is really quite a while even under these circumstances. More over, in as much as we have continued our good faith cooperation in what we believe has been in your most effective best interest, we now appeal to your sense of fair play in offering how we may best proceed from here.

We will look forward to your early response.

Sincerely yours,

HEINRICHS GEOEXPLORATION CO.

Walter E. Heinrichs, Jr.
President & General Manager

WEH:jh

bcc: V. H. Verity

MA-3-6541

LONG DISTANCE PHONE CALL REPORT

Request of Mr. _____

Date 1/21/63

Number Called PLaza 1-3060
Exchange Number

Time Requested _____ A. M. P. M.

Individual Bobs Fulton or Seals.

KIND OF SERVICE DESIRED

☐ Station to Station ☒ Person to Person

Firm Newmont.

Time Called 10:10 A. M. ~~P. M.~~

Street Address _____

Time Connected 10:55 A. M. ~~P. M.~~

City New York City State New York.

Time Off 2:03 A. M. ~~P. M.~~

Remarks: R.D. agreement of 13 Feb 1959

Minutes Elapsed Time 8

Contact Bulmer re: Fulton in town etc.

CHARGES: $ 7.67

Phone Company Verification of Charge Given by _____

Switchboard Operator's Notations

Sorry couldn't discuss Trend thing

☒ **Company Business**
☐ **Personal Call**

Charge to R.D. - Newmont. ? A/C No. _____

Signed _____
Switchboard Operator

The **UTILITY** Line Form 39A

Bob Seals. — called Vermont. 1/21/63

John Donaldson called is more serious? is submitting writing?

Contact

Don Bulmer re Foulton etc.

W.

July 3, 1962

Mr. Robert J. Searls
Newmont Mining Corporation
200 Park Avenue
New York 22, N. Y.

Dear Bob,

Very sorry to have missed you on your rapid jaunts through town. However, I am at least glad Jean got to see you even if I didn't. I am also happy she reports you in good fettle!

Lately, I have tried a time or two to reach Donaldson and feel him out, but he was always out of town. Haven't heard anything from Cyprus lately, either.

Many thanks for the copy of Newmont's last annual report. I appreciate receiving these very much and hope someday to become a bonafide stock holder (so I can attend meetings and raise hell in general--for example like why you aren't president yet or something!)

We are busy as hell here--in fact have been all year so far--for a change. Think we may be getting some pretty good results with our I. P. gear.

Hope this finds you all fine. Our best to everyone,

Sincere regards,

WEH:jh

Walter E. Heinrichs, Jr.

COPY

October 11, 1960

Mr. W. J. Rundle
Cyprus Mines Corporation
1200 Pacific Mutual Building
523 West 6th St.
Los Angeles, California.

Re: Roskruge Project - Vermont
Pima County, Ariz.

Dear Bill,

The present status of the Roskruge Project as I know it, is as follows:

Heinrichs Geoexploration Co. located both placer and lode claims in the open ground of Sec. 25, T 14 S, R 10 E, (East half and East half Northwest quarter, see enclosed map) in the name of Lewis Ettawageshik on July 25, 1960. We did not record any of the claims in the East half of Sec. 25, however we did record all the claims in the East half Northwest quarter. This was at Mr. Donaldson and Mr. Kelly's instructions via telephone. Sections 34 and 35 were inspected in August to see if any recent activity was evident by any third parties and no activity was noted.

Payment in full was received from Mr. Kelly, Aug. 29, 1960 for the above services.

The following information is of record in the Pima County Court House:

Claim Name			Location	Recorded date	Book	Page
Kwon Lun	9	Lode	Sec.25, T 14 2	Aug. 11, 1960	1654	173
"	10	"	R 10 E	"	"	174
"	11	"	"	"	"	175
"	12	"	"	"	"	176
"	13	"	"	"	"	177
"	14	"	"	"	"	178
Rex	9	Placer	"	"	"	179
"	10	"	"	"	"	180
"	11	"	"	"	"	181
"	12	"	"	"	"	182
"	13	"	"	"	"	183
"	14	"	"	"	"	184

To my knowledge no pit work has been done on any of

these claims, but of course this should be verified with Mr. Donaldson.

The enclosed map is for your file and information. If you have any questions please let me know.

Very truly yours,

E. Grover Heinrichs, Vice-Pres.
Heinrichs Geoexploration Co.

EGH:cp

cc: Donaldson
Kelly
Verity

File ✓

COPY

March 27, 1959

Mr. R. B. Fulton, Vice President
Newmont Exploration Limited
300 Park Avenue
New York 22, N. Y.

Dear Mr. Fulton:

Enclosed please find a letter signed by the President of Minerals Exploration Company authorizing the release of certain material and maps by Heinrichs Geoexploration Company to third parties, as per your request of March 9, 1959.

Very truly yours,

HEINRICHS GEOEXPLORATION CO.

by:_____

E. Grover Heinrichs
Vice President & Field Manager

egh/jh

HEINRICHS GEOEXPLORATION COMPANY
MINERAL ENGINEERING CONSULTANTS AND CONTRACTORS
GEOPHYSICAL, GEOLOGICAL AND ECONOMIC APPRAISALS
TUCSON, ARIZONA

WALTER E. HEINRICHS, JR.
E. GROVER HEINRICHS

PHONE: MAIN 2-4202
806-808 WEST GRANT ROAD
MAIL: P. O. BOX 5671

March 18, 1959

Mr. A. C. Rubel, President
Union Oil Company of California
Union Oil Center
Los Angeles 17, California

Dear Cy:

When I was in your office last month, Doug Gregg dictated a letter from you "To Whom it May Concern", to serve as evidence to third parties of our authority to disclose information contained in the local files of Minerals Exploration Company. While this should suffice in most general cases, it is apparently not adequate for a particular instance at hand.

We are presently undertaking some work for Newmont Exploration Company Limited in the vicinity of Mexco's abandoned Roskruge District project and in order to specifically clarify their position with Mexco, they have requested that we obtain appropriate evidence from you as per the attached letter which I have drafted on Mexco letterhead to facilitate your proposed execution. I am enclosing an original and three carbon copies and would appreciate your returning two copies to us.

Many thanks.

Sincerely,

Walter E. Heinrichs, Jr.

weh/jh

Encl: 4

March 18, 1959

Mr. R. B. Fulton
Vice President
Newmont Exploration Limited
300 Park Avenue
New York 22, New York

Dear Mr. Fulton:

We acknowledge receipt of your letter of March 9, 1959 and the attached copy of memorandum from Mr. Grunow of your legal department, dated March 6, 1959.

The wordeng suggested by Mr. Grunow for the consideration of Minerals Exploration Company to satisfy the intent and desire of paragraph (1) of your 13 February 1959 letter agreement with us, has been forewarded to Mr. Rubel, President of Mexco, and I see no reason why we should not receive his affirmative response within a reasonable time.

Accordingly we are proceeding directly with the mineral and surface ownership investigation of the lands described in detail in your letter. Initially it would seem that four days allotted for this work would be sufficient. If after we get further into the matter, it appears that additional work might be warranted, we will consult with you before proceeding beyond the allotted four days. In any event a summary report of the results will be submitted.

Your suggested compensation for the above services at the rate of $10.00 per hour is satisfactory.

Very truly yours,

HEINRICHS GEOEXPLORATION COMPANY

BY:_____

Walter E. Heinrichs, Jr.
President & General Manager

weh/jh

March 3, 1959

Newmont Exploration Limited
300 Park Avenue
New York 22, New York

Mr. R. B. Fulton, Vice President
Mr. Robert J. Searls

Gentlemen:

Returned herewith is executed copy of your letter agreement with us, dated 13 February 1959. Also, as evidence of our authority to deal with third parties, enclosed, are copies of agreement between Geoex. and Minerals and a " To Whom it may Concern letter" dated 24 February 1959, and signed by Mr. A. C. Rubel, President of Minerals. The "functions and services" referred to in the latter are enumerated in the agreement between Geoex and Minerals. Otherwise, Minerals property interests have all been abandoned, including those in the Roskruge district, and sign off letters related to permits and agreements in this area are on file in this office. Although this does not exactly fit the wording of your paragraph 1, we trust this evidence will satisfactorily suffice, or that you will accordingly advise us to the contrary.

We will await your word as to further action contemplated.

Very truly yours,

HEINRICHS GEOEXPLORATION COMPANY

by:_____
Walter E. Heinrichs, Jr.
President & General Manager

weh/jh

Encl: 3

bcc: Victor H. Verity

NEWMONT EXPLORATION LIMITED
OFFICE OF THE SECRETARY
300 PARK AVENUE
NEW YORK 22 N.Y.

RECEIVED FEB 21 1959

February 13, 1959

Heinrichs Geoexploration Company
P. O. Box [illegible]71
Tucson, Arizona

Gentlemen:

You have voluntarily disclosed to Newmont Exploration Limited the existence and location of the magnetic anomalies indicated in red on your Magnetic Recon Survey chart designated "R. D. Area", and dated January [illegible], 1957. This will confirm our understanding and agreement as follows:

(which is this? [illegible])

(1) That Geoex represents it has the right to disclose information concerning such anomalies, and undertakes to deliver promptly to Newmont Ex a letter signed by or on behalf of Mineral Exploration Company, a subsidiary of Union Oil Company, confirming that said Company has no further interest in Sections 22-27, 34-36, T 14 S, R 11 E, Pima County, Arizona, and consenting to the review by Newmont Ex of any of its files or maps that may be furnished by Geoex relating to work heretofore done or interests acquired within said Sections;

was this done? which letter? (27 March 1959 by Rubel)

(2) That Geoex will not, prior to February 13, 1959, [illegible] sooner released by Newmont Ex from further [illegible] hereunder, divulge the existence or location of said anomalies to any other party, nor engage directly or indirectly in any exploration, land acquisition, or mining activity within said nine Sections;

Sole & Exclusive rights to Newmont.

(Secs-22, 23, 24, 25, 26, 27, 34, 35, 36 T 14S R 10E) ????

(3) That subject to its right to suspend all further activity and operations hereunder at any time and in such event to make an assignment of [illegible] interests acquired within said Sections [illegible] provided in paragraph [illegible] Newmont Ex [illegible] reasonable contingency, and at its own expense, [illegible] proceed to secure information [illegible] the ownership of properties [illegible] said anomalies, to negotiate for [illegible] acquire [illegible] and [illegible] terms and conditions acceptable to [illegible]

February 13, 195[illegible]

Heinrichs Geoexploration Company - Page Two

carry on such prospecting, exploration, and mining activity within said Sections as it shall consider prudent and advisable;

(1) That Geoex shall have no right or interest in any of the mining properties or interests so acquired by Newmont Ex, and any right to participate with Newmont Ex in its prospecting, exploration, and mining activities within said Sections;

no rights to Geoex to ~~[illegible]~~

(2) That upon request by Newmont Ex from time to time, and to the extent and on such terms of compensation as may hereafter be mutually agreed, Geoex shall offer to assist Newmont Ex, and Newmont Ex shall endeavor to utilize Geoex in preference to other qualified contractors, in connection with its negotiations for mining properties, its surveying, mapping, geological and geophysical work, and drilling within said Sections;

Geoex Assist Newmont & " prefer use of Geoex for work done

(3) That in the event Newmont Ex desires, prior to the time for exercise by Geoex of its right described below in paragraph [illegible], to abandon or dispose of any one or more, or all of the properties or interests therein which it has previously acquired within said Sections, Newmont Ex shall first designate and offer to transfer and assign such properties or interests to Geoex, and Geoex shall have ten days following receipt of such offer within which to elect to accept such transfer and assignment. Newmont Ex shall do all things necessary to effect all such transfers and assignments without cost to Geoex promptly following its request therefor, but if any such offer be not accepted within the said ten day period, Newmont Ex shall be free to abandon or otherwise dispose of the property or interest so designated, as it shall see fit. Newmont Ex shall endeavor to maintain the good standing of such properties and property interests acquired by it, but shall incur no liability or obligation to Geoex if an event of default or forfeit are shall [illegible] with respect [illegible] properties or interests shall be offered transfer and assignment to Geoex as [illegible]

Property Assignment to Geoex if supplied by Newmont.

February 13, 1959

Heinrichs Geoexploration Company - Page Three

(7) That Newmont Ex and Geoex shall endeavor to agree and specify in writing the date as of which the land acquisitions within said Sections are substantially completed. Upon the expiration of 18 months following said date, but not later than February 13, 1962, Geoex shall, within ten days thereafter, have the right to call for and receive from Newmont Ex the cash sum of $15,000, as advance royalty, together with a royalty assignment of three per cent of net smelter returns from minerals produced from the properties and interests then held by Newmont Ex within said Sections, said royalty to be subject to a cumulative maximum payment of $[illegible]. As an alternative to, and in lieu of said payment and royalty assignment, Newmont Ex may, at its option, execute and deliver to Geoex a general assignment of its right, title and interest in any and all of said mining properties and interests that may then be owned by Newmont Ex within the said Sections.

Land acquisitions were completed, therefore no date for same, therefore no expiration of 18 mos.

(8) That Newmont Ex may associate itself hereunder in joint venture with one or more other parties, in which event the provisions hereof shall inure and be binding upon such joint venture with equal effect as herein provided with respect to Newmont Ex.

When countersigned by you, this letter will evidence our complete understanding.

Very truly yours,

NEWMONT EXPLORATION LIMITED

By R. B. Pelton
R. B. Pelton
Vice President

R

Confirmed and agreed: 3/3/59

HEINRICHS GEOEXPLORATION COMPANY

By N. M. Heinrichs Jr.
N. M. Heinrichs Jr., President

6 February 1959

Mr. Robert J. Searls
Newmont Mining Company
300 Park Avenue
New York 22, N. Y.

Dear Bob:

Many thanks for your prompt re=ly of 3 February to Grover's letter of 29 January, I will try to respond.

Your suggestions regarding our protection, etc., we sincerely appreciated, however, there is a complicating factor. The best part of the major magnetic anomaly is on Papago Indian Reservation land, and is therefore subject to public auction for mining rights on a 10% lease basis. This makes an exploration program, as well as any agreement we might negotiate, somewhat more involved. Some of the adjoining land, of considerable importance, is homestead mineral. We are presently investigating the possibilities and problems of tying this up on a workable deal, but have no answers as yet. Certain fringe ground, including that which Minerals Exploration Company worked, could probably be partially if not completely relocated but is of only percentage value now.

There are two means of dealing with the Indians:

1. Initially negotiate and/or submit a bid for an exclusive permit to prospect a defined area including a preferential right to lease in the event of commercial discovery.

2. Secure a non exclusive prospecting permit for $100.00 (plus a discreet mordito to the tribal district concerned, for expediting and good public relations) and take your chances later when brought up for bid.

Obviously the first method is more certain, however, it is also apt to be initially more costly and difficult to obtain although, it coulc be pointed out that the case in point area is about as far as one can get from any current production areas or past areas of much prospecting interest, for that matter, and as such, is an unusually risky proposition.

Our established relationship with the Papagoes is excellent, and therefore of some potential value regarding any future negotiations. Except for the all important factor of

financial stature, I believe we could compete favorably with anyone on dealing with the Indians.

Under these circumstances, all we can really offer, at the moment, is a magnetic anomaly and a file of data representing a previous investment in the ground of approximately $25,000.00. If Newmont is not interested, then of course, neither party would be bound. In this event, a small temporary measure of protection to us might be provided by merely referring to the area, for the time being, as lying about half way between Pima and Silverbell. In this case you could either return or destroy the index map#1 and leave only the R.D. coded map #2 in Newmont's files.

Meanwhile we might alter our proposal to a 3% carried interest up to $250,000.00, which would, in effect, be a buy-out price, and thereafter, a small token interest of say 1/2 of 1%, all more or less along the lines of the enclosed suggested sample agreement.

I realize that this is necessarily slightly vague and nebulous, but I see no other immediate alternative. You will be quite a magician if you can make this appeal to your Park Avenue, transplanted Wall Street cavern dweller associates. In defense, I can offer that this is not the most prideful proposition we might have up our sleeves, only the most immediately available at the moment. Along these lines, is there any more potential interest whatsoever in Courtland-Gleeson?

See you at San Francisco. We will be at the Sir. Francis Drake Hotel.

Best regards,

Sincerely,

HEINRICHS GEOEXPLORATION CO.

Walter E. Heinrichs, Jr.

weh/jh

Encl: 1

Newmont

MINERAL LEASE AND OPTION

I

This Mineral Lease and Option is made this _____ day of _____, 1959 by and between Heinrichs Geoexploration Company, of Tucson, Arizona, hereinafter designated as Lessor; and Newmont Exploration Company, Ltd., hereinafter designated as Lessee.

II

Lessor for and in the consideration of ~~One (1) dollar, receipt whereof~~ certain information & data receipt for which is hereby acknowledged, and other valuable considerations, does hereby grant unto the Lessee the exclusive right to enter on and to explore, drill, sample, test and survey in any manner deemed necessary or desirable, the following described property situated in or near the Roskruge Mining District, Pima County, Arizona:

Description of Property

Any and all purchased or leased lands or Federal mining claims included within the boundaries of sections ~~13, 14, 15, 16, 21, 22, 23, 24, 25, 26, 27, 28, 29, 33, 34, 35, 36, T 14 S, R 10 E, and sections 1, 2, 3, and 4, T 15 S, R 10 E, Gila and Salt River Base and Meridian~~, which are now or become at any time during the life of this agreement, owned or controlled by Lessee or Lessor, or Lessee's or Lessor's agents representatives.

III

The term of this Mineral Lease and Option shall be for fifteen (15) years from date of execution, unless sooner terminated under any of the provisions herein contained, or renewed or extended by common agreement of the parties hereto.

IV

Lessee may elect to purchase at anytime during the life of this Mineral Lease and Option agreement, in which case the purchase price for all of the Lessors rights of any nature in the above mentioned or described area of ~~sixteen (16)~~ sections shall be two hundred fifty thousand ($250,000.00) dollars. When this amount is fully paid, Lessor agrees to execute and deliver to Lessee a good and sufficient deed conveying title to Lessee free and clear of all liens and encumbrances.

V

On or before the end of the 18 month period following the signing of this agreement, the Lessee may elect to purchase all of the above mineral claims located by either party for two hundred fifty thousand dollars ($250,000.00) cash.

Payments may be made on the purchase price either as above provided or at any time following the date of this agreement at the rate of 85% of the unpaid balance at the time of payment, such payment to be considered as payment in full for the purchase price, or as individual payments as follows: a minimum payment of twenty thousand ($20,000.00) dollars by or on the first day following the end of eighteen (18) months from the date of this agreement and on or by the first day following the end of each year thereafter until the total amount of the purchase price of two hundred forty thousand ($240,000.00) dollars is paid or the the equivalent proportional share remaining in the event either Lessor is bought out prior on a separate agreement with Lessee.

VI

During the terms of this agreement, Lessee is granted the right to mine and dispose of any and all ores, minerals or concentrates, owned by Lessee or Lessor, within the area of this agreement, but shall pay to Lessor a royalty on all such ores, of five (2)% of the net smelter and/or mill returns less direct transportation and/or trucking charges from mine or mill to railhead, mill, smelter, buying station or points of sale. However, the Lessees shall pay to the Lessors a royalty of ten (10)% of the total royalty paid by lease agreement to private third party interest, or to the state of Arizona, or Papago Indian Tribes for all ores, minerals or concentrates mined under lease by Lessee on State or Indian lands, or private lands within the area of this agreement. All such amounts or royalty payments paid to Lessors shall apply on, and be deducted from the purchase price and/or payments as stipulated and scheduled in above clauses IV and V. In the event that royalty payments exceed the annual installments of rent to be paid, the annual rent is hereby increased by said amount.

VII

If the lessee shall be delayed at any time in keeping or performing any agreement on his part to be kept or performed according to the terms and provisions therof by strikes, lockouts, fire, lack of market, unusual delay in transportation, orders of the Government or any duly consitiuted instrumentality thereof, unavoidable casualties, or any causes beyond the control of the lessee, such delay shall not be deemed a breach of this agreement or a default on the part of the Lessee constituting a cause for forfeitrue; provided that during any such periods the Lessee continues to pay the taxes or perform the assessment requirements as herein stipulated and to pay ten (10) % of the minimum payments, rental or royalty as herein provided.

VIII

Lessee shall keep accurate accounts showing the amount and ~~character~~ Character of work done and the net returns from the sale of production, and such records, as well as the Lessee's operations on the property, shall be open to inspection of Lessor's representatives at all resonable times, Lessee agrees to furnish Lessors with copies of all factual data obtained by Lessee in the event that this agreement is terminated prior to fianl purchas by Lessee.

All claims located by Lessee within the limits of this agreement as specified in clauses II and III hereof, shall be in the name of Lessors, and all claims staked prior to the date of this agreement by Lessors within the lim ts of this agreement as specified in clauses II and III hereof, shall be completed by Lessees in the name of the Lessors and Lessee agrees to perform all of the location work thereon.

IX

Lessee agrees to commence work on the said premises within thirty (30) days after the execution of this Lease and Option and thereafter shall diligently prosecute the work. During the first

year, Lessee agrees to have expended a minimum of fifteen thousand ($15,000.00) dollars worth of work on the property. All work shall be conducted in a thorough, prudent and workmanlike manner and in accordance with the applicable state and federal laws. This is also expressly meant to include no unnecessary damage to fields, forests, fences, water holes and other existing permanent surface improvements.

X

Lessee shall indemnify and save harmless Lessor against all claims, demands, liabilities, suits, and judgements whatsoever arising out of property damage to owner's of surface rights and personal injury or death of any Lessee employee engaged in working on said premises, as well as any claims for labor, materials, supplies or other charges agising out of Lessee's operations.

XI

This agreement may be terminated by Lessee upon Thirty (30) days written notice of such termination to Lessor and Lessee shall have the right to remove any and all machinery, equipment and supplies from the herein described property provided Lessee shall not be in default as to any of the Lease and Option terms.

XII

If Lessee fails to make payments as herein specified, or shall fail to perform, carry out or comply with any term, condition, promise or covenant of this agreement, then this agreement may be terminated after Thirty (30) days following the receipt by Lessee of written notice by registered mail, specifying said default or defaults, provided, however, Lessee shall have failed to remedy such default or defaults within the Thirty(30) day period, otherOwise this agreement shall remain in full force and effect. Upon termination of this agreement, other than by purchase, whether by lapse of time, or otherwise, Lessee shall peacably and promptly surrender and deliver up said property to Lessor.

XIII

Lessor's exclusive and lawful ownership of herein said acquired property and, that same is free and clear and will be kept free and clear of all liens and encumbrances during the term of this agreement, is hereby warranted. Annual assessment work if required, will only be at Lessee's expense when this agreement is in effect and only when it is in effect during the last Six (6) months of the assessment year involved in that work. Lessee agrees to pay all taxes and assessments which may be levied against said premises on account of the production of ore, or Lessee's personal property under this agreement.

XIV

For the purpose of receiving notices, the parties hereto specify the following mailing addresses:

For Lessor:	For Lessee:
_____	_____
_____	_____
_____	_____
_____	_____

XV

Terms of this Mineral Lease and Option shall be binding upon and inure to the benefit of the heirs, administrators, executors, successors and assigns of the parties hereto.

Lessor	Lessee
_____	_____
_____	_____
_____	_____
_____	_____

MINERAL LEASE AND OPTION

I

This Mineral Lease and Option is made this _____ day of _____, 19____ by and between Heinrichs Geoexploration Company, of Tucson, Arizona, hereinafter designated as Lessor; and _____ Newmont Mining Company _____ hereinafter designated as Lessee.

II

LESSOR for and in the consideration of One (1) dollar, receipt for which is hereby acknowledged, and other valuable considerations, does hereby grant unto the LESSEE the exclusive right to enter on and to explore, drill, sample, test and survey in any manner deemed necessary or desirable, the following described property situated in or near _____

Description of Property

Any and all purchased or leased lands or Federal mining claims included within the boundaries of sections _____

which are now or become at any time during the life of this agreement, owned or controlled by LESSEE or LESSOR, or LESSEE'S or LESSOR'S agents or representatives.

III

The term of this Mineral Lease and Option shall be for fifteen (15) years from date of execution, unless sooner terminated under any of the provisions herein contained, or renewed or extended by common agreement of the parties hereto.

IV

LESSEE may elect to purchase at anytime during the life of this Mineral Lease and Option agreement, in which case the purchase price for all of the LESSOR'S rights of any nature in the above mentioned or described area of _____ sections shall be $250,000

When this amount is fully paid, LESSOR agrees to execute and deliver to LESSEE a good and sufficient deed conveying title to LESSEE free and clear of all liens and encumbrances.

V

On or before the end of the eighteenth (18) month period following the signing of this agreement, the LESSEE may elect to purchase all of the above mineral claims located by either party for $200,000 cash.

Payments may be made on the purchase price either as above provided or at any time following the date of this agreement at the rate of 25% of the unpaid balance at the time of payment, such payment to be considered as payment in full for the purchase price, or as individual payments as follows: a minimum payment of $20,000 by or on the first day following the end of eighteen (18) months from the date of this agreement and on or by the first day following the end of each year thereafter until the total amount of the purchase price of $250,000 be paid or the equivalent proportional share remaining in the event either either LESSOR is bought out prior on a separate agreement with LESSEE.

VI

During the terms of this agreement, LESSEE is granted the right to mine and dispose of any and all ores, minerals or concentrates, owned by LESSEE or LESSOR, within the area of this agreement, but shall pay to LESSOR a royalty on all such ores, of 3%

of the net smelter and/or mill returns less direct transportation charges. However , the LESSEE shall pay to the LESSOR a royalty of ten (10) % of the total royalty paid by lease agreement to private third party interest, or to the State of Arizona, or Papago Indian Tribe for all ores, minerals or concentrates mined under lease by LESSEE on State or Indian lands, or private lands within the area of this agreement. All such amounts or royalty payments paid to LESSOR shall apply on, and be deducted from the purchase price and/or payments as stipulated and scheduled in above clauses IV and V. In the event that royalty payments exceed the annual installments of rent to be paid, the annual rent is hereby increased by said amount.

VII

If the LESSEE shall be delayed at any time in keeping or performing any agreement on his part to be kept or performed according to the terms and provisions thereof by strikes, lockouts, fire, lack of market, unusual delay in transportation, orders of the Government or any duly constituted instrumentality thereof, unavoidable casualties, or any causes beyond the control of the Lessee, such delay shall not be deemed a breach of this agreement or a default on the part of the Lessee constituting a cause for forfeiture; provided that during any such periods the Lessee continues to pay the taxes or perform the assessment requirements as herein stipulated and to pay ten (10) % of the minimum payments, rental or royalty as herein provided.

VIII

Lessee shall keep accurate accounts showing the amount and character of work done and the net returns from the sale of production, and such records, as well as the Lessee's operations on the property, shall be open to inspection of Lessor's representatives at all reasonable times, Lessee agrees to furnish Lessors with copies of all factual data obtained by Lessee in the event that this agreement is terminated prior to final purchase by Lessee.

All claims located by Lessee within the limits of this agreement as specified in clauses II and III hereof, shall be in the name of Lessors, and all claims staked prior to the date of this agreement by Lessors within the limits of this agreement as specified in clauses II and III hereof, shall be completed by Lessees in the name of the Lessors and Lessee agrees to perform all of the location work thereon.

IX

Lessee agrees to commence work on the said premises within thirty (30) days after the execution of this Lease and Option and thereafter shall diligently prosecute the work. During the first year, Lessee agrees to have expended a minimum of 25,000 dollars worth of work on the property. All work shall be conducted in a thorough, prudent and workmanlike manner and in accordance with the applicable state and federal laws. This is also expressly meant to include no unnecessary damage to fields, crops or fences, water holes and other existing permanent surface improvements.

X

Lessee shall indemnify and save harmless Lessor against all claims, demands, suits, liens, stops, and judgments whatsoever arising out of property damage to [illegible] of surface or [illegible] and personal injury or death of any Lessee employee engaged in working on said premises, as well as all claims for labor, materials, supplies or other charges arising out of Lessee's operations.

XI

This agreement may be terminated by Lessee upon thirty (30) days written notice of such termination to Lessor and Lessee shall have the right to remove all of its machinery, equipment and supplies from the premises, or may sell the same to any other Lessee, but Lessee shall not be liable to any of the Lessors for such sale.

XII

If Lessee shall fail to make payments herein specified, or shall fail to perform, [illegible] with any term, condition, provision or covenant

of this agreement, then this agreement may be terminated after thirty (30) days following the receipt by Lessee of written notice by registered mail, specifying said default or defaults, provided, however, Lessee shall have failed to remedy such default or defaults within the thirty (30) day period, otherwise this agreement shall remain in full force and effect. Upon termination of this agreement, other than by purchase, whether by lapse of time, or otherwise, Lessee shall peacably and promptly surrender and deliver up said property to Lessor.

XIII

Lessor's exclusive and lawful ownership of herein said acquired property and, that same is free and clear and will be kept free and clear of all liens and encumbrances during the term of this agreement, is hereby warranted. Annual assessment work if required, will only be at Lessee's expense when this agreement is in effect and only when it is in effect during the last six (6) months of the assessment year involved in that work. Lessee agrees to pay all taxes and assissments which may be levied against said premises on account of the production of ore, or Lessee's personal property under this agreement.

XIV

For the purpose of receiving notices, the parties hereto specify the following mailing addresses:

For Lessor:	For Lessee:
Heinrichs Geoexploration Co	
P.O. Box 5671	
Tucson, Ariz	

XV

Terms of this Mineral Lease and Option shall be binding upon the inure to the benefit of the Heirs, administrators, executors, successors and assigns of the parties hereto.

Lessor	Lessee
Heinrichs Geoexploration Co	

MINING LEASE

THIS MINING LEASE is made and entered into at _____

_____, this _____ day of _____, 195_,

by and between HEINRICHS Geoexploration Co. [redacted], a ARIZONA [redacted]

corporation licensed to do business in the State of Nevada,

lessor, hereinafter referred to as Geoex United and Newmont DODGE CON-

Exploration Co. Ltd. ? ? STRUCTION, INC. of ~~Fallon, Nevada~~, a ~~Nevada corporation~~,

lessee, hereinafter referred to as Newmont Dodge.

In consideration of the payments hereinafter designated

to be paid to Geoex United by Newmont Dodge, and in further consideration

of the covenants and agreements to be kept and performed by

Newmont Dodge as hereinafter set forth, ~~United~~ Geoex does hereby grant unto

Newmont Dodge a lease to the hereinafter described lands unpatented lode

& mining exploration in any manner mining claim for the sole purpose of mining thereon as set

deemed necessary or desirable.

forth in the following clauses:

Description of Property

Any and all purchased or leased lands or Federal mining claims included within the boundaries of sections ~~13, 14, 15, 16, 21, 22, 23, 24, 25, 26, 27, 28, 29, 33, 34, 35, 36, T 14 S, R 10 E, and sections 1, 2, 3, and 4, T 15 S, R 10 E, Gila and Salt River Base and Meridian~~, which are now or become at any time during the life of this agreement, owned or controlled by Lessee or Lessor, or Lessee's or Lessor's agents representatives.

[illegible] sooner forfeited, cancelled, terminated or surrendered, or unless extended. Newmont Dodge shall have the option of renewing

this lease for an additional term of three (3) years from the date of the expiration of the term hereof, upon the same terms, covenants and conditions as herein set forth; provided, this lease shall not have been terminated prior thereto and that Dodge is not then in default with respect to any of its obligations hereunder, and provided, further, that written notice from Dodge of the exercise of such option shall be received by United not more than six (6) months, nor less than thirty (30) days prior to the expiration of said term.

~~2. Dodge is hereby granted the right to enter into and take possession of the said mining claim and commence work thereon to explore, develop, operate, mine, extract, mill and ship minerals from the same.~~

3. Dodge agrees to take possession of said property and start work thirty (30) days from the date hereof, and to cause all work to be done in a safe and miner-like manner, in accordance with applicable laws of the United States and the State of Arizona safeguarding against accidents and properly conserving said land and minerals in a first class manner compatible with safe and economical mining and agrees to keep all workings clear of all loose [redacted] rock, earth and rubbish.

Lessee may elect to purchase at anytime during the life of this Mineral Lease and Option agreement, in which case the purchase price for all of the Lessors rights of any nature in the above mentioned or described area of sixteen (16) sections shall be two hundred forty thousand ($240,000.00) dollars. When this amount is fully paid, Lessor agrees to execute and deliver to Lessee a good and sufficient deed conveying title to Lessee free and clear of all liens and encumbrances.

V

On or before the end of the 18 month period following the signing of this agreement, the Lessee may elect to purchase all of the above mineral claims located by either party for ~~two hundred~~ ~~four~~ ~~thousand~~ 500,000 dollars (~~$200,000.00~~) cash.

Payments may be made on the purchase price either as above provided or at any time following the date of this agreement at the rate of 85% of the unpaid balance at the time of payment, such payment to be considered as payment in full for the purchase price, or as individual payments as follows: a minimum payment of twenty thousand ($20,000.00) dollars by or on the first day following the end of eighteen (18) months from the date of this agreement and on or by the first day following the end of each year thereafter until the total amount of the purchase price of ~~two hundred forty thousand ($240,000.00)~~ 500,000 dollars is paid or the the equivalent proportional share remaining in the event either Lessor is bought out prior on a separate agreement with Lessee.

VI

During the terms of this agreement, Lessee is granted the right to mine and dispose of any and all ores, minerals or concentrates, owned by Lessee or Lessor, within the area of this agreement, but shall pay ~~to~~/~~to~~ to Lessor a royalty on all such ores, of five (5)% of the net smelter and/or mill returns less direct transportation and/or trucking charges from mine or mill to railhead, mill, smelter, buying station or points of sale. However, the Lessees shall pay to the Lessors a royalty of ten (10)% of the total royalty paid by lease agreement to private third party interest, or to the state of Arizona, or Papago Indian Tribes for all ores, minerals or concentrates mined under lease by Lessee on State or Indian lands, or private lands within the area of this agreement. All such amounts or royalty payments paid to Lessors shall apply on, and be deducted from the purchase price and/or payments as stipulated and scheduled in above clauses IV and V. In the event that/~~for~~ royalty payments exceed the annual installments of rent to be paid, the annual rent is hereby increased by said amount.

reason of injury to any persons, livestock or other property as a result of any work or operations of Newmont Dodge or their possession and occupancy of the leased property.

Newmont Dodge shall post and keep posted upon the herein described mining claim notices of non-liability for labor and materials in accordance with the laws of the State of Ariz. Nevada, such notices to be furnished by Geoex United.

7. Newmont Dodge shall pay, when due and before delinquent, all taxes which may be levied upon the said property during the termof this lease as well as all taxes levied or assessed against any and all personal property, machinery and equipment now on or placed upon said property by Dodge during the term of this lease. Newmont Dodge shall pay any sales taxes and other taxes of every kind, character and description levied or imposed during the term of this lease upon ores, minerals, concentrates or products produced, sold or otherwise disposed of by Newmont Dodge, and all taxes levied against Newmont Dodge as an employer of labor; all such taxes to be promptly paid when due and before delinquent.

8. At least Ninety (90) days before it shall be required to perform annual assessment work on said property, Newmont Dodge agrees to have performed and completed such assessment work at its expense and to have caused to be recorded a proper and sufficient affidavit of performance as required by Nevada law, and to notify Geoex United in writing that such has been done.

9. Newmont Dodge shall carry at all times during the term of

this lease Workmen's Compensation; Employer's Liability and such other insurance as may be required by the laws of the State of Nevada. Ariz.

10. Not later than the tenth (10th) day of each calendar month, during the term hereof, and during the calendar month next following the termination hereof, Dodge Newmont will furnish to United Geoex a statement in writing, under oath, accompanied by full and complete copies of all documents, including settlement sheets, certificates of analyses, and assays, pertaining to or governing settlement of any ore mineral or material disposed of and also full and complete reports of any reduction works or mill where the ore may be reduced or treated, and setting forth for the preceding calendar month:

(a) The cubic contents of earth and rock mined or excavated, and the number of tons thereof.

(b) The number of tons of ore or mineral mined and the gross value thereof.

(c) The number of tons of ore remaining on the dump on said premises.

(d) The kind, quantity and value of all mineral extracted and sold or otherwise disposed of.

(e) The disposition made of all material mined, together with the dates of shipments, names and addresses of consignees, car numbers, initials and weights.

(f) That the said land is being worked independently of and not in connection with any other mine,

mineral land or operation.

11. Newmont Dodge shall keep a full set of operating accounts and records, drill hole logs, sample and assay data and maps, covering its entire operation of the property and will allow United, or its agents or employees, during any reasonable working hours, to examine them from time to time and to enter upon said land, and into any workings, mills, or reduction works thereon, or wherever said ore may be worked or reduced, for the purpose of inspection; to take samples and make tests and measurements and affix notices.

12. Newmont Dodge agrees to occupy and hold for Geoex United all cross or parallel lodes, dips, spurs, feeders, crevices, or deposits of any kind or any material of economic value which may be discovered or developed in working under this agreement.

13. Dodge will not do or suffer to be done in or upon said leased premises any act or thing which is or may be a nuisance, and shall not use or permit to be used by others the said property or any part thereof, for any unlawful or immoral purposes.

14. The failure of Newmont Dodge to make or caus to be made any payment herein provided for, or to keep or perform any obligation on its part to be kept or performed, according to the terms and provisions hereof, shall at the election of Geoex United work a forfeiture hereof, and any and all monies which have been paid to Geoex United in accordance with the terms of this agreement shall be deemed forfeited to Geoex United as liquidated

damages. Provided, however, that in the event of a default on the part of Dodge and the election of United to terminate this lease on account thereof, United shall give to Dodge a written notice of its intention to declare a forfeiture of this lease and to terminate the same on account thereof, specifying the particular default or defaults relied upon by it, and Dodge shall have thirty (30) days after receipt of said notice in which to make good such default or defaults, in which event there shall be no forfeiture thereof. In the event United waives any breach of any covenant or condition of this lease it shall not be deemed a waiver of any other or subsequent breach hereof.

15. Dodge reserves the right to surrender this mining lease and to relinquish all rights and privileges and to be relieved of all obligations hereunder, at any time during the life of the agreement upon giving thirty (30) days notice to United, provided, however, that all royalty payments then due shall have been paid, and further provided that all debts and obligations of Dodge which are or which may become a lien upon the property have been paid and satisfied in full. Upon surrendering the said lease, Dodge shall give to United a quit-claim deed covering the property herein described.

16. If Dodge shall be delayed at any time in keeping or performing any agreement on its part to be kept or performed according to the terms and provisions hereof by strikes, lock-outs, fire, lack of market, unusual delay in transportation,

orders of the Government or any duly constituted instrumentality thereof, unavoidable casualties, or any causes beyond the control of Dodge, such delay shall not be deemed a breach of this agreement or a default on the part of Dodge constuting a cause for forfeiture; provided however, that during any such period or periods that Dodge continues to pay all taxes and do all annual assessment requirements, as herein provided and pay in addition a minimum rental of Three Hundred Dollars ($300.00) per month in advance.

17. Dodge shall have, and is hereby given and granted sixty (60) days after a valid forfeiture, surrender or other termination of this lease to remove from said property all warehouse stocks, merchandise, materials, tools,hoists, compressors, shovels, engines, motors, pumps, transformers, electrical accessories, metal or wooden tanks, pipes and connections and any and all other machinery and equipment erected or placed in or upon said property by them; but this right of removal shall not extend to retaining timbers, walls, or supports, whether they be underground or on the surface; under ground pipe, track, and ladders; safety fences or covers around open holes or workings; nor does it extend to permanent improvements, including all buildings and other structures. Provided, however, that Dodge is not at that time in default in respect to any payments due to United or in respect to any of the terms of this agreement the non-performance of which might involve United in any present or future liability.

Until such obligations have been fully discharged, United shall hold a first and prior lien upon all of the moveable equipment and other personal property of Dodge placed upon the leased property, and such equipment and personal property may not be removed from the premises until such time as all liens and obligations have been fully satisfied and discharged.

18. The rental and royalties herein provided for shall be a lien upon any and all ores or minerals mined upon the said land, and upon any improvements erected upon the said land or equipment installed thereon.

19. This agreement is intended as, and is, a lease; and United shall not be called upon or required to make any repairs, or incur any expense of any kind or nature upon or in connection with said land for and during the term of this agreement. All such expenses shall be borne by Dodge.

20. That in case Dodge shall, except by United, be lawfully deprived of the possession of said premises, or any part thereof, Dodge shall notify United in writing setting forth in full the circumstances in relation thereto, whereupon United may, at its option, either reinstall Dodge in possession of said premises or terminate this lease and refund to Dodge the pro-rata amount of any rental therefore paid in advance for the unexpired term of this lease from and after the receipt of such notice, whereupon no claims for damages of whatsoever character incurred by Dodge by reason of such disposition shall be chargeable against United.

21. In case Dodge shall be adjudged a bankrupt, by either voluntary or involuntary proceedings, United may, at its option, terminate this lease by written notice. The receipt of rent or other payments from any person for the use of the demised premises after the date of adjucation of bankruptcy, shall not constitute a waiver of United's option to terminate this lease. The option of United herein provided shall also be exercisable in the event that Dodge becomes insolvent or any actions or proceedings for debtor relief of Dodge be commenced by or against Dodge or general debtor relief be sought by Dodge by extra judicial means. Upon exercise of the option to terminate, the estate and rights of Dodge and any person claiming through Dodge, by act of the parties or operation of law, shall immediately terminate. If there should be two or more Lessees hereunder, or if Lessee is a partnership, then the option of United to terminate this entire lease shall be exercisable in case any one of the Lessees or partners is adjudged a bankrupt or becomes subject to or participates in any other proceedings or procedure herein mentioned.

22. If there be more than one Lessee the Lessee's obligations shall be joint and several and wherever Lessee is used herein, it shall include the plural as well as the singular.

23. Time is of the essence of this MINING LEASE. The terms, provisions, covenants and agreements herein contained

shall extend to, be binding upon and inure to the benefit of the respective heirs, executors, administrators, successors and assigns of the parties hereto, but no assignment of this lease and no underleasing or subletting of the leased premises, or any part thereof shall be valid unless made with the written consent of United.

24. All notices herein provided for shall be given in writing by mail as follows, until otherwise changed by written request and acknowledgement of the parties hereto:

To UNITED: UNITED GEOPHYSICAL COMPANY, INC.
BIN "M"
PASADENA 15, CALIFORNIA
Attn: Mining Department

With information copy also to:

UNITED GEOPHYSICAL COMPANY, INC.
P. O. BOX 7005
TUCSON, ARIZONA

To DODGE: Dodge Construction, Inc.
Fallon, Nevada.

IN WITNESS WHEREOF, the parties hereto have executed this Mining Lease in duplicate on the day and year first above written.

Dodge Construction, Inc.

By_____

By_____

United Geophysical Company, Inc.

By_____

By_____

STATE OF CALIFORNIA
COUNTY OF LOS ANGELES } ss.

Before me _____ a notary public in and for the County of Los Angeles, State of California, on this day personally appeared _____ and _____, known to me to be the persons whose names are subscribed to the foregoing instrument as _____ _____ and _____, respectively, of the United Geophysical Company, Inc., and who acknowledged to me that they as such officers executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office this ____ day of _____, 19__.

_____
Notary Public

My commission expires:

STATE OF NEVADA
COUNTY OF CHURCHILL } ss.

Before me _____ a notary public in and for the County of Churchill, State of Nevada, on this day personally appeared _____ and _____, known to me to be the persons whose names are subscribed to the foregoing instrument as _____ and _____, respectively, of the Dodge Construction, Inc.,

and who acknowledged to me that they as such officers executed the same for the purpose and consideration therein expressed.

Given under my hand and seal of office this ____ day of _____, 19__.

_____
Notary Public

My commission expires:

VII

If the lessee shall be delayed at any time in keeping or performing any agreement on his part to be kept or performed according to the terms and provisions therof by strikes, lockouts, fire, lack of market, unusual delay in transportation, orders of the Government or any duly consitiuted instrumentality thereof, unavoidable casualties, or any causes beyond the control of the lessee, such delay shall not be deemed a breach of this agreement or a default on the part of the Lessee constituting a cause for forfeitrue; provided that during any such periods the Lessee continues to pay the taxes or perform the assessment requirements as herein stipulated and to pay ten (10) % of the minimum payments, rental or royalty as herein provided.

VIII

Lessee shall keep accurate accounts showing the amount and character of work done and the net returns from the sale of production, and such records, as well as the Lessee's operations on the property, shall be open to inspection of Lessor's representatives at all resonable times, Lessee agrees to furnish Lessors with copies of all factual data obtained by Lessee in the event that this agreement is terminated prior to final fianl purchase by Lessee.

All claims located by Lessee within the limits of this agreement as specified in clauses II and III hereof, shall be in the name of Lessors, and all claims staked prior to the date of this agreement by Lessors within the lim ts of this agreement as specified in clauses II and III hereof, shall be completed by Lessees in the name of the Lessors and Lessee agrees to perform all of the location work thereon.

IX

Lessee agrees to commence work on the said premises within thirty (30) days after the execution of this Lease and Option and thereafter shall diligently prosecute the work. During the first

year, Lessee agrees to have expended a minimum of fifteen thousand ($15,000.00) dollars worth of work on the property. All work shall be conducted in a thorough, prudent and workmanlike manner and in accordance with the applicable state and federal laws. This is also expressly meant to include no unnecessary damage to fields, forests, fences, water holes and other existing permanent surface improvements.

X

Lessee shall indemnify and save harmless Lessor against all claims, demands, liabilities, suits, and judgements whatsoever arising out of property damage to owner's of surface rights and personal injury or death of any Lessee employee ingaged in working on said premises, as well as any claims for labor, materials, supplies or other charges agising out of Lessee's operations.

XI

This agreement may be terminated by Lessee upon Thirty (30) days written notice of such termination to Lessor and Lessee shall have the right to remove any and all machinery, equipment and supplies from the herein described property provided Lessee shall not be in default as to any of the Lease and Option terms.

XII

If Lessee fails to make payments as herein specified, or shall fail to perform, carry out or comply with any term, condition, promise or covenant of this agreement, then this agreement may be terminated after Thirty (30) days following the receipt by Lessee of written notice by registered mail, specifying said default or defaults, provided, however, Lessee shall have failed to remedy such default or defaults within the Thirty(30) day period, otherOwise this agreement shall remain in full force and effect. Upon termination of this agreement, other than by purchase, whether by lapse of time, or otherwise, Lessee shall peacably and promptly surrender and deliver up said property to Lessor.

XIII

Lessor's exclusive and lawful ownership of herein said acquired property and, that same is free and clear and will be kept free and clear of all liens and encumbrances during the term of this agreement, is hereby warranted. Annual assessment work if required, will only be at Lessee's expense when this agreement is in effect and only when it is in effect during the last Six (6) months of the assissment year involved in that work. Lessee agrees to pay all taxes and assissments which may be levied against said premises on account of the production of ore, or Lessee's personal property under this agreement.

XIV

For the purpose of receiving notices, the parties hereto specify the following mailing addresses:

For Lessor:	For Lessee:
_____	_____
_____	_____
_____	_____
_____	_____

XV

Terms of this Mineral Lease and Option shall be binding upon and inure to the benefit of the heirs, administrators, executors, successors and assigns of the parties hereto.

Lessor	Lessee
_____	_____
_____	_____
_____	_____
_____	_____

HEINRICHS GEOEXPLORATION COMPANY
MINERAL ENGINEERING CONSULTANTS AND CONTRACTORS
GEOPHYSICAL, GEOLOGICAL AND ECONOMIC APPRAISALS
TUCSON, ARIZONA

WALTER E. HEINRICHS, JR.
E. GROVER HEINRICHS

PHONE: MAIN 2-4202
806-808 WEST GRANT ROAD
MAIL: P. O. BOX 5671

January 29, 1959

Mr. Robert J. Searls
Newmont Mining Co.
300 Park Avenue
New York 22, N.Y.

Dear Bob:

It was a pleasure meeting you for the first time in New York three weeks ago, and I certainly appreciate your taking the time to "shoot the bull".

In response to your interest in a certain magnetic anomaly referred to in our discussion at your office, I have enclosed some data and also a brief history of the property involved.

The area known to us as the R.D. area is about twenty airline miles west from Tucson, Arizona, in Pima County. (See map 1). It was first brought to the attention of Mexco (Minerals Exploration Company) by three partners who were the original locators of two claim groups. (See map 2).

Mexco investigated the area commencing in August, 1956, with a field investigation by the company geologist and ending in June, 1957, upon completion of a drilling program. In December, 1957, Mexco excersised its option under the terms of the Lease and Option Agreement to terminate said Lease and Option.

The area is largely alluvial covered. Outcrops include metamorphosed limestone and shales and a grey felsitic rock. Surface minerals include occasional oxidized coppers, limonite in quartz, some magnetite, abundant epidote and skarn minerals. Some underground workings and the drill holes have

yielded pyrite, galena, scattered copper sulfides, wulfenite, vanadinite (?) and pyromorphite.

Due to a magnetic anomaly and magnetite and chalcopyrite float found by the original locators, the area was first traversed by Mexco with the mobile magnetometer (MoMag). Two strikingly anomalous areas were located, both trending NW-SE and somewhat parallel. The more northerly one, ("A", see map 2), was believed to be relatively deep, so further work was concentrated on the other ("B", see map 2), near the area of the mineralized float.

A program of land negotiation and claim staking was embarked on to secure a favorable land position. Mexco then commenced a detailed geological and geophysical program the results of which indicated an area of sufficient interest to warrant a drilling program.

Five holes were diamond drilled, varying in depth from 120 feet to 222 feet. Interesting and encouraging core was recovered at some intervals, but the overall picture was not economic. Sufficient evidence was obtained from the drill holes to account for the anomalous features detected by the several geophysical methods used.

No work other than with the MoMag was done over the larger and deeper anomaly "A". This anomaly is 1200 gammas, plus or minus, over the surrounding areas and on the order of one and one half miles in length. (See map 2). The area was deemed of interest, but because of depth considerations it was given no further attention at that time.

The basis on which we might get together in a cooperative effort along the lines discussed in your office is tentatively laid out below.

First, negotiate a lease and option agreement between Newmont and Heinrichs Geoexploratioh Company (Geoex), with the following assumptions:

THAT

1. Geoex gets a royalty of 5% on the described property as pay-

ment for the information furnished to Newmont.

2. Newmont agrees to contract the exploration phase to Geoex, on the following basis:

Surveying	$100.00/day
Geologic mapping	125.00/day
Self potential	125.00/day
Electro-magnetics	250.00/day
Legal work including land negotiation, court house, etc. ...	10.00/hour plus option payments, etc. at cost
MoMag	450.00/day
Drilling supervision and correlation ...	100.00/ man day

The above includes all drafting time in connection with each survey but does not include the blueprinting, photostating, and miscellaneous supplies which would be an additional charge at cost.

3. Work conducted by Geoex using Newmont equipment (I.P. gear) would be at cost plus 10%, the cost being defined as "out of pocket expense". This is meant to be as follows:
   a. Vehicular expense (liason vehicle), gas, oil, lubrication plus a normal rental fee.
   b. Personnel expense, salaries, travel allowance (if camping or moving).

It is recommended that the following procedures be followed after the signing of the Lease and Option Agreement:

1. A land study be initiated to determine the present land situation. Negotiate with the groups involved, to secure a favorable land position.
2. Map the geology. This would actually be rather limited as alluvium covers most of the area.
3. Carry out geophysical surveys.
4. Sub contract, supervise, and interpret drill program as indicated.

I hope that this has presented my thinking on the subject and that the accompanying data will stimulate your interest.

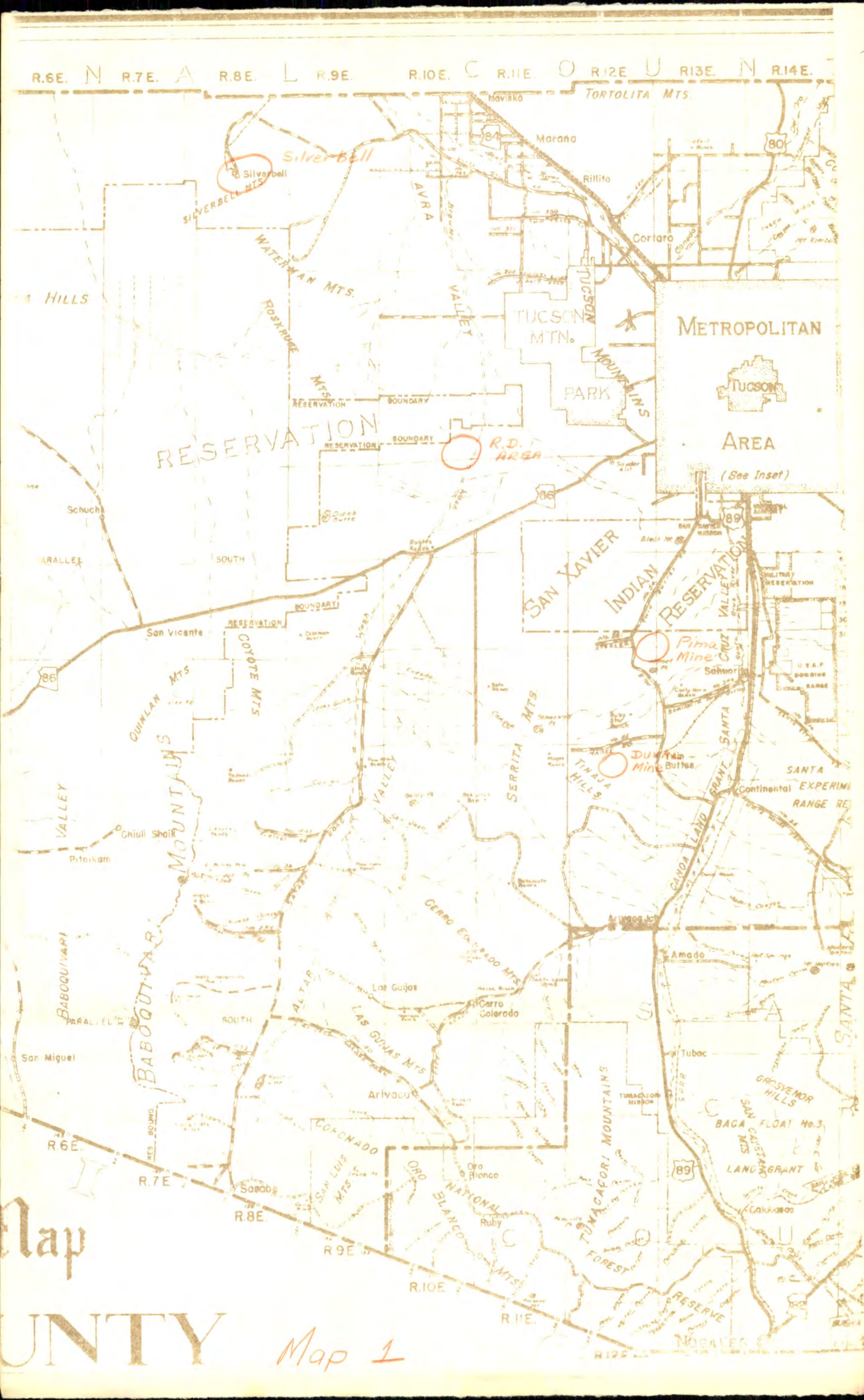
Walt and Jean plan to be in San Francisco for the A.I.M.E. convention, so it is possible that further discussion might arise there with them. Of course, if your schedule allows, you might stop in here at the office in Tucson on your way to or from San Francisco and look over our complete file on the R.D. area.

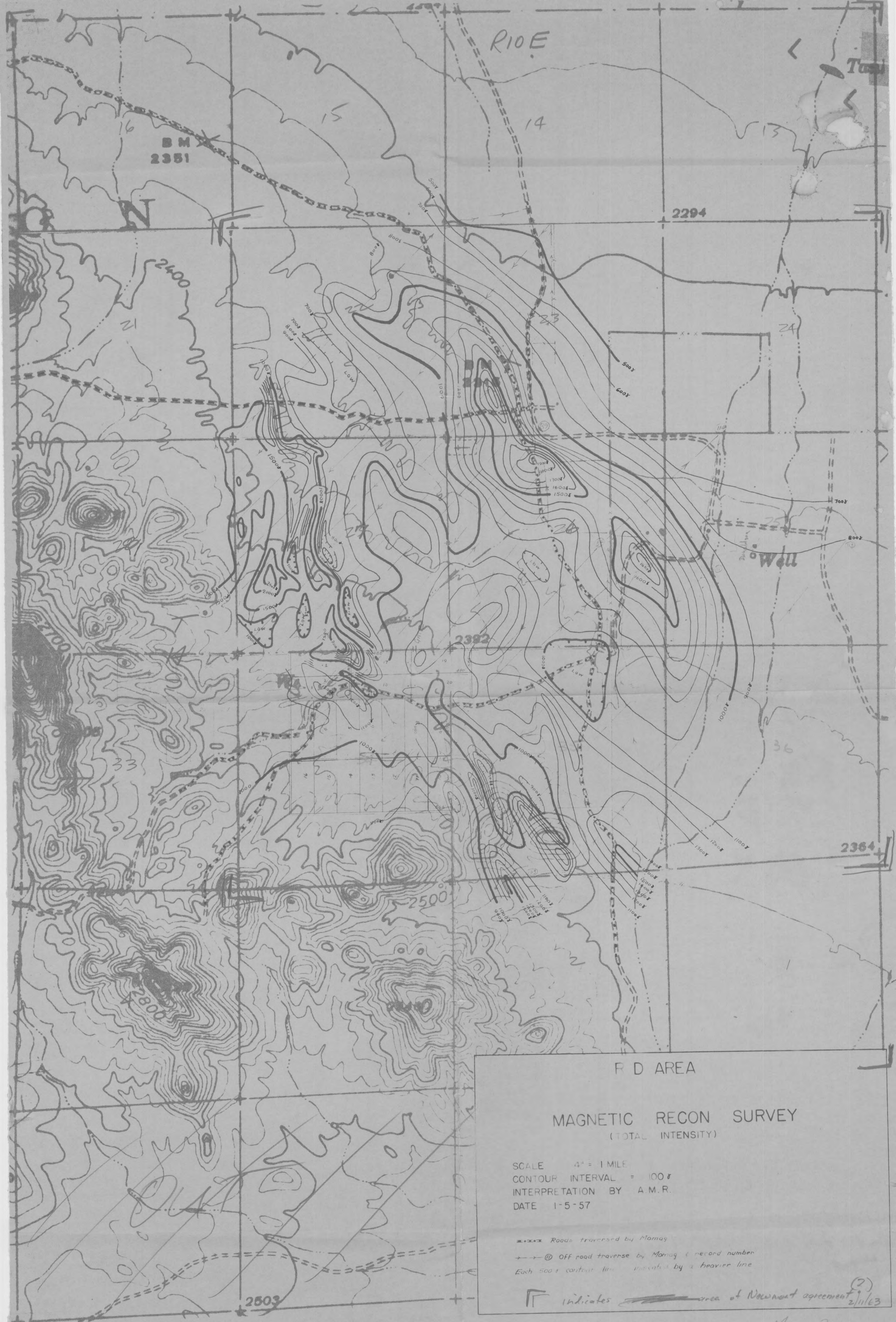
Regards,

E. Grover Heinrichs

egh/jh
Enclosure: 2 Maps

HEINRICHS GEOEXPLORATION COMPANY


R.6E.
R.7E.
R.8E.
R.9E.
R.10E.
R.11E.
R.12E
R13E.
R.14E.
TORTOLITA MTS.
Naviska
Marana
Rillito
Cortaro
Silverbell
Silverbell MTS.
AVRA
VALLEY
WATERMAN MTS.
ROSKRUGE MTS.
TUCSON MTN.
TUCSON MOUNTAINS
PARK
METROPOLITAN
TUCSON
AREA
(See Inset)
RESERVATION
RESERVATION BOUNDARY
R.D. AREA
Schuchi
PARALLEL
SOUTH
San Vicente
COYOTE MTS
QUINLAN MTS
SAN XAVIER INDIAN RESERVATION
Pima Mine
Sahuarita
SERRITA MTS
TINAJA HILLS
DUVAL Mine
Twin Buttes
SANTA CRUZ VALLEY
SANTA CRUZ LAND GRANT
Continental
SANTA EXPERIMENTAL RANGE RE
VALLEY
Chiuli Shoik
Pitoikam
BABOQUIVARI MOUNTAINS
BABOQUIVARI
CERRO COLORADO MTS
Arivaca Jct
Amado
Las Guijas
Cerro Colorado
ALTAR
LAS GUIJAS MTS
San Miguel
Arivaca
Tubac
TUMACACORI MOUNTAINS
GROSVENOR HILLS
BACA FLOAT No.3
SAN CAYETANO MTS
LAND GRANT
CORONADO
SAN LUIS MTS
ORO BLANCO MTS
Oro Blanco
Ruby
Sasabe
TUMACACORI NATIONAL FOREST RESERVE
Calabasas
NOGALES
R.6E.
R.7E.
R.8E.
R.9E.
R.10E.
R.11E.
R.12E.
Map
UNTY
Map 1


R10E
BM
2351
2294
2400
2392
2364
2500
2800
2503
R D AREA
MAGNETIC RECON SURVEY
(TOTAL INTENSITY)
SCALE 4" = 1 MILE
CONTOUR INTERVAL = 100 γ
INTERPRETATION BY A.M.R.
DATE 1-5-57
Roads traversed by Mamag
Off road traverse by Mamag & record number
Each 500 γ contour line indicated by a heavier line
indicates area of Newmont agreement (?) 2/11/63

Map 2

BRIEF RESUME OF INFORMATION FROM R.D. PROJECT

The area known as the Roskruge District lies in Pima County, Arizona. Part of the district extends north into the Papago Indian Reservation (see accompanying Pima Co. map).

The area was first brought to the attention of Mexco Minerals Exploration Co.) by three partners, two prospectors and a geophyscist who were the original locators of two groups of full sixed mining claims. Mexco investigated the area, commencing August, 1956, with a field investigation by the company geologist, Mr. Norman Eastmoore, and ending in June, 1957, upon completion of a drilling program. On 18 Dec 1957 Mexco ~~abandoned~~ exercised its option under the terms of the Lease & Option agreement to terminate said Lease & option agreement.

The area is largely alluvial covered. Outcrops include metamorphosed limestone and shales and a grey felsitic rock. Surface minerals include occasional oxidized coppers, limonite in quartz, some magnetite, abundant epidote and skarn minerals. From underground workings and drill holes have come pyrite, galena, scattered copper sulfides, wulfenite, vanadinite (?) and pyromorphite.

Due to a magnetic anomaly found by the original locators the area was first covered by Mexco with the continuously recording, total intensity, mobile magnetometer. Two strikingly anomalous areas were located, both trending N.W.-S.E. and somewhat parallel. The more northerly one was believed to be relatively deep, so further work was concentrated on the other. Land status work was accomplished, more claims staked, and the area detailed with hand magnetometer, self-potential, and electromagnetic surveys. This geophysical evaluation showed an anomalous area of sufficient interest to warrant the commencment of a drilling program. Five holes were diamond drilled to depths varying from 120 feet to 222 feet. Interesting and encouraging core was recovered at some intervals, but the overall picture was such that it was decided further exploration of this anomaly at that time was unwarranted. Sufficient evidence was obtained from the drill holes to account for the anomalous features detectee by the several geophysical methods used.

No ~~other~~ work other than with the mobile magnetometer was done over the larger and deeper magnetic anomaly. This anomaly is 1200 gammas (plus or minus) over the surrounding areas and on the order of one and one half miles in length, (see accompanying map). Company and consultant geophysicists have considered this anomaly to have potential interest.

RECOMMENDATIONS.

The area of MoMag coverage could be extended to locate more anomalies, or an extension of this one, in the direction of Silverbell. I.P. then to be used on what proves to be the most promising location, and finally E.M. over the same area. Other g.p. methods should be considered as their useful application becomes ~~desirable~~ apparent and/or desirable.

Negotations for prospecting rights, etc. should be initiated promptly with the Papago Indian tribe upon completion of a working agreement between Geoex, and Newmont. Further, the above mentioned agreement would allow Newmont representatives access to Geoex. files and data on this area.

S.P. $450.00

11 lines, 20 stations/line
= 22,000 feet

$2500.00

E.M. Phase & Ratio

5 lines, 20 stations/line
= 10,000 feet

Hand Mag. $500.00

334 stations – 31,800 feet

10 day Geol. mapp.
$1000.00

Momag 4 day @ 450.00/day
$1800.00

Surveying 10 day = $1250.00

Land status investig.
$200.00

personnel

10.5 miles profile

$400 mo Mag
$100 survey

550

4 days Land Work
$400.

$1,000

1 mo pulse @ $5,000
1 DDH 1000' @ $7.00 7,000

$13,000

cash lump sum

Pay off at any time

at 75% of balance due.

10% of net to Indians O.K.

1% overriding royalty } O.K. agreed to prev.

on Indian base & bases

5% " State " " "

---

assignment

---

1 yr free option.

$20,000 office each.

Cash.

$750,000.00 lease option

10 yrs renewable

(250,000 each.)

Sliding scale $10.00 = 10% Max

to $1.00 or less 1% Min

Royalty to apply purchase

Rental + assessment 6 Mos +

Non performance rental in lieu of work on property $1000.00 1st yr and double each additional yr unless offset by equivalent production or exploration work also to apply to purchase price.

8/19/5[illegible]

Discussion w/ Al. Rugg.

Al's Pt.

$20,000 = 10% of $250,000 ≅.

& Income tax reduce total

by 30% ±.

Al's sug. (& would be willing to consid.)

1. $10,000 / in six Mo. (or ε $30,000)
2. Carried royal. int. @ prev. set. rate upto ε roy. of $75,000/each (~~Cd~~ ε $225,000).

In contingency that state lease royalty is increased above 5% ~~of 10% [illegible] effect~~ before filing claims then partners want diff. between legal royalty and 10% or in event legal royalty is 10% – same deal as on ~~Ed~~ Indian land.

Since Hicks positively do not intend to partic. in lease agreement after option period of 1yr. expires - but wants his $20,000 [or agreed fig.] at that time: total royalty payments to affect purchase actually amount to $520,000 (250,000 for Ben & Al & $20,000 for Hicks @ expiration of 1yr.).

per orig. agree.

Al would offer his services (survey, Geophy., etc.) on this ground @ reduced rate.

1. Reporting claims #

2. Telephone # in Benson.

3. Neg. w/ Al Rugg (Rpskrugg) Rough outline of terms.

4. J-D.P.

a) S.P. work.

b) Negot. w/ Tom Adams.

1) Would work requirement continue on @ $8,000/yr. after 4th yr.

Ans No, work requir. double every year thereafter.

2) Should call to your attention that Minerals may want to buy outright before 1st year up & you fellows would loose benefit of year and $10,000/each payment.

Ans No - they understand that

	$30,000
Σ payment if pur. during 1st yr.	+150,000
	$ 180,000

3) Check the nine sections they agreed to ~~include in lease~~ ~~pen~~ participate in.

Was it? (?)

sec. 26, 27, 28, 33, 34, 35 T14S, R10E

& sec. 2, 3 & 4, R10E, T15S.

These nine sections agreed on 8/27/50 when Ernest Hicks & Ben Bell met w/me in office. Al Rugg not present but we all talked w/him on Phone.

Owners want copies of all geologic ~~and~~ records, maps etc, and drill hole & assay data. Also want privilege of ~~the~~ inspection of the ~~of~~ production records ~~and operation accounts~~ by either them or their agent.

Feb. 12, 1964

M E M O:

To: Walter E. Heinrichs, Jr.

From: Chris S. Ludwig

Re: Comments on Newmont - New Jersey Zinc Report - Roskruge Area dated January 10, 1964

1. Anomaly (1) with a true M of 32, possibly representing 2% sulfides seems to me to be a better bet than they indicate.

2. One 2,000 ft. long 200 ft. a dipole-dipole over the area of Mexco's drilling doesn't seem sufficient to really check it out. It is somewhat surprising that they obtained completely negative results since the drilling seemed to indicate sufficient sulfide for at least a marginal anomaly!!

3. Magnetic results seem to correspond to our thinking and past work.

4. Gravity seems to have worked pretty well in determining sub-alluvial bedrock gradients.

5. I'd like to see several 750 ft. a dipole-dipole spreads in the vicinity of their Anomaly 1 and west to check out the western mag high on Mag Line 6.

6. Also like to see some 250 ft. "a"-dipole-dipole spreads around Mexco's drilling and surrounding areas to possibly pick up any strong sulfide zones.

C. S. Ludwig
Geophysicist

MAGNETIC RECONNAISSANCE
(Vertical Intensity)

ROSKRUGE DISTRICT, PIMA COUNTY, ARIZONA

for

THE NEW JERSEY ZINC COMPANY

January 1963

by

HEINRICHS GEOEXPLORATION COMPANY
P. O. Box 5671 Tucson, Arizona

TABLE OF CONTENTS

Map #1------Location and Index----------Frontpiece

Introduction----------1

Conclusions & Recommendations----------2

Interpretation----------3

Methods & Procedures----------5

MAPS----------In Pocket

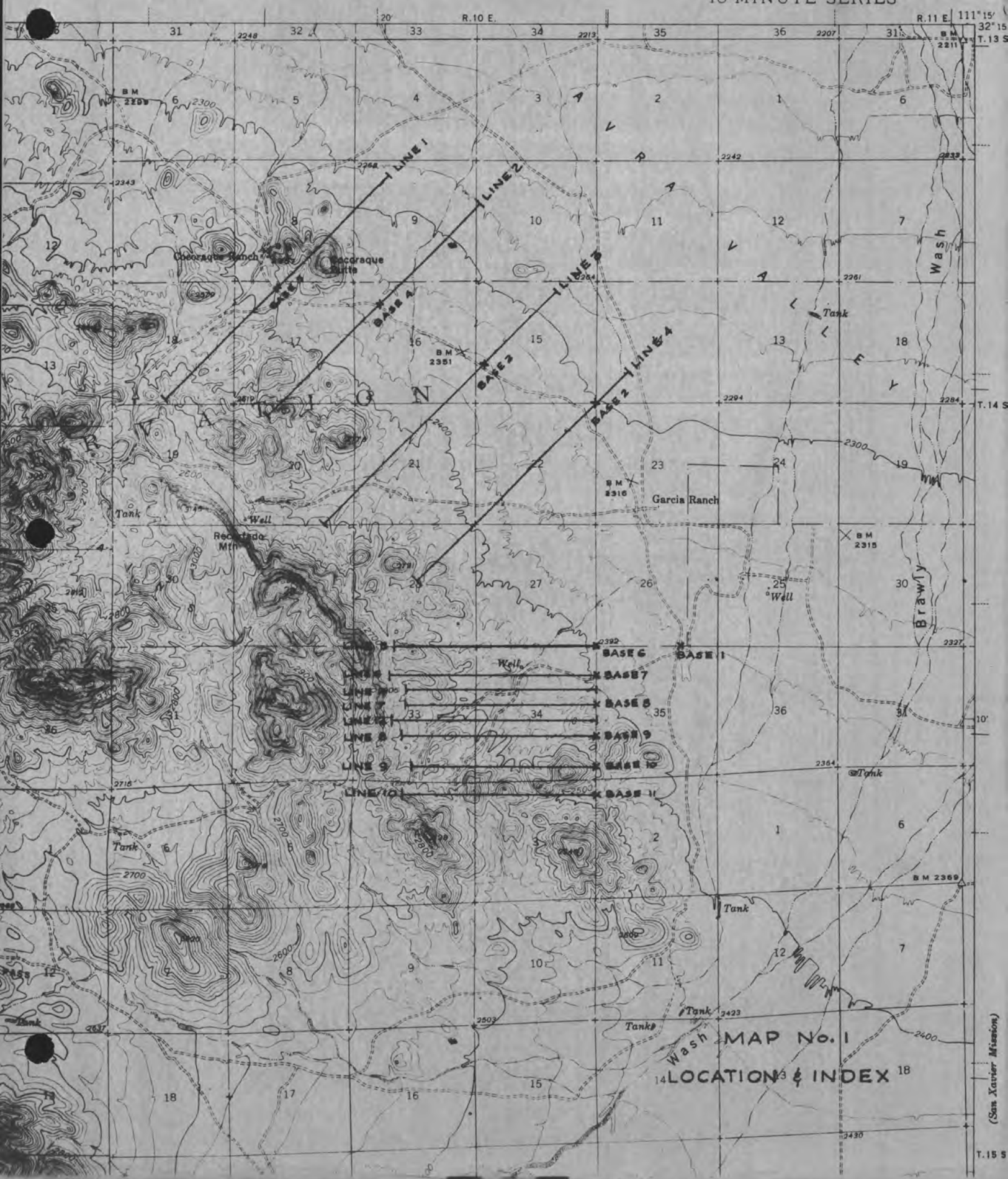
No. 2 Magnetic Profiles, Lines 1 - 4

No. 3 Magnetic Profiles, Lines 5 - 12

No. 4 Magnetic contours over topography of Lines 5 - 12

WAR DEPARTMENT

ARIZONA
(PIMA COUNTY)
COCORAQUE BUTTE QUADRANGLE
15-MINUTE SERIES



MAP No. 1
LOCATION & INDEX

INTRODUCTION

At the request of Mr. D. Bulmer of The New Jersey Zinc Company, Heinrichs Geoexploration Company in January 1963 made a reconnaissance magnetic survey in a portion of T 14 S, R 10 E, G.S.R.B.&M., Pima County, Arizona. This area lies on the northeast flank of the Roskruge Mountains. Twelve profile lines were run, as selected by the client. Results of the survey are herewith presented, plotted on maps and the written report contains tentative interpretations.

GEOEX personnel involved were Mr. J. W. Marlatt, geologist and Mr. Floyd Hanly assistant in the field and office as well as the GEOEX staff in the office.

CONCLUSIONS AND RECOMMENDATIONS

The results of this evaluation--an expanded follow-up of previous work-- has enlarged the total magnetic coverage thus allowing for additional interpretation, but has not significantly altered previous conclusions, i.e. that there are interesting buried magnetic features whose cause is little known. The anomalies showing the more favorable magnetic characteristics for possible economic ore association still appear to be some of those disclosed by the previous work. One of these areas has a few shallow drill holes on it, and magnetite and some mineralization was found.

Possibly the most significant new indication is the break on the northeast end of Line 2. Apparently the rocks comprising Cocoraque Butte and the major magnetic anomaly to the southeast are of a different type and relate to separate structures, with the relatively smooth gradient of the latter seemingly suggesting lower magnetic susceptibility sediments in addition to deepening alluvium. Furthermore, a third structure and/or rock-type, could exist between these two, but the inference of such pronounced banding, although not impossible, may be subject to some doubt.

In the light of what is known from magnetics, geology and the little previous drilling, the area warrants thorough investigation by induced polarization techniques. Land status is of

course a problem, for much of the favorable ground is on the Papago Indian Reservation. To thoroughly evaluate the area by electrical means, prior to drilling, the program budget will require $20,000 for the geophysical work. If strictly reconnaissance coverage is all that is desired, a few evaluation lines could be run for as little as $5,000 although this usually leaves some aspects in doubt.

INTERPRETATION

Line #1. Much of this line was run over outcrop or near surface bedrock. Results on other lines indicate that additional coverage of a couple of thousand feet more to the northeast would have been desirable, to see if a drop in level occurs. Features of note are that no pronounced high zone occurs over or near Cocoraque Butte whereas there is one farther to the southwest in fairly flat country with an apparent low in the hills at the extreme southwest end of the line. There is a possible correlation of this feature across the next three profiles to the southeast.

Line #2. Broadly speaking, two highs and two lows are shown. On the southwest end is a high with rather erratic readings due to outcropping volcanic type rocks. Going northeast there is a low, then a high caused by a feature buried under shallow alluvium, which might or might not be an extension of Cocoraque Butte. An interesting feature on this line is the

sharp low to the northeast. The alluvium is deeper, there is probably a fault, and the end of the line may be over Paleozoic sediments.

Line #3. In essence this repeats what Line #2 shows except for a convergence of the two highs indicating the two masses causing them to have different strike angles and they may be separated by a fault. The level drop to the northeast is more gradual indicating deepening alluvium.

Line #4. Again the same features as above show with the two highs now even closer together. The major broad deeper source (?) high noted in previous work, is on the northeastern part of the line. It exhibits some character which could correlate with the small smooth deep source (?) highs which show on the northeastern end of Lines #2 & #3 above. The major high appears separated by a fault from the others to the southwest and probably also is in contact with Paleozoic sediments to the northeast where the magnetic gradients drop and then flattens out at a low level.

Line #5. This and the following lines were run east-west and essentially are hard to tie to the four above. For magnetic coverage between the two areas, the former total intensity results obtained with the mobile magnetometer may be utilized. However, the most easterly high appears to tie to the two highs on the southwest ends of the first four lines. The larger high about

midway on the profile correlates with a high on Line #6 and probably is on a fault contact.

Lines #6 - #12. Except for the high on Line #6 mentioned above the rest of the lines show much similarity. It appears likely there are two rock types crossed with the one to the west containing more erratic distributions of magnetite. The two are separated by a fault which does not contain any large amount of magnetite. The rock to the west may be a metamorphic sequence.

METHODS AND PROCEDURES

Readings were taken at 100 ft. intervals along lines run using Brunton compass for direction and distance by pacing. A base was established at a known position on each line. Wooden marker pegs and flagging were placed at 1,000 ft. intervals and ends of the lines.

The instrument used is a Jalander, vertical intensity, flux-gate type, read in scale divisions which are interpretable to 10 gammas. There is some temperature drift with this instrument which is lessened by not reading too early or too late in the day. In this case the amount of driving time involved in getting to and from the job each day reduced this to a minimum which could be ignored except for one day which required the plotting of a drift curve and adjustment of the readings obtained.

A total of about 23 2/3 profile miles were read, plus base

check readings. Profiles are plotted to scale. The contour map is a little arbitrary, especially the ties with old work, and the values of the readings have been raised 200 gammas to give a closer tie to previous total intensity results plotted in contour form at 4" = 1 mile.

Respectfully submitted,

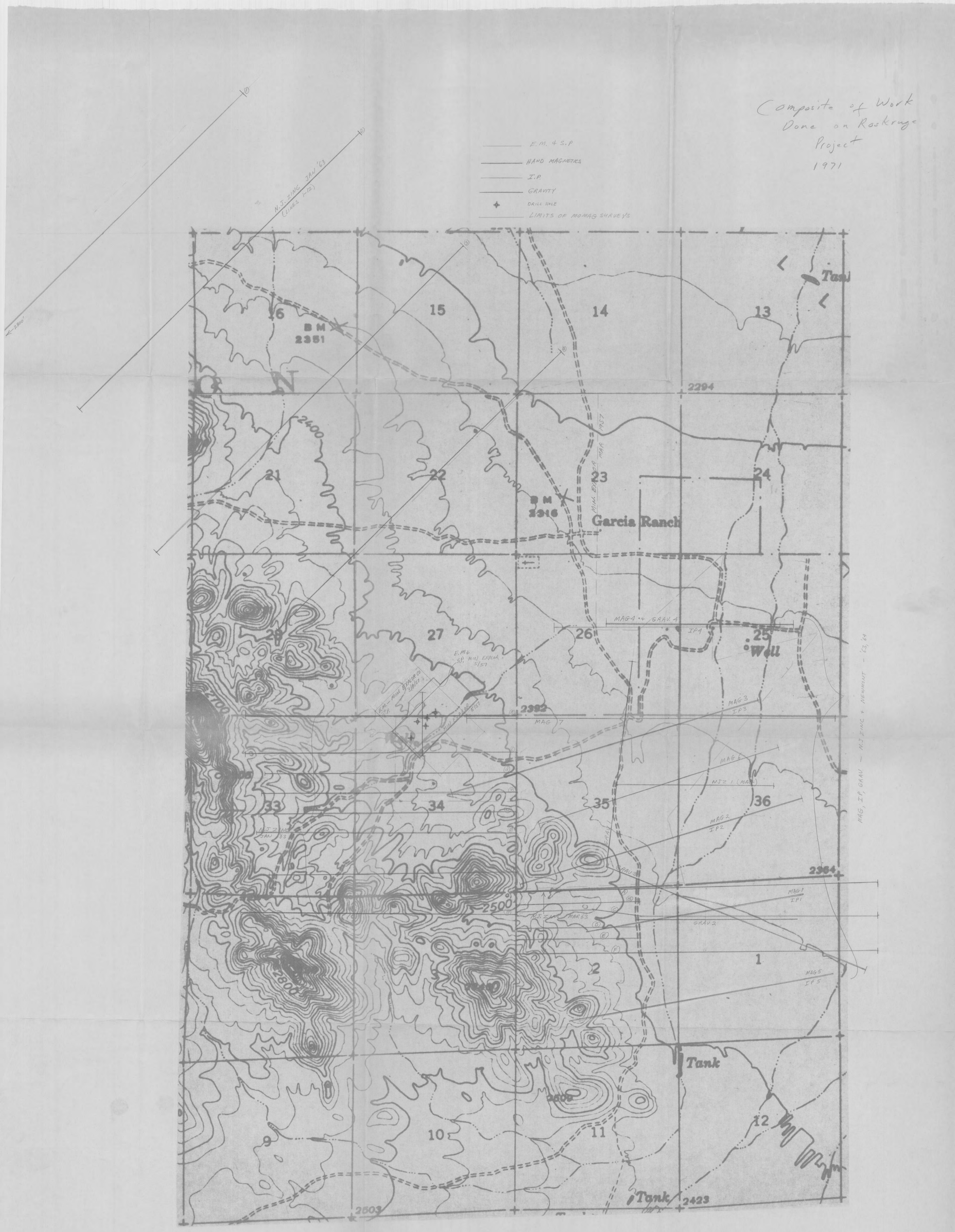
HEINRICHS GEOEXPLORATION CO.

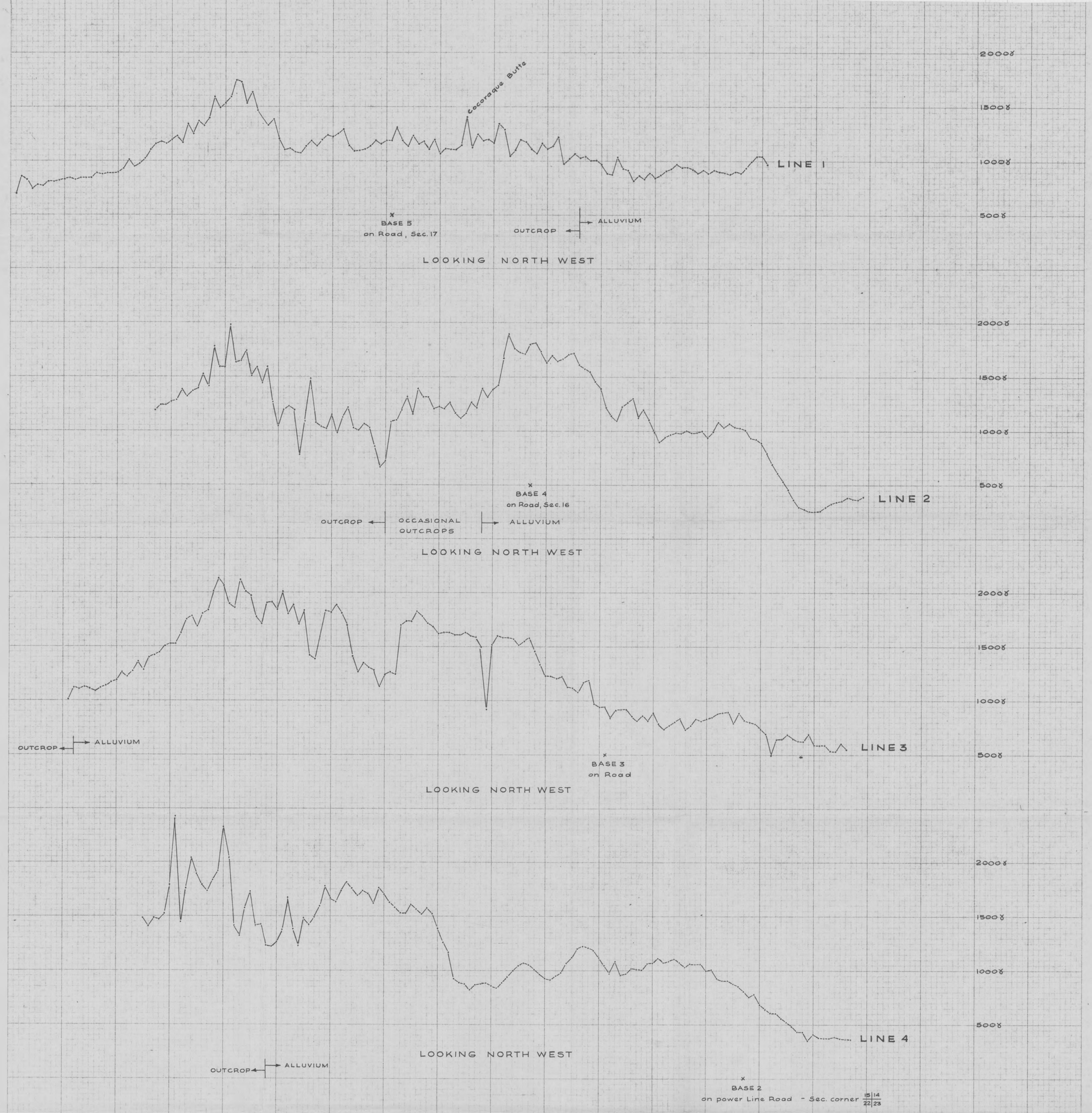
J. W. Marlatt

J. W. Marlatt
Geologist

January 21, 1963
P. O. Box 5671
Tucson, Arizona

Composite of Work Done on Roskruge Project 1971





All lines are S45°W – N45°E

MAP No. 2

MAGNETIC PROFILES
(Vertical Intensity)

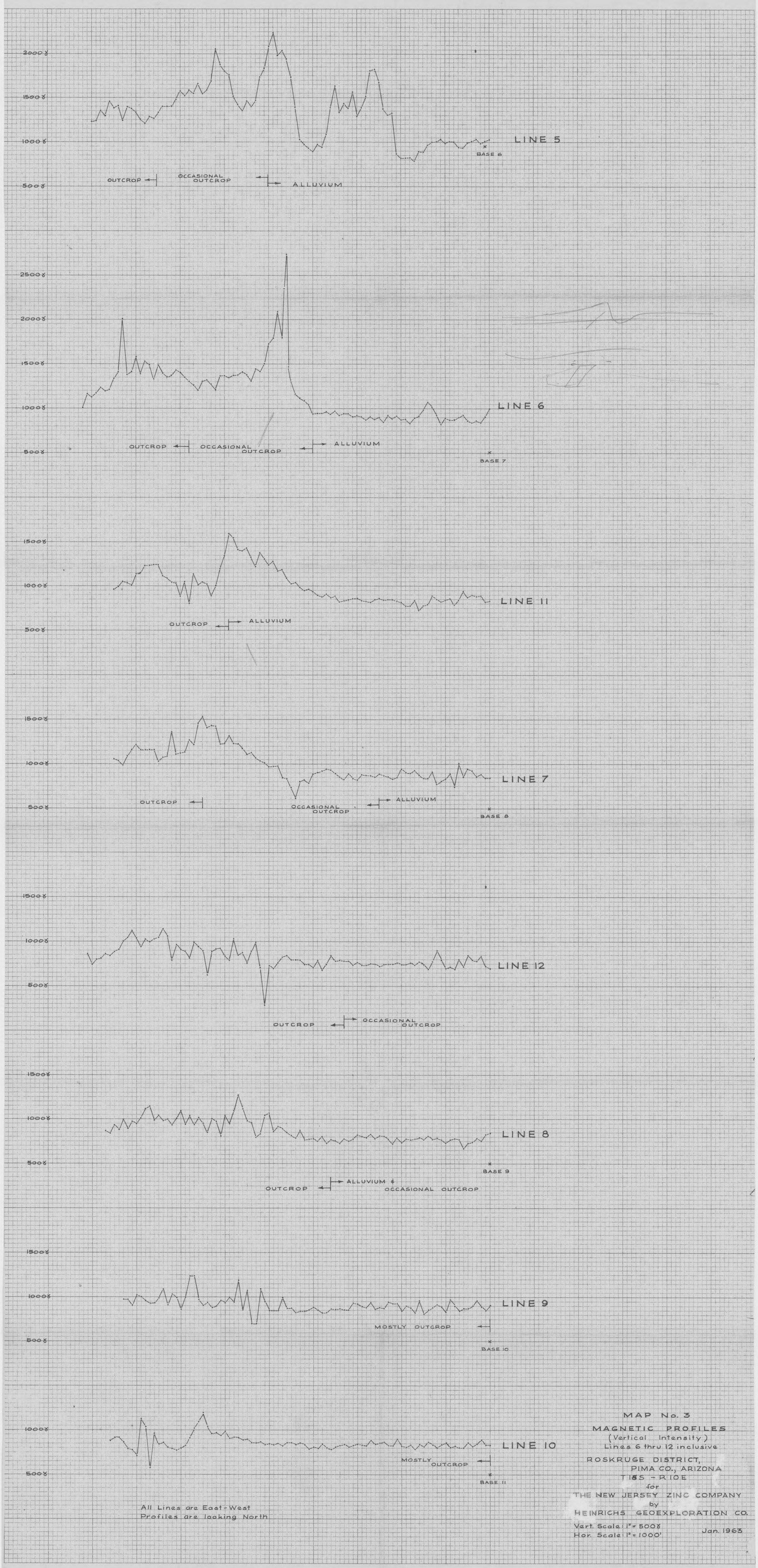
LINES 1-2-3 & 4

ROSKRUGE DISTRICT, PIMA CO., ARIZONA
T14S – R10E
for
THE NEW JERSEY ZINC COMPANY
by
HEINRICHS GEOEXPLORATION CO.

Vert. Scale: 1" = 500γ
Hor. Scale: 1" = 1000'

Jan. 1963

K&E STANDARD @ CROSS SECTION 10 X 10 TO THE INCH
KEUFFEL & ESSER CO. MADE IN U.S.A.
K&E STANDARD @ CROSS SECTION 10 X 10 TO THE INCH


2000γ
1500γ
1000γ
500γ
OUTCROP
OCCASIONAL OUTCROP
ALLUVIUM
BASE 6
LINE 5
2500γ
2000γ
1500γ
1000γ
500γ
OUTCROP
OCCASIONAL OUTCROP
ALLUVIUM
BASE 7
LINE 6
1500γ
1000γ
500γ
OUTCROP
ALLUVIUM
LINE 11
1500γ
1000γ
500γ
OUTCROP
ALLUVIUM
OCCASIONAL OUTCROP
BASE 8
LINE 7
1500γ
1000γ
500γ
OUTCROP
OCCASIONAL OUTCROP
LINE 12
1500γ
1000γ
500γ
OUTCROP
ALLUVIUM &
OCCASIONAL OUTCROP
BASE 9
LINE 8
1500γ
1000γ
500γ
MOSTLY OUTCROP
BASE 10
LINE 9
1000γ
500γ
MOSTLY OUTCROP
BASE 11
LINE 10
All Lines are East-West
Profiles are looking North
MAP No. 3
MAGNETIC PROFILES
(Vertical Intensity)
Lines 6 thru 12 inclusive
ROSKRUGE DISTRICT,
PIMA CO., ARIZONA
T15S - R10E
for
THE NEW JERSEY ZINC COMPANY
by
HEINRICHS GEOEXPLORATION CO.
Vert. Scale: 1" = 500γ
Hor. Scale: 1" = 1000'
Jan. 1963

Hand Mag
Notes

NRICHS GEOEXPLORATION COMPANY
POST OFFICE BOX 5671
TUCSON, ARIZONA

Page 1 Jan 7, 1963 (LINE 4)

J.W.M.
F.F.H.

ROSKRUGE AREA
Jalander Survey – N.J.E.

Sta.	Scale	Read	Conv. γ	Adjust for M.tie	Info.
Base 1	+1	99	1020	1000	11:05 – Allow.
BASE 2	+1	80	824	804	12:10 – ALLOW
1NE	+1	75	773	753	LINE 4 N.45 E.
2 NE	+1	77	793	773	
3	+1	68	700	680	
4	+1	65	670	650	
5	+1	63	649	629	
6	+1	61	628	608	
7	+1	56	577	557	
8	+1	54	556	536	
9	+1	50	515	495	
10	+1	54	556	536	HUB ④ 10NE
11	+1	55	567	547	
12	+1	46	474	454	
13	+1	52	536	516	
14	+1	50	515	495	
15	+1	49	505	485	
16	+1	49	505	485	
17	+1	50	515	495	
18	+1	48	494	474	
19	+1	47	484	464	
20	+1	47	484	464	HUB ④ 20NE
BASE 2	+1	82	845	825	12:45
1SW	+1	85	876	856	LINE 4 S.W.
2	+1	88	906	886	
3	+1	90	927	907	
4	+1	91	937	917	
5	+1	94	968	948	
6	+1	100	1030	1010	

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Page 2 Jan 7, 63 CLINE 4

JW	M
P.E.	H

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STA	SCALE	READ	ECN		INFO
7	+1	99	1020	1000	
8	+1	105	1082	1062	
9	+1	104	1071	1051	
10	+1	105	1082	1062	HOB ④
11	+1	103	1061	1041	
12	+1	107	1102	1082	
13	+1	110	1133	1113	Good future 13 14
14	+1	108	1112	1092	
15	+1	106	1092	1072	
16	+1	110	1133	1113	
17	+1	105	1082	1062	
18	+1	105	1082	1062	
19	+1	99	1020	1000	
20	+1	100	1030	1010	HOB
21	+1	101	1040	1020	
22	+1	96	989	969	
23	+1	95	979	959	
24	+1	98	1009	1089	
25	+1	97	999	979	
26	+1	104	1071	1051	
27	+1	112	1154	1134	
28	+1	118	1215	1195	
29	+1	119	1226	1206	
30	+1	121	1246	1226	HOB
31	+1	119	1226	1206	
32	+1	110	1133	1113	
33	+1	106	1092	1072	
34	+1	97	999	979	
35	+1	95	979	959	

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Page 3 Jan 17, 63 (LINEU

JW	M
FE	H

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STA	SCALE	READ			INFO
36	+1	91	937	917	
37	+1	93	958	938	
38	+1	96	989	969	
39	+1	100	1030	1010	
40	+1	104	1071	1051	HUB
41	+1	105	1082	1062	
42	+1	104	1071	1051	
43	+1	99	1020	1000	
44	+1	94	968	948	
45	+1	89	906	886	
46	+1	84	865	845	
47	+1	86	886	866	
48	+1	89	917	897	
49	+1	88	906	886	
50	+1	86	886	866	HUB
51	+1	82	845	825	
52	+1	88	906	886	
53	+1	89	917	897	
54	+1	93	958	938	
55	+1	115	1184	1164	old Road
56	+1	124	1277	1257 check +129	HUB old Road
57	+1	137	1411	1391	
58	+1	150	1545	1525	
59	+1	154	1586	1566	
60	+1	151	1555	1535	HUB
61	+1	154	1586	1566	
62	+1	158	1627	1607	
63	+1	151	1555	1535	
64	+1	152	1566	1546	
65	+1	156	1607	1587	

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page 4 Jan 7, 63 (J in 4

JW	M
JFF	H

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STA	SCALE	READ			INFO	
66	+1	160	1648	16 28		
67	+1	167	1720	17 60		
68	+1	172	1772	17 52		
69	+1	159	1638	16 18		
70	+1	168	1730	17 10	HUB	
71	+1	170	1751	17 31		
72	+1	166	1710	16 90		
73	+1	172	1772	17 52		
74	+1	178	1833	18 13 ✓		
75	+1	170	1751	17 31		
76	+1	161	1658	16 38		
77	+1	163	1679	16 59		
78	+1	174	1792	17 72		
79	+1	157	1617	15 97		
80	+1	146	1504	14 84	HUB	
81	+1	140	1442	14 22		
82	+1	147	1514	14 94		
83	+1	121	1246	12 26		
84	+1	136	1401	13 81		
85	+1	164	1689	16 69		
86	+1	135	1391	13 71		
87	+1	125	1288	12 68		
88	+1	121	1246	12 26		
89	+1	122	1257	12 37	O-CROP	
90	+1	140	1442	14 22 HUB	"	"
91	+1	139	1432	14 12	"	"
92	+1	171	1761	17 41 Dallin	"	"
93	+1	155	1597	15 97 Unit	"	"
94	+1	131	1349	13 29		
95	+1	139	1432	14 12		

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(Page 5) Jan 7, 63 (Jan 4)

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STA	SCALE	READ			INFO
96	+1	200	2060	2040	-0- cop
97	+1	229	2359	2339	
98	+1	130	1539	1919	-0- cop
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100	+1	170	1751	1731 HUB	" "
101	+1	175	1803	1783	" "
102	+1	185	1906	1886	" "
103	+1	199	2050	2030	" "
104	+1	172	1772	1752	" "
105	+1	142	1463	1443	" "
106	+1	237	2441	2421	" "
107	+1	176	1813	1793	" "
108	+1	152	1566	1546	" "
109	+1	144	1483	1463	" "
110	+1	145	1494	1474 HUB	
111	+1	138	1421	1401	
112	+1	147	1514	1494 HUB	
Bm2	+1	80	824	826	

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Page 1 Jan 8, 63 (Line 3)

JW	M
FE	H

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STA	SCALE	Read	γ CONV	Diurnal adj.	aquat TOMO-MAG	Info
BASE 1	+1	101	1040	1000	980	8:20
Base 2	+1	92	948	908		8:40
BASE 3	+1	98	1009	969	949 ✓	8:50
1NE	+1	89	917	867	847 ✓	N.E
2NE	+1	95	979	939	919 ✓	
3	+1	96	989	949	929 ✓	
4	+1	96	989	949	929 ✓	
5	+1	91	937	887	867 ✓	
6	+1	87	896	846	826 ✓	
7	+1	91	937	897	877 ✓	
8	+1	86	886	846	826 ✓	
9	+1	83	855	815	795 ✓	
10	+1	82	845	805	785 ✓	10. NE HUB
11	+1	78	803	763	743 ✓	
12	+1	80	824	784	764 ✓	
13	+1	84	865	825	805 ✓	
14	+1	87	896	856	836 ✓	
15	+1	77	793	753	733 ✓	
16	+1	80	824	784	784 ✓	
17	+1	87	896	856	836	
18	+1	85	876	836	816	
19	+1	87	896	856	836	
20	+1	88	906	866	846	20. NE HUB
21	+1	91	937	897	877	
22	+1	92	948	908	888	
23	+1	93	958	918	898	
24	+1	82	845	805	785	
25	+1	92	948	908	888	
26	+1	86	886	846	826	
27	+1	84	865	825	805	

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Page 2 Jan 8, 63 (Jan 3

J.W. M.
JEF. H.

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STA	SCALE	Read	CONV		INFO
28	+1	82	845	805	785
29	+1	78	803	763	743
30	+1	74	762	722	702 HUB 30 NE
31	+1	54	556	516	496
32	+1	69	711	671	651
33	+1	69	711	671	651
34	+1	73	752	712	692
35	+1	69	711	671	651
36	+1	67	690	650	630
37	+1	67	690	650	630
38	+1 NE	64	659	619	699
39	+1 NE	63	649	609	589
40	+1 NE	63	649	609	589B 40 NE
41	+1	63	649	609	589
42	+1	59	607	567	547
43	+1	58	597	557	537
44	+1	65	670	630	610
45	+1	60	618	572	552 HUB 45 NE
Base 3	+1	99	1020	980	960
1 SW	+1	109	1112	918	948 CIRC S.W. 1 ROD w Base 3
2	+1	110	1155	983	993
3	+1	117	1250	1210	1190
4	+1	119	1226	1186	1166
5	+1	112	1154	1104	1084
6	+1	115	1184	1144	1124
7	+1	116	1195	1155	1135
8	+1	124	1277	1237	1217
9	+1	123	1267	1227	1207
10	+1	125	1288	1248	1228 HUB 10 SW

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Page 3 Jan 8, 63 (Jan 3)

A.W.	M
E.E.	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	Read	CONV		INFO
11SW	+1	125	1288	1258	1238
12	+1	135	1391	1361	1341
13	+1	146	1504	1474	1454
14	+1	157	1617	1587	1567
15	+1	155	1597	1567	1547
16	+1	152	1566	1536	1516
17	+1	157	1617	1587	1567
18	+1	159	1638	1608	1588
19	+1	158	1627	1597	1577
20	+1	160	1648	1618	1598 HUB 20 S.W
21	+1	150	1545	1525	1505
22	+1	94	968	948	928
23	+1	149	1535	1515	1495
24	+1	158	1627	1607	1587
25	+1	159	1638	1618	1598
26	+1	162	1669	1649	1629
27	+1	160	1648	1628	1608
28	+1	160	1648	1628	1608
29	+1	163	1679	1659	1639
30	+15W	164	1679	1659	1639 HUB 30 SW
31	+1	161	1658	1648	1628
32	+1	166	1710	1700	1686
33	+1	169	1741	1731	1711 WASH
34	+1	175	1803	1793	1773
35	+1	180	1854	1844	1824
36	+1	171	1761	1751	1731
37	+1	172	1772	1762	1742
38	+1	168	1730	1720	1700
39	+1	124	1277	1267	1247
40	+1	126	1298	1288	1268 HUB 40 SW

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(Page 4) Jan 8, 63 (June 3)

J.W.	M.
E.E.	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	Read	COND	IN	FO
4 ISW	+1	124	1277	1267	1247
42	+1	112	1154	1149	1124
43	+1	129	1329	1319	1299
44	+1	130	1339	1329	1309
45	+1	134	1380	1370	1350
46	+1	125	1288	1268	
47	+1	140	1442	1422	
48	+1	167	1720	1700	
49	+1	178	1833	1813	
50	+1	195	1906	1886 UB	50 SW
51	+1	179	1844	1824	
52	+1	180	1854	1834	
53	+1	148	1524	1504	
54	+1	136	1401	1381	
55	+1	140	1442	1422	
56	+1	180	1854	1864	1844
57	+1	168	1730	1740	1720
58	+1	185	1906	1916	1896
59	+1	176	1813	1823	1803
60	+1	197	2029	2039 UB	2019 60 SW
61	+1	180	1854	1864	1844
62	+1	187	1926	1936	1916
63	+1	186	1916	1926	1906
64	+1	168	1730	1740	1720
65	+1	173	1782	1792	1772
66	+1	193	1988	1998	1978
67	+1	197	2029	2039	2019
68	+1	206	2122	2133	2113
69	+1	182	1875	1885	1865
70	+1	184	1895	1905 UB	70 1880 SW

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Page 5 Jan 8, 63 Line 3

J.W.	M
F.F.	H

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TR. MK REG. U.S. PAT. OFF.

STA	SCALE	Read	CONV		IN FO
71	+1	200	2060	2080	2060
72	+1	206	2122	2142	2122
73	+1	195	2009	2029	2009H
74	+1	177	1823	1843	1823 "
75	+1	175	1803	1823	1803 "
76	+1	164	1689	1709	1689 + Road
77	+1	173	1782	1802	1782
78	+1	170	1751	1771	1751
79	+1	158	1627	1647	1627
80	+1	149	1535	1555	+ 153580 SW
81	+1	147	1514	1544	1514
82	+1	144	1483	1523	1503
83	+1	140	1442	1472	1452
84	+1	139	1421	1451	1431
85	+1	135	1391	1421	1401
86	+1	124	1277	1307	1287
87	+1	132	1360	1390	1370
88	+1	125	1267	1297	1277
89	+1	118	1215	1245	1225
90	+1	122	1257	1287	HUB 1267 SW
91	+1	114	1174	1214	1194
92	+1	112	1154	1194	1174
93	+1	109	1123	1163	1143
94	+1	107	1102	1142	1122
95	+1	104	1071	1111	1091
96	+1	106	1092	1134	1114
97	+1	107	1102	1142	1122
98	+1	105	1082	1124	1104
99	+1	98	1009	1149	1129 CROP
100	+1	97	999	1039	+ 101900 SW
BOZ 3	+1	90	927		1120

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Page 1 Jan 8, 63 Line 2

JW	M
EF	H

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TR. MK REG. U.S. PAT. OFF.

STA	SCALE	READ	CONV	TN	FO
BASE 4	+1	175	1803	1783	1130
1NE	+1	177	1823	1803	
2NE	+1	170	1751	1731	
3NE	+1	160	1648	1628	
4NE	+1	166	1710	1690	
5NE	+1	161	1658	1638	
6	+1	164	1689	1669	
7	+1	167	1720	1700	
8	+1	168	1730	1710	
9	+1	159	1627	1607	
10	+1	154	1586	1566	HUB 10NE
11	+1	152	1566	1546	
12	+1	143	1473	1453	
13	+1	137	1411	1391	
14	+1	120	1236	1216	
15	+1	112	1154	1134	
16	+1	109	1112	1092	Dance comb
17	+1	122	1257	1237	
18	+1	124	1277	1257	
19	+1	128	1318	1298	
20	+1	111	1143	1123	HUB 20NE
21	+1	118	1215	1195	
22	+1	108	1112	1092	
23	+1	97	999	979	
24	+1	89	917	897	
25	+1	93	958	938	
26	+1	95	979	959	
27	+1	97	999	979	
28	+1	97	999	979	
29	+1	99	1020	1000	

Page 2 Jan 8, 63 Line 2

JW	M
FF	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	Read	CONV	IN	FO
30NE	+1	97	999	979	30NE
31	+1	97	999	979	
32	+1	98	1009	989	
33	+1	93	958	938	
34	+1	98	1009	989	
35	+1	106	1092	1072	
36	+1	102	1050	1036	
37	+1	105	1082	1062	
38	+1	103	1061	1041	
39	+1	102	1050	1036	
40	+1	100	1030	1010	UB 40NE
41	+1	93	958	938	
42	+1	92	948	928	
43	+1	89	917	897	
44	+1	78	803	783	✓
45	+1	69	711	691	
46	+1	62	639	619	
47	+1	54	556	536	
48	+1	46	474	454	
49	+1	37	381	361	
50	+1	36	371	351	UB 50NE
51	+1	35	361	341	
52	+1	33	340	320	
53	+1	32	330	310	
54	+1	33	340	320	
55	+1	36	371	351	
56	+1	38	391	371	
57	+1	40	412	392	
58	+1	42	422	402	
59	+1	45	464	444	

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Page 3 Jan 8, 63 Line 2

JW	M
JEF	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	Read	CONV	IN	FC
60 NE	+1	44	453	433	B 60 NE
61	+1	43	443	423	
62	+1	45	464	444	
Base 4	+1	175	1803	1793	✓
1 SW	+1	168	1730	1710	
2	+1	169	1741	1721	
3	+1	172	1772	1752	
4	+1	166	1710	1890	
5	+1	164	1689	1669	
6	+1	140	1442	1422	
7	+1	136	1401	1381	
8	+1	130	1339	1319	
9	+1	137	1411	1391	-- CROP
10	+1	120	1236	1216	UB 10 SW
11	+1	125	1288	1268	✓
12	+1	115	1184	1164	
13	+1	112	1154	1124	
14	+1	115	1184	1164	
15	+1	124	1277	1257	
16	+1	120	1236	1216	
17	+1	121	1246	1226	
18	+1	119	1226	1206	
19	+1	130	1339	1319	
20	+1	130	1339	1319	UB 20 SW
21	+1	137	1411	1391	
22	+1	114	1174	1154	
23	+1	130	1339	1319	
24	+1	117	1205	1185	
25	+1	108	1112	1092	

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(Page 4) Jan 8, 63 (Line 2)

JW	M
JEE	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	Read	CONV	IN	FO
26	+1	106	1092	1072	
27	+1	72	742	722	(O-CROP)
28	+1	67	690	670	(GRAVITY)
29	+1	85	876	856	" "
30	+1	102	1050	1030	HOB 30SW
31	+1	105	1082	1062	
32	+1	100	1030	1010	
33	+1	102	1050	1030	
34	+1	120	1236	1216	
35	+1	111	1143	1123	
36	+1	97	999	979	
37	+1	104	1071	1151	
38	+1	101	1040	1020	
39	+1	103	1061	1041	
40	+1	106	1092	1072	HOB 40SW
41	+1	146	1504	1484	
42	+1	107	1102	1082	
43	+1	77	793	773	
44	+1	118	1215	1195	
45	+1	121	1246	1226	
46	+1	118	1215	1195	
47	+1	113	1164	1044	
48	+1	125	1288	1268	
49	+1	157	1617	1597	
50	+1	142	1463	1443	HOB 50SW
51	+1	155	1597	1577	
52	+1	148	1524	1504	
53	+1	190	1957	1737	-O-CROP
54	+1	162	1669	1649	
55	+1	161	1658	1638	

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Page 5 Jan 8, 63 Line 2

JW	M.
E.E.	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	Read	CONV	IN	FO
56SW	+1	194	1998	1978	
57	+1	155	1597	1577	
58	+1	156	1607	1587	
59	+1	175	1803	1783	
60	+1	138	1421	1401 B	60 SW
61	+1	148	1524	1520	0 - CROD
62	+1	137	1411	1391	-0-CROD
63	+1	134	1380	1360	" "
64	+1	130	1339	1319	-0- CROD
65	+1	136	1401	1381	" "
66	+1	126	1298	1278	" "
67	+1	125	1288	1268	
68	+1	122	1257	1237	
69	+1	122	1257	1237	
70	+1	117	1205	1185 H.U.D	70SW
Base 4	+1	168	1730	1710	2:30
Base 3	+1	94	968	948	2:40

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LEFAX, PHILADELPHIA 7, PA. MADE IN U.S.A.

Page 1 Jan 8, 63 (Tmd)

JW	M.
FF	H.

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	READ	CONV	INFO	
Page 5	+1	117	1205	1185	Run 14:50
1 NE	+1	130	1339	1319	"
2 NE	+1	117	1205	1185	"
3	+1	112	1154	1134	"
4	+1	121	1246	1226	"
5	+1	114	1174	1154	"
6	+1	116	1195	1175	"
7	+1	109	1123	1103	"
8	+1	118	1215	1195	"
9	+1	105	1082	1062	"
10	+1	110	1133	1113	"
11	+1	109	1123	1103	"
12	+1	109	1123	1103	"
13	+1	113	1164	1144	CROP
14	+1	138	1421	1401	"
15	+1	112	1154	1134	"
16	+1	123	1267	1247	CROP
17	+1	117	1205	1185	" PYR.
18	+1	118	1215	1195	"
19	+1	115	1184	1164	"
20	+1	132	1360	HUB	1340
21	+1	127	1308	1288	"
22	+1	103	1061	1041	"
23	+1	108	1112	1092	"
24	+1	117	1205	1185	"
25	+1	116	1195	1175	"
26	+1	110	1133	1113	"
27	+1	105	1082	1062	"
28	+1	114	1174	1154	
29	+1	110	1133	1113	

ORIGINAL COPR. 19[illegible] BY J. C. PARKER

LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Page 2 Jan 8 65 (Line 1)

D.W.	M
F.E.	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	READ	CONV	INFO	
30NE	+1	112	1154	HUB	1134
31	+1	120	1236	"	1216
32	+1	96	989	"	969
33	+1	100	1030	-0	CR 1010
34	+1	105	1082	"	1062
35	+1	102	1050	off 0	C20 1030
36	+1	102	1050		1030
37	+1	99	1020		1000
38	+1	99	1020		1000
39	+1	96	989		969
40	+1	87	896	876	HUB 40NE
41	+1	87	896	876	
42	+1	103	1061	1041	
43	+1	92	948	928	
44	+1	90	927	907	
45	+1	81	834	814	
46	+1	86	886	866	
47	+1	83	855	835	
48	+1	88	906	886	
49	+1	84	865	845	
50	+1	86	886	866	HUB 50NE
51	+1	90	927	907	
52	+1	91	937	917	
53	+1	96	989	969	
54	+1	94	968	948	
55	+1	94	968	948	
56	+1	92	948	928	
57	+1	88	906	886	
58	+1	91	937	917	
59	+1	88	906	886	

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Page 3 Jan 8, 63 (Line 1

JW	M
F.E	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	READ	CONV	INFO	
60	+1	90	927	907 HUB	60NE
61	+1	89	917	897	
62	+1	88	906	886	
63	+1	87	896	876 WASH	
64	+1	89	917	897	
65	+1	89	906	886	
66	+1	92	948	928	
67	+1	98	1009	989	
68	+1	102	1050	1030	
69	+1	102	1050	1030	
70	+1	96	989	969	HUB 70NE
Base 5	+1	119	1226	1206	4:21 8
BASE 3	+1	96	989	969	4:35
BASE 1	+1	97	999	979	4:50

Page 3 - 1 Jan 9, 63 (Line 2

Base 1	+1	107	1102	1082	9:20
BASE 3	+1	98	1009	1089	9:40
Base 5	+1	120	1236	1216	9:50
1SW	+1	116	1195	1175	
2SW	+1	114	1174	1154	
3SW	+1	117	1205	1185	
4	+1	112	1154	1134	
5	+1	109	1123	1103	
6	+1	108	1112	1092	
7	+1	108	1112	1092	
8	+1	116	1195	1175	
9	+1	127	1308	1288	
10	+1	123	1267	clear old	Good HUB

1247

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Page 4 Jan 9, 63 (Final)

JW	M
E.F.	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	Read	CONV	IN	FO	
11	+1	121	1246	1226		
12	+1	122	1257	1237		
13	+1	118	1215	1195		
14	+1	112	1154	1134		
15	+1	116	1195	1175		
16	+1	111	1143	1133		
17	+1	105	1082	1062	-0-	CROP
18	+1	107	1102	1082	"	"
19	+1	110	1133	1113	"	"
20	+1	109	1123	1103	-0- HUB	CROP
21	+1	118	1215	1195		
22	+1	135	1391	1371		
23	+1	131	1349	1329	-0-	CROP
24	+1	191	1967	1947	-0-	CROP
25	+1	144	1483	1463	-0-	CROP
26	+1	161	1658	1638	"	"
27	+1	150	1545	1525	"	"
28	+1	170	1751	1731	"	"
29	+1	171	1761	1741	"	"
30	+1	165	1597	1577	HUB	
31	+1	150	1545	1525	-0-	"
32	+1	146	1504	1484		
33	+1	156	1607	1587	-0-	CROP
34	+1	137	1411	1391	"	"
35	+1	130	1339	1319	"	"
36	+1	134	1390	1360	"	"
37	+1	123	1267	1247	"	"
38	+1	132	1360	1340	"	"
39	+1	115	1184	1164	"	"
40	+1	116	1195	1175	HUB	"

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LEFAX, PHILADELPHIA 7, PA. MADE IN U.S.A.

Page 5 Jan 9, 63 Line 1

JW	M
E.E.	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	Read	CONV	IN	FO	
41	+1	113	1164	1144	-0-	CRCA
42	+1	114	1174	1154	"	"
43	+1	115	1184	1164	"	"
44	+1	114	1174	1154	"	"
45	+1	109	1123	1103	"	"
46	+1	101	1040	1020	"	"
47	+1	96	989	969	"	"
48	+1	94	968	948	"	"
49	+1	100	1030	1010	"	"
50	+1	92	948	928	"	"
51	+1	89	917	897	"	"
52	+1	88	906	886	"	"
53	+1	88	906	886	"	"
54	+1	87	896	876	"	"
55	+1	88	906	886	"	"
56	+1	84	865	845	"	"
57	+1	84	865	845	"	"
58	+1	84	865	845	"	"
59	+1	82	845	825	"	"
60	+1	83	855	835	"	"
61	+1	82	845	825	"	"
62	+1	81	834	814	"	"
63	+1	80	824	804	"	"
64	+1	80	824	804	"	"
65	+1	76	783	763	"	"
66	+1	77	793	773	MORALI	"
67	+1	74	762	742	"	"
68	+1	82	845	825	"	"
69	+1	85	876	856	"	"
70	+1	88	906	HOB	886	"

ORIGINAL COPR. 1959 BY J. C. PARKER
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Page 6 Jan 9, 63 (Tins)

JW	M
E.F.	U

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	RCQd	CONV	IN	FO
Base 5	+1	118	1215	1195	
BASE 3	+1	94	968	948	
BASE 1	+1	93	958	938	

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Line 6 Jun 9, 63 (Page 1

JW	M
E.F.	11
TR. MK REG.	U.S. PAT. OFF.

STA	SCALE	READ	CONV	IN	FO
BASE 6	+1	96	989		
0 E	+1	99	1020	1000 Base	7
1 W	+1	90	927	907	
2	+1	84	865	845	
3	+1	86	886	866	
4	+1	84	865	845	
5	+1	86	886	866	
6	+1	92	948	928	
7	+1	89	917	897	
8	+1	87	896	876	
9	+1	87	896	876	
10	+1	79	914	894	Road
11	+1	82	845	825	
12	+1	92	948	928	
13	+1	101	1040	1020	
14	+1	106	1092	1072	
15	+1	97	999	979	
16	+1	90	927	907	
17	+1	88	906	886	
18	+1	83	855	835	
19	+1	87	896	876	
20	+1	87	896	876B	
21	+1	90	927	907	
22	+1	89	917	897	
23	+1	92	948	928	
24	+1	84	865	845	
25	+1	92	917	897	
26	+1	97	999	879	
27	+1	90	927	907	

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Line 6 Jan 9, 63 (Pos 2

J.W.	M
E.E.	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	READ	CONV	IN	FO	
28	+1	87	896	876		
29	+1	90	927	907		
30	+1	92	948	928	Pond	
31	+1	91	937	917		
32	+1	94	968	948		
33	+1	94	968	948		
34	+1	92	948	928		
35	+1	96	989	969		
36	+1	94	968	948	[illegible] Pond + Dam	
37	+1	96	989	969	[illegible] pond	
38	+1	94	968	948	[illegible] pond	
39	+1	94	968	948		
40	+1	92	948	928	HUB	
41	+1	102	1050	1030	-0- CROP	
42	+1	107	1102	1082		
43	+1	110	1133	1113		
44	+1	114	1174	1154		
45	+1	130	1339	1319		
46	+2	89	2750	2730	-0- CROP	
45½	+2	48	1483	1463	"	"
45½	+1	144	1483	1463	"	"
46½	+1	230	2369	2349	"	"
47	+1	175	1803	1783	"	"
48	+1	204	2101	2081	"	"
49	+1	175	1803	1783		
50	+1	170	1751	1731	HUB	
51	+1	148	1524	1504		
52	+1	140	1442	1422		
53	+1	142	1463	1443		

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Line 6 Jan 9, 63) Pg 3

J.W.	M
F.E.	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	READ	CONV	INFO		
54	+1	129	1329	1309	Clean Pad 75 PN	
55	+1	135	1391	1371		
56	+1	138	1421	1401		
57	+1	135	1391	1371		
58	+1	135	1391	1371		
59	+1	133	1370	1350		
60	+1	135	1391	1371	HUB	
61	+1	134	1380	1360		
62	+1	120	1236	1216		
63	+1	126	1298	1278		
64	+1	130	1339	1319	-0-CROX	
65	+1	129	1329	1309		
66	+1	118	1215	1195		
67	+1	124	1277	1257		
68	+1	128	1318	1298	-0-CROX	
69	+1	133	1370	1350	"	"
70	+1	138	1421	1401 HUB	"	"
71	+1	141	1455	1435	"	"
72	+1	135	1391	1371	"	"
73	+1	133	1370	1350	"	"
74	+1	137	1411	1391	"	"
75	+1	136	1401	1481	"	"
76	+1	131	1349	1329	"	"
77	+1	146	1504	1484	"	"
78	+1	150	1545	1525	"	"
79	+1	136	1401	1381	"	"
80	+1	155	1597	1577	"	"
81	+1	139	1432	1412	"	"
82	+2	135	1391	1371	"	"

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Jan 6 Jan 963 Page 4

JW	M
EE	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	READ	CONV	IN	FO	
83	+1	197	2029	2009	-0-CROD	
84	+1	138	1421	1401	"	"
85	+1	132	1360	1340	"	"
86	+1	120	1236	1216	"	"
87	+1	118	1215	1195	"	"
88	+1	122	1257	1237	"	"
89	+1	116	1195	1175	"	"
90	+1	112	1154	1134	"	"
91	+1	114	1174	1157	"	"
92	+1	100	1030	1010	"	"
TURN		NORTH		first Sta 120 ft		
12S	+1	100	1030			
11S	+1	106	1092			
10S	+1	107	1102			
9S	+1	110	1033			
8S	+1	106	1092			
7S	+1	138	1421			
6S	+1	108	1112			
5S	+1	122	1257			
4S	+1	130	1339			
3S	+1	135	1391			
2S	+1	119	1226			
1S	+1	128	1318			
0S	+1	122	1257	HUB		

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Line 5 Jan 9, 63 Page 1

A.W.	M
F.F.	#

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	Read	CONV	IN	FO
92W	+1	122	1257	1237	-0- CROD
91	+1	123	1267	1247	"
90	+1	133	1370	1350	"
89	+1	126	1298	1278	"
88	+1	149	1483	1463	"
87	+1	136	1401	1381	"
86	+1	139	1432	1412	"
85	+1	123	1267	1247	"
84	+1	137	1411	1391	"
83	+1	135	1391	1371	"
82	+1	132	1360	1340	"
81	+1	124	1277	1257	"
80	+1	130	1339	1319	"
79	+1	127	1308	1288	"
78	+1	125	1288	1268	"
77	+1	131	1349	1329	"
76	+1	135	1421	1401	"
75	+1	138	1421	1401	
74	+1	139	1432	1412	
73	+1	146	1504	1484	
72	+1	145	1594	1574	
71	+1	150	1545	1525	-0- CROD
70	+1	156	1607	1587	
69	+1	152	1566	1546	
68	+1	163	1679	1659	-0- CROD
67	+1	152	1566	1546	
66	+1	156	1607	1587	
65	+1	165	1700	1680	
64	+1	202	2081	2061	

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Line 5 Jan 9 63 Page 2

JW	M
RE	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	READ	CONV	IN	FO
63	+1	184	1895	1875	
62	+1	176	1813	1793	
61	+1	173	1782	1762	
60	+1	149	1535	HUB 1515	
59	+1	141	1452	1432	
58	+1	133	1370	1350	
57	+1	144	1483	1463	Road
56	+1	137	1411	1391	Corner at 55½
55	+1	145	1494	1474	
54	+1	171	1761	1741	
53	+1	180	1854	1834	
52	+1	205	2112	2092	
51	+1	220	2266	2246	-0-C ROD
50	+1	195	2009	1989	
49	+1	200	2060	2040	
48	+1	191	1967	1947	
47	+1	170	1751	1731	
46	+1	137	1411	1391	
45	+1	102	1050	1030	
44	+1	96	989	969	
43	+1	92	948	928	
42	+1	89	917	897	
41	+1	96	989	969	
40	+1	94	968	948	HUB
39	+1	107	1102	1082	
38	+1	136	1401	1381	
37	+1	160	1648	1628	
36	+1	132	1360	1340	
35	+1	141	1452	1432	

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Line 5 Jan 9, 63 Page 3

JW	M
EE	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	READ	CONV	IN	FO
34	+1	135	1391	1371 Loc Pt	100' S
33	+1	154	1586	1566 DUH	33 1/2
32	+1	128	1318	1298	
31	+1	136	1401	1381	
30	+1	149	1535	1515	
29	+1	177	1823	1803	
28	+1	179	1844	1924	
27	+1	164	1689	1669	
26	+1	134	1380	1360	
25	+1	129	1329	1309	mark
24	+1	131	1349	1329	
23	+1	86	886	866	
22	+1	82	845	825	
21	+1	82	845	825	
20	+1	82	845	825	
19	+1	78	803	783	
18	+1	89	917	897	
17	+1	88	906	886	
16	+1	96	989	969	
15	+1	99	1020	1000	
14	+1	100	1030	1010	
13	+1	102	1050	1030	
12	+1	98	1009	989	
11	+1	100	1030	1010	
10	+1	99	1020	1000 B	
9	+1	94	968	948	
8	+1	93	958	938	
7	+1	98	1009	989	
6	+1	100	1030	1010	

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Page 4 Jan 9, 63 Lines

JW	M
F.E.	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	Read	CONV	INFO
5	+1	101	1048	1028
4	+1	98	1009	989
3	+1	100	1030	1010 d Bar 6
2	+1	102	1050	1030 Road
OE	+1	100	1030	LINE 6 16:00
BASE	+1	94	968	16:10

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LEFAX, PHILADELPHIA 7, PA. MADE IN U.S.A.

Page 1 Jan 10, 63 (Line 7)

L.W.	M.
F.F.	H.

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	Read	CONV	IN	FO	
Base 1	+1	100				9:20
Base 4	+1	106			Line 6	9:30
Base 6	+1	99			Line 5	10:00
Base 7	+1	94			Line 6	10:03
Base 8	+1	87			Line 7	10:06
Base 9	+1	79			Line 8	10:10
Changed Batteries						
Base 9	+1	74	762	742	Line 8	10:20
Bin 8-OE	+1	84	865	845	Line 7	10:28
1W	+1	84	865	845	Claim Post	
2W	+1	87	896	876		
3	+1	85	876	856		
4	+1	92	948	928	E. Colm Post	
5	+1	94	968	948		
6	+1	85	876	856		
7	+1	100	1030	1010	West of Claim Post	
8	+1	74	762	742		
9	+1	89	917	897		
10	+1	83	855	835	HUB	10:35
11	+1	81	834	814		
12	+1	77	793	773		
13	+1	90	927	907	Colm NE 12	
14	+1	83	855	835		
15	+1	84	865	845		
16	+1	87	896	876		
17	+1	92	948	928		
18	+1	89	917	897		
19	+1	90	927	907		
20	+1	94	968	HUB 948		10:40

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Page 2 Jan 10, 63 Line 7

J. W. M.
F. F. H.

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	Read	CONV	INFO		
21	+1	84	865	845		
22	+1	83	855	835		
23	+1	85	876	856		
24	+1	86	886	866	-0-	CROP
25	+1	88	906	886	"	"
26	+1	85	876	856		
27	+1	86	886	866		
28	+1	86	886	866		
29	+1	87	896	876		
30	+1	82	845	HUB 825		10:50
31	+1	84	865	845		
32	+1	88	906	886		
33	+1	83	855	835		
34	+1	85	876	856	-0-	CROP
35	+1	89	917	897	"	"
36	+1	93	958	938		
37	+1	94	968	948		
38	+1	92	948	928		
39	+1	90	927	907		
40	+1	88	906	HUB 886		10:58
41	+1	79	814	794		
42	+1	82	845	825		
43	+1	80	824	804	Road 4 3½	
44	+1	62	639	619		
45	+1	74	762	742		
46	+1	83	855	835		
47	+1	84	865	845		
48	+1	97	999	979		
49	+1	97	999	979		
50	+1	96	989	HUB 969		11:10

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LEFAX, PHILADELPHIA 7, PA. MADE IN U.S.A.

Page 3 Jan 10, 63 Line 7

J.W.	M.
F.F.	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	Read	CONV	INFO		
51	+1	101	1040	1020		
52	+1	100	1030	1030		
53	+1	105	1082	1062		
54	+1	112	1154	1134		
55	+1	110	1133	1113		
56	+1	116	1195	1175		
57	+1	121	1246	1226		
58	+1	122	1257	1237	old Road	
59	+1	130	1339	1319		
60	+1	122	1257	HUB	1237	11:20
61	+1	121	1246	1226		
62	+1	140	1442	1422		
63	+1	141	1452	1432		
64	+1	139	1432	1412		
65	+1	150	1545	1535	-0-	CROP
66	+1	143	1473	1453	-0-	CROP
67	+1	120	1236	1216	"	"
68	+1	124	1277	1257	"	"
69	+1	112	1154	1134	"	"
70	+1	111	1143	1123	"	1135
71	+1	110	1133	1113	"	"
72	+1	134	1380	1360	"	"
73	+1	107	1102	1082	"	"
74	+1	105	1082	1062	"	"
75	+1	102	1050	1030		
76	+1	114	1174	1154		
77	+1	114	1174	1154		
78	+1	114	1174	1154	-0-	CROP
79	+1	114	1174	1154		
80	+1	119	1226	HUB		1145
				1206		

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Line 7 June 10, 63 Page 4

J.N.	M.
F.E.	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	Read	CONV	INFO		
81	+1	115	1184	1164	0	CROP
82	+1	107	1102	1082	"	"
83	+1	99	1009	989	"	"
84	+1	103	1061	1041	"	"
85	+1	104	1071	1051	"	11:50
TURN		South				
1S	+1	100	1030	1010	"	"
2S	+1	99	999	979	"	"
3S	+1	92	948	928	"	"
4S	+1	85	876	856	"	"
5S	+1	99	1020	1000	"	"
6S	+1	97	999	979	"	"
7S	+1	94	968	948	"	"
8S	+1	99	1020	1000	"	"
9S	+1	98	1009	989	"	"
10S	+1	92	948	928	"	"
11S	+1	98	1009	989	"	"
12S	+1	92	948	928		
13S	+1	85	876	856		
TURN EAST				856		
85W	+1	85	876	Line 8		12:07
84	+1	83	855	Page 1	0	CROP
83	+1	92	948	835 928	"	"
82	+1	87	896	876	"	"
81	+1	98	1009	989		
80	+1	89	917	897		12:13
79	+1	96	989	969		
78	+1	94	968	948		
77	+1	100	1030	1010		

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LEFAX, PHILADELPHIA 7, PA. MADE IN U.S.A.

Line 8 Jan 10 (Page 2

JW	M
F.E.	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	ROAD	CONV	IN	FO	
76	+1	110	1133	1113		
75	+1	113	1164	1144	-0-	CROP
74	+1	97	999	979	"	"
73	+1	102	1050	1030	"	"
72	+1	99	999	979		
71	+1	98	1009	989	12:20	
70	+1	92	948	928	-0-	CROP
69	+1	100	1030	1010	"	"
68	+1	108	1112	1092		
67	+1	93	958	938		
66	+1	102	1050	1030	-0-	CROP
65	+1	93	958	938	"	"
64	+1	100	1030	1010	"	"
63	+1	94	968	948	"	"
62	+1	84	865	845	"	"
61	+1	99	1020	1000	"	"
66	+1	96	989	969	HUB	12:30 "
59	+1	80	824	804	"	"
58	+1	102	1050	1030	"	"
57	+1	93	958	938	"	"
56	+1	107	1102	1082	"	"
55	+1	125	1288	1268	"	"
54	+1	113	1164	1144	"	"
53	+1	96	989	969	"	"
52	+1	95	979	959	"	"
51	+1	79	814	794	Road	
50	+1	82	845	825	12:50	HUB
49	+1	103	1061	1041		
48	+1	105	1082	1062		
47	+1	85	876	856		

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Line 8 Jan 10, 63 Page 3

J.W.	M
F.F.	H
TR. MK REG.	U.S. PAT. OFF.

STA	SCALE	READ	CONV	IN	FO	
46	+1	90	927	907		
45	+1	88	906	886	-0	CROP
44	+1	84	865	845	"	"
43	+1	81	834	814	"	"
42	+1	78	803	783	"	"
41	+1	86	886	866	"	"
40	+1	76	783	763	"	13:00 HUB
39	+1	77	793	773	"	"
38	+1	77	793	773	Dair Post	"
37	+1	75	773	753	65' N	"
36	+1	80	824	804	-0	CROP
35	+1	73	752	732		
34	+1	76	783	763		
33	+1	75	773	753		
32	+1	74	762	742	Post 65' N	
31	+1	77	793	773		
30	+1	75	773	753	13:10	HUB
29	+1	77	792	772		
28	+1	82	845	825	Road	
27	+1	80	824	804		
26	+1	79	814	794	Post 65' N	
25	+1	82	845	825		
24	+1	78	803	783		
23	+1	80	824	804		
22	+1	80	824	804		
21	+1	77	793	773		
20	+1	72	742	722	13:17	HUB
19	+1	78	803	783		
18	+1	74	762	742	-0	CROP
17	+1	77	793	773	Post 50' N	

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Line Jan 10, 63 Page 4

DW	M
F.E.	H.

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	READ	CONV	INFO		
16	+1	76	783	763		
15	+1	78	803	783		
14	+1	79	814	794	- Post	
13	+1	76	783	763	- O-CROP	
12	+1	80	824	804	"	"
11	+1	77	793	773	Post	"
10	+1	78	803	783		4013
9	+	76	783	763		
8	+1	73	752	732	Post	
7	+1	76	783	763		
6	+1	77	793	773		
5	+1	76	783	763	Post	
4	+1	67	690	670		
3	+1	73	752	732		
2	+1	74	762	742	Post	
1	+1	77	793	773		
0	+1	75	773	753		
1	+1	82	845	825	Post	
OE	+1	81	834	834	Bone 9	13:30
Bone 8	+1	86	886	866		13:35
Back 8	+1	86	886	866		14:00
Bone 10		89	917	897		14:15

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Jerry Jan 15, 65 (Page 1)

dc deat 20 + 0.7 ft

					RW	M
					T.E.	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	READ	CONV		INFO	
BASE 1	+1	100	1030			9:30
BASE 7	+1	99	1020			9:35
BASE 8	+1	89	917			9:40
BASE 9	+1	79-80	814/824			9:43
BASE 10	+1	87	896		Jm 9	9:48
90E	+1	95	979	899	BASE 10	10:05
1W	+1	90	927	847	-0- (120)	
2W	+1	93	958	878	"	(-80)
3	+1	100	1030	950	"	
4	+1	94	968	888	"	
5	+1	92	948	868	"	
6	+1	92	948	868	"	
7	+1	89	917	837	"	
8	+1	94	968	888	"	
9	+1	102	1050	970	"	
10	+1	88	906	826	"	10:14
11	+1	93	958	878	"	
12	+1	96	989	909	"	
13	+1	83	855	875	"	
14	+1	96	927	852	"	(-75)
15	+1	85	876	801	"	
16	+1	100	1030	955	"	
17	+1	87	896	821	"	
18	+1	92	948	873	"	
19	+1	94	968	893	"	
20	+1	89	917	842	"	10:28
21	+1	97	999	924	"	
22	+1	97	999	924	"	
23	+1	99	1020	945	"	

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LEFAX. PHILADELPHIA 7, PA. MADE IN U.S.A.

Line 9 Jan 15, 63 Day 2

J.W.	M.
F.F.	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	Read	CONV		INFO	
24	+1	92	948	873	O-CROP	
25	+1	93	958	883	"	
26	+1	92	948	873	"	
27	+1	99	1020	945	"	
28	+1	93	958	883	"	C 4 show
29	+1	94	968	893	"	
30	+1	97	999	924	"	shaft 10.39
31	+1	98	1009	939	"	-70
32	+1	90	927	857	"	
33	+1	90	927	857	"	
34	+1	91	937	867	"	
35	+1	90	927	857	"	
36	+1	91	937	867	"	
37	+1	84	906	836	"	
38	+1	84	906	836	"	
39	+1	90	927	857	"	
40	+1	93	958	888	"	10.45
41	+1	91	937	867	"	
42	+1	89	917	847	"	
43	+1	89	917	847	"	
44	+1	88	906	836	"	
45	+1	91	937	867	"	
46	+1	91	937	867	"	
47	+1	103	1061	991	"	
48	+1	89	917	847	"	
49	+1	89	917	847	"	
50	+1	89	917	847	"	10.55
51	+1	99	1009	944	"	-65
52	+1	111	1143	1078	"	

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Line 9 Jan 15, 63 Page 3

AV	M
EE	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	Read	CONV		IN	FO
53	+1	74	762	697	O-CROP	
54	+1	74	762	697	"	
55	+1	110	1133	1068	"	
56	+1	89	917	852	"	
57	+1	122	1257	1192	"	
58	+1	98	1009	944	"	
59	+1	103	1061	996	"	
60	+1	97	999	934	"	11:05
61	+1	99	1020	955	"	
62	+1	93	958	893	"	Road
63	+1	92	948	883	"	
64	+1	97	999	934	"	
65	+1	94	968	903	"	
66	+1	100	1030	965	"	
67	+1	125	1288	1228	"	+60
68	+1	125	1288	1228	"	
69	+1	102	1050	990	"	
70	+1	89	917	857	"	11:13
71	+1	102	1050	990	"	
72	+1	106	1092	1032	"	
73	+1	94	968	908	"	
74	+1	111	1143	1083	"	
75	+1	102	1050	990	"	
76	+1	97	999	939	"	
77	+1	97	999	939	"	
78	+1	99	1020	960	"	
79	+1	103	1061	1001	"	
80	+1	105	1082	1022	"	11:20
81	+1	94	968	908	"	

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Line Jan 15, 62 Pose

J.W.	M
F.F.	H

TR. MK REG. U.S. PAT. OFF.

STA	SCALE	Read	CONV		IN	FO
82	+1	100	1030	970	o-CROP	
83	+1	100	1030	970	"	11.22
burn South					"	
18	+1	93	958	898	"	
2	+1	88	906	846	"	
3	+1	89	917	857	"	
4	+1	88	906	846	"	
5	+1	95	979	919	"	
6	+1	90	927	867	"	
7	+1	92	948	893	"	-55
8	+1	110	1133	1078	"	↓
9	+1	98	1009	954	"	
10	+1	90	927	872	"	
11	+1	89	917	862	"	
12	+1	91	937	882	"	
13	+1	93	958	903	"	
13.2	+1	91	937	882		

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Field No - Jones, 63 (Rev)

AK	M
REF.	H

TR.MK. REG. US. PAT. OF

STA	SCALE	12 LEAD	CONL		IN	FC
83W	+1	91	937	882	"	40
82W	+1	93	958	908	"	-50
81W	+1	93	958	908	change	
80W	+1	84	906	856	"	1150
79	+1	81	834	784	"	
78	+1	80	824	774	"	
77	+1	74	762	712	"	
76	+1	114	1174	1124	"	
75	+1	106	1092	1042	"	
74	F	60	618	568	"	
73	+1	98	1009	959	"	
72	+1	87	896	846	"	
71	+1	88	906	856	"	
70	+1	83	855	805	"	1155
69	+1	82	845	795	"	
68	+1	80	824	774	Good	67½
67	+1	82	845	795	"	
66	+1	85	876	826	"	
65	+1	93	958	908	"	
64	+1	103	1061	1016	"	-45
63	+1	110	1133	1088	"	
62	+1	120	1236	1191	"	
61	+1	105	1082	1037	"	
60	+1	97	999	954	"	12.00
59	+1	99	1009	964	"	
58	+1	96	989	944	"	
57	+1	99	1020	975	"	
56	+1	92	948	903	"	
55	+1	93	958	918	"	-40
54	+1	92	948	908	"	

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LEFAX PHILADELPHIA 7, PA. MADE IN U.S.A.

Line 10 Jan 13 63 (Pg 2

AW	M
F	H

TR.MK. REG. US. PAT. OF

STA	SCALE	READ	CONV		IN	FO
53	+1	90	927	887	G-CROD	
52	+1	91	937	897	"	
51	+1	87	896	856	"	
50	+1	87	896	856	"	12:20
49	+1	88	906	866	"	
48	+1	85	876	836	"	
47	+1	86	886	846	"	
46	+1	85	876	836	"	
45	+1	86	886	846	"	
44	+1	84	865	830	"	-35
43	+1	86	886	851	"	
42	+1	86	886	851	"	
41	+1	85	876	841	"	1230
40	+1	86	886	851	"	
39	+1	84	865	830	"	
38	+1	80	824	789	"	
37	+1	82	845	810	"	
36	+1	81	834	799	"	
35	+1	85	876	841	"	
34	+1	81	834	799	"	
33	+1	79	814	779	"	
32	+1	82	845	810	"	
31	+1	83	855	820	"	
30	+1	84	865	830	"	1240
29	+1	81	834	804	"	-30
28	+1	83	855	825	"	
27	+1	84	865	835	"	
26	+1	83	855	825	"	
25	+1	83	855	825	"	
					"	

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LEFAX PHILADELPHIA 7, PA DE IN U.S.A.

Pos 3 Jan 15, 63 Jan 10

JW	M
FE	H

TR.MK. REG. US. PAT. OFF

STA	SCALE	Read	CONV		IN	FO
24	+1	89	917	887	-0	CRA
23	+1	85	876	846	"	
22	+1	86	886	856	"	
21	+1	84	896	866	"	
20	+1	83	855	825	"	12:50
19	+1	83	855	825	"	
18	+1	90	927	897	"	
17	+1	83	855	825	"	
16	+1	81	834	804	"	
15	+1	85	865	835	"	
14	+1	79	814	784	"	
13	+1	74	762	737	"	-25
12	+1	82	845	820	"	
11	+1	86	886	861	"	
10	+1	83	855	830	"	13:05
9	+1	80	824	799	"	
8	+1	84	865	840	"	
7	+1	85	876	851	"	
6	+1	81	834	809	"	
5	+1	82	845	820	"	
4	+1	80	824	799	"	
3	+1	80	824	799	"	
2	+1	85	876	856	"	-20
1W	+1	92	845	825	"	
0E	+1	84	865	845	"	
1E	+1	88	906	886	"	
2E	+1	83	855	835		
3E	+1	83	855	835		
Br 10	+1	89	917	897	Jan 9	13:20

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LEFAX PHILADELPHIA 7, PA. MADE IN U.S.A.

Pool 1 Jan 15,62 Line 11

Deduct 20+20 + drift

JW	M
FF	H

TR.MK. REG. US. PAT. OF

STA	SCALE	Read	CONV		IN	FO
BAS 9	+1	88	906	866	(60)	13:30
0E	+1	84	865	825	(Line 11)	13:35
1W	+1	83	855	815		
2W	+1	89	917	877		
3	+1	89	917	877		
4	+1	91	937	897		
5	+1	88	906	866		
6	+1	95	979	939		
7	+1	86	886	846		
8	+1	80	824	784	Good	
9	+1	87	896	856		
10	+1	85	876	836		13:45
11	+1	84	865	825		
12	+1	87	896	856		
13	+1	90	927	887		
14	+1	81	834	794		
15	+1	80	824	784		
16	+1	75	773	733		
17	+1	85	876	836		
18	+1	79	814	774		
19	+1	79	814	774		
20	+1	83	855	815		13:50
21	+1	84	865	825		
22	+1	86	886	846	Good	
23	+1	86	886	846		
24	+1	86	886	846		
25	+1	87	896	856		
26	+1	86	886	846		
27	+1	83	855	815		

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LEFAX LADELPHIA 7, PA DE IN U.S.A.

Page 2 Jan 15, 63 Tim 1

[illegible]	M
F.F.	H

TR.MK. REG. US. PAT. OF

STA	SCALE	Read	CONV		INFO
28	+1	84	865	825	
29	+1	85	876	836	
30	+1	87	896	856	13:55
31	+1	87	896	856	
32	+1	86	886	846	
33	+1	85	876	836	
34	+1	84	865	825	
35	+1	90	927	887	
36	+1	89	917	877	Good 36½
37	+1	92	948	908	
38	+1	89	917	877	
39	+1	90	927	887	
40	+1	95	979	939	14:00
41	+1	97	999	959	
42	+1	96	989	949	
43	+1	99	1020	980	
44	+1	105	1082	1042	
45	+1	104	1071	1031	
46	+1	110	1133	1093	47½ Good
47	+1	119	1226	1186	
48	+1	117	1205	1165	
49	+1	128	1318	1278	
50	+1	125	1288	1238	14:07 -50
51	+1	131	1349	1299	
52	+1	138	1421	1371	
53	+1	123	1267	1217	
54	+1	134	1380	1330	
55	+1	143	1473	1423	
56	+1	141	1452	1402	

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LEFAX PHILADELPHIA 7, PA DE IN U.S.A.

Dos 3 Jan 15, 63 Jan 11

DW	M
E.F	H

TR.MK. REG. US. PAT. OF

STA	SCALE	READ	CONV		IN	FO
57	+1	142	1463	1413		
58	+1	155	1597	1547		
59	+1	159	1638	1588	OKROP	
60	+1	135	1391	1341	1424	
61	+1	119	1226	1176	"	
62	+1	101	1040	990	"	
63	+1	90	927	877	"	
64	+1	103	1061	1011		
65	+1	106	1092	1042		
66	+1	103	1061	1011		
67	+1	114	1174	1124		
68	+1	82	845	795		
69	+1	107	1102	1047		-55
70	+1	90	927	872	1427	
71	+1	105	1082	1027		
72	+1	106	1092	1037		
73	+1	110	1133	1078		
74	+1	113	1164	1109		
75	+1	125	1288	1233		
76	+1	126	1298	1243		
77	+1	125	1288	1233		
78	+1	125	1288	1233		
79	+1	117	1205	1150		
80	+1	116	1195	1140	1430	
81	+1	103	1061	1006		
82	+1	106	1092	1037		
83	+1	107	1102	1047		
84	+1	102	1050	995		
85	+1	98	1009	954	1434	
						-60

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LEFAX PHILADELPHIA 7, PA. MADE IN U.S.A.

Page 1 (Jan 15, 63 Jan 12

STA	SCALE	READ	CONV		INFO
85W	+1	89	917	857	-0-C Ref
84	+1	78	803	743	
83	+1	83	855	795	
82	+1	85	876	816	
81	+1	89	917	857	
80	+1	88	906	846	10 50
79	+1	92	948	888	
78	+1	94	968	908	
77	+1	103	1061	1001	
76	+1	107	1102	1042	
75	+1	115	1184	1124	
74	+1	106	1092	1032	
73	+1	97	999	939	
72	+1	105	1082	1022	
71	+1	103	1061	996	-65
70	+1	107	1102	1037	15 50
69	+1	109	1112	1047	
68	+1	116	1195	1130	
67	+1	109	1123	1058	
66	+1	82	845	780	
65	+1	100	1030	965	
64	+1	94	968	903	
63	+1	92	948	883	
62	+1	85	876	811	
61	+1	102	1050	985	
60	+1	98	1009	944	15 10
59	+1	93	958	893	
58	+1	67	690	625	
57	+1	92	948	883	

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LEFAX LADELPHIA 7, PA DE IN U.S.A.

Page 2 Jan 15, 63 Lin 12

SW	M
F.E.	12

TR.MK. REG. US. PAT. OF

STA	SCALE	Read	CONV		IN	FO
56	+1	94	968	903	-0-CROP	
55	+1	95	979	909		-70
54	+1	87	896	826		
53	+1	83	855	785		
52	+1	106	1092	1022		
51	+1	89	917	847		
50	+1	91	937	867	15:20	
49	+1	80	824	754		
48	+1	93	958	888		
47	+1	103	1061	981		
46	+1	75	773	703	Post	
45	+1	33	340	270		
44	+1	87	896	826		
43	+1	73	752	682		
42	+1	80	824	754		
41	+1	106	1092	1022		
40	+1	108	1112	1042	15:30	
39	+1	84	865	795		
38	+1	84	865	795		
37	+1	83	855	785		-75
36	+1	80	824	749		
35	+1	80	824	749		
34	+1	76	783	708		
33	+1	82/83	845/855	780		
32	+1	79/73	814/752	677		
31	+1	79/80	814/824	749		
30	+1	89	917	842	15:40	
29	+1	82	845	770		
28	+1	84	865	790		
27	+1	82	845	770		

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LEFAX LADELPHIA 7, PA DE IN U.S.A.

Page 3 Jan, 15 63 Line 12

STA	SCALE	Read	CONV		INFO
26	+1	82	845	770	PCR
25	+1	79	814	739	old shaft
24	+1	81	834	759	
23	+1	79	814	739	
22	+1	79	814	739	
21	+1	80	824	749	
20	+1	80	824	749	15 50
19	+1	78	803	723	-89
18	+1	80	824	744	
17	+1	80	824	744	
16	+1	80	824	744	
15	+1	81	834	754	
14	+1	80	824	744	
13	+1	80	824	744	
12	+1	81	834	754	
11	+1	79	814	734	
10	+1	82	845	765	16 00
9	+1	79	814	734	
8	+1	75	773	693	0 0 0 0
7	+1	83	855	775	
6	+1	95	979	899	
5	+1	84	865	785	
4	+1	76	783	703	
3	+1	77	793	713	
2	+1	75	773	693	
1 W	+1	85	876	796	
0 E	+1	77	793	713	
1 E	+1	89	917	837	
2 E	+1	84	865	785	
3 E	+1	83	855	775	

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LEFAX PHILADELPHIA 7, PA. MADE IN U.S.A.

Page 4 Jan 15 62 Line 12

JW	H
JEF	H

TR.MK. REG. US. PAT. OF

STA	SCALE	Read	CONV		IN	FO
4E	+1	88	906	826	"	"
5E	+1	77	793	713	"	"
6E	+1	75	773	693		
Back	+1	92-93	948/953	873	16:20	
Full	+1	89	917	837	16:25	

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Second Phase
Magnetic Survey
(Jalander)
for
New Jersey Zinc Co.
Roskruge District
March 23, 24, 1963

Note
In plotting this data, all values lowered 250 gammas to approximately tie former work, both Jalander and McMag.

LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Ros Kruge
Line "A"
Going West

3'24'63
100' STA.

Sta.	Scale	Read	Con.	Time	Infor.
0 E/W	+1	160	1460	9:48	
1 W		160	1460		
2 W		159	1450		
3 W		153	1400		
4 W		150	1370		
5 W		150	1370		
6 W		150	1380		
7 W		150	1380		
8 W		147	1350		
9 W		149	1380		
10 W		149	1380	9:51	
11 W		149	1380		
12 W		151	1410		
13 W		168	1580		
14 W		156	1460		
15 W		150	1410		
16 W		144	1350		
17 W		139	1300		
18 W		142	1340		
19 W		145	1370		
20 W		139	1310	10:03	
21 W		141	1340		
22 W		150	1430		
23 W		152	1450		
24 W		160	1540		
25 W		160	1540		out crop...
26 W	+2	92	2700		wash..
27 W	+2	119	3510		
28 W	+2	90	2650		

Curve Drift Correction

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Roskruge
Line "A"
- Going West -

3/24/63

100' STA.

TR: MK. REG. U.S. PAT. OFF.

Sta.	Scale	Read	Con.	Time	Infor
29 AW	+2	84	2470		outcrop...
30 AW	+1	137	1330	10:11	
31 AW		164	1600		
32 AW		140	1360		
33 AW		160	1570		
34 AW		139	1360		
35 AW		139	1360		
36 AW		135	1330		
37 AW		136	1340		
38 AW		125	1230		
39 AW		131	1300		
40 AW		118	1170	10:18	Falls on power line road... W. of power line.

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

ROSKRUGE
"LINE A"
Going East

3/23/63

100' Stations

Sta	Scale	Read	Con.		Info.
0 S/W	+2	146	1460	11:30	
1 E		146	1460		
2 E		150	1500		
3 E		150	1500		
4 E		153	1530		
5 E		155	1550		
6 E		156	1560		
7 E		154	1540		
8 E		153	1530		
9 E		154	1540		
10 E		151	1510	11:34	
11 E		153	1530		Sec. Cor. 1245"
12 E		155	1550		
13 E		154	1540		
14 E		155	1550		North-So. fence 1470'
15 E		158	1580		
16 E		157	1570		
17 E		154	1540		
18 E		150	1500		
19 E		149	1490		
20 E		145	1450	11:48	
21 E		143	1430		
22 E		142	1420		
23 E		141	1410		
24 E		141	1410		
25 E		141	1410		
26 E		141	1410		
27 E		140	1400		
28 E		136	1360		

No drift corrections

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

3/23/63

100' STA.

TRI MK. REG. U.S. PAT. OFF.

Ros Kruge

Line "A"

- Going East -

STA.	Scale	Read	CON.	Infor.
29 E	+1	137	1370	
30 E		135	1350	11:58
31 E		137	1370	
32 E		135	1350	
33 E		134	1340	
34 E		133	1330	
35 E		131	1310	
36 E		129	1290	
37 E		128	1280	
38 E		128	1280	
39 E		126	1260	
40 E		125	1250	12:09
41 E		126	1260	
42 E		124	1240	
43 E		124	1240	
44 E		123	1230	
45 E		123	1230	
46 E		121	1210	
47 E		120	1200	
48 E		119	1190	
49 E		119	1190	
50 E		117	1170	12:19
51 E		119	1190	
52 E		118	1180	
53 E		118	1180	
54 E		118	1180	
55 E		117	1170	
56 E		117	1170	

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"Roskruge"
Line A
Going EAST

Sta.	Scale	Read	Con.	Time	Infor.
57 E	+1	115	1150		
58 E		116	1160		
59 E		117	1170		
60 E		117	1170	12:29	
61 E		119	1190		
62 E		120	1200		
63 E		119	1190		
64 E		119	1190		
65 E		120	1200		
66 E		119	1190		
67 E		120	1200		
68 E		122	1220		
69 E		123	1230		
70 E		122	1220	12:38	Loc. IN Stock TANK
71 E		122	1220		
72 E		122	1220		
73 E		121	1210		GATE between #73 & #74
74 E		121	1210		
75 E		122	1220		
76 E		117	1170		
77 E		118	1180		
78 E		117	1170		
79 E		114	1140		
80 E		115	1150	12:49	
60 E 2nd		119		1:00	After Instr. off.
40 E 2nd		129		1:07	" " "
30 E 2nd		135		1:16	
20 E 2nd		145		1:24	
10 E 2nd		151		1:31	
0 E 2nd		145		1:37	

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Roskruge
Line "B"

3'24	
100'	Sta.

TRI MK. REG. U.S. PAT. OFF.

Coing West

Sta	Scale	Read	Con.	Time	Infor
0 E/W	+1	133	1340	10:58	
1 W		136	1370		
2 W		132	1330		
3 W		131	1320		
4 W		130	1310		
5 W		128	1290		
6 W		126	1270		
7 W		124	1250		
8 W		127	1280		
9 W		136	1370		
10 W		138	1390	10:47	
11 W		134	1350		
12 W		139	1400		
13 W		127	1280		
14 W		123	1240		
15 W		126	1270		
16 W		137	1380		
17 W		137	1380		
18 W		136	1370		
19 W		125	1260		
20 W		126	1270	10:38	
21 W		135	1360		
22 W		134	1350		
23 W		132	1320		
24 W		141	1420		
25 W		135	1360		
26 W		142	1430		
27 W		139	1400		
28 W		125	1260		

Raise 1 S/D for drift correction

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Roskruge
Line "B"
- Going West -

3'24'	
100'	STA.

TRE MK. REG. U.S. PAT. OFF.

Sta.	Scale	Read	Con.	Time	Infor
29 W	+1	112	1130		
30 W		110	1110	10:31	
31 W		113	1140		
32 W		107	1080		wash...
33 W		121	1220		
34 W		123	1240		
35 W		132	1330		
36 W		128	1290		
37 W		125	1260		
38 W		142	1430		
39 W		132	1330		
40 W		126	1270	10:24	W. of Power line rd.

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LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

3'24

100' STA.

TRI MK. REG. U.S. PAT. OFF.

Roskruge
Line "C"
- Going West -

Sta.	Scale	Read	Con.	Time	Infor
0 E/w	+1	121	1220	11:22	
1 W		120	1210		
2 W		119	1200		
3 W		118	1190		
4 W		115	1160		
5 W		113	1140		
6 W		114	1150		
7 W		123	1240		
8 W		125	1260		
9 W		119	1200		
10 W		127	1280	11:28	
11 W		123	1240		
12 W		134	1350		
13 W		131	1320		
14 W		130	1310		
15 W		127	1280		
16 W		100	1010		
17 W		124	1250		
18 W		131	1320		
19 W		125	1260		
20 W		77	780	11:36	
21 W		124	1250		
22 W		136	1370		
23 W		142	1430		
24 W		116	1170		
25 W		105	1060		
26 W		126	1270		
27 W		132	1330		
28 W		127	1280		

Raised 1 s/b for Drift correction

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3'24

100' STA

TRI MK. REG. U.S. PAT. OFF.

Roskruge
Line "C"
Going West

Sta.	Scale	Read	Con.	Time	Infor
29 W	+1	145	1460		
30 W		114	1150	11:42	
31 W		112	1130		
32 W		113	1140		
33 W		108	1090		wash...
34 W		109	1100		
35 W		109	1100		
36 W		110	1110		
37 W		115	1160		
38 W		110	1110		
39 W		112	1130		
40 W		108	1090	11:50	W. of Power line.

- end of line is 200' North -

- base "11" is Approx. ½ way between "C" & "D" at 4000' -

Base "11" is 200' ± north of "D" 4000 west

On old work "11" read 835 gammas.

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Roskruge
line "C"
Going East

3'23'

100' Sta

TRI MK. REG. U.S. PAT. OFF.

Sta.	Scale	Read	Con.	Time	Infor.
0 E/W	+1	122	1220	2:00	
1 E		124	1240		
2 E		125	1250		
3 E		130	1300		
4 E		129	1290		
5 E		134	1340		
6 E		135	1350		
7 E		137	1370		
8 E		139	1390		
9 E		141	1410		
10 E		140	1400	2:10	
11 E		142	1420		
12 E		145	1450		
13 E		146	1460		
14 E		146	1460		
15 E		144	1440		
16 E		145	1450		
17 E		146	1460		
18 E		147	1470		
19 E		148	1480		
20 E		147	1470	2:18	N.W-S.E fence
21 E		145	1450		
22 E		145	1450		
23 E		140	1400		
24 E		138	1380		
25 E		138	1380		
26 E		137	1370		
27 E		136	1360		
28 E		134	1340		

No drift correction

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Roskruge
Line "C"
Going East

3'23'63

100' Sta

TRI MK. REG. U.S. PAT. OFF.

Sta.	Scale	Read	Con.	Time	Infor
29 E	+1	137	1370		
30 E		137	1370	2:27	
31 E		134	1340		
32 E		136	1360		
33 E		137	1370		
34 E		137	1370		
35 E		137	1370		
36 E		136	1360		
37 E		135	1350		
38 E		135	1350		
39 E		135	1350		
40 E		134	1340	2:35	
41 E		133	1330		
42 E		131	1310		
43 E		131	1310		
44 E		131	1310		
45 E		130	1300		
46 E		128	1280		
47 E		128	1280		
48 E		126	1260		
49 E		125	1250		
50 E		124	1240	2:47	
51 E		123	1230		
52 E		123	1230		
53 E		123	1230		
54 E		124	1240		
55 E		123	1230		
56 E		123	1230		

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Roskruge
Line "C"
Going East

3/23/63

100' sta.

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Sta.	Scale	Read	Con.	Time	Infor.
57 E	+1	123	1230		
58 E		123	1230		
59 E		123	1230		
60 E		122	1220	2:54	
61 E		120	1200		
62 E		124	1240		
63 E		124	1240		
64 E		124	1240		
65 E		123	1230		
66 E		123	1230		
67 E		124	1240		
68 E		124	1240		
69 E		125	1250		
70 E		124	1240	3:02	
71 E		125	1250		
72 E		124	1240		
73 E		124	1240		
74 E		125	1250		
75 E		125	1250		
76 E		124	1240		
77 E		124	1240		
78 E		124	1240		
79 E		124	1240		
80 E		123	1230	3:10	
40 E 2nd		133			
30 E 2nd		137			
20 E 2nd		147			
10 E 2nd		140		3:42	

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"A" 10W @- 10:52 Read 135 →

"A" 20W @ 10:40 Read 127 →

Ros Kruga
Line "D"
Gravity West

3'24	
1001	STA

TRI MK. REG. U.S. PAT. OFF.

STA.	Scale	Read	CON.	Time	Infor
0 E/W	+1	115	1150	12:27	
1 W		122	1220		
2 W		123	1230		
3 W		126	1260		
4 W		128	1280		
5 W		139	1390		
6 W		139	1390		
7 W		127	1270		
8 W		122	1220		
9 W		113	1130		
10 W		113	1130	12:21	
11 W		122	1220		
12 W		113	1130		
13 W		116	1160		
14 W		124	1240		
15 W		107	1070		
16 W		110	1100		
17 W		118	1180		
18 W		118	1180		
19 W		117	1170		
20 W		127	1270	12:14	
21 W		141	1410		
22 W		113	1130		
23 W		115	1150		
24 W		132	1320		
25 W		132	1320		
26 W		139	1390		
27 W		119	1190		
28 W		118	1180		

No drift correction

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Roskruge
Line "D"
- Going West -

3'24	
100'	3LA

TRI MK. REG. U.S. PAT. OFF.

Sta.	Scale	Read	Con.	Time	Infor
29 W	+1	126	1260		
30 W		119	1190	12:07	
31 W		140	1400		
32 W		122	1220		
33 W		123	1130		
34 W		118	1180		
35 W		132	1320		
36 W		117	1170		
37 W		119	1190		
38 W		117	1170		
39 W		127	1270		
40 W		118	1180	12:00	

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Roskruge
Line "E"
-Going West-

3'24	
100'	SE

TRI MK. REG. U.S. PAT. OFF.

Sta.	Scale	Read	Con.	Time	Infor
0 E/W	+1	130	1310	1:05	
1 W		122	1230		
2 W		125	1260		
3 W		120	1210		
4 W		119	1200		
5 W		118	1190		
6 W		115	1160		
7 W		115	1160		
8 W		122	1230		
9 W		121	1220		
10 W		114	1150	1:14	
11 W		118	1190		
12 W		131	1320		
13 W		131	1320		
14 W		124	1250		
15 W		125	1260		
16 W		124	1250		
17 W		108	1090		
18 W		120	1210		
19 W		116	1170		
20 W		109	1100	1:22	
21 W		130	1310		
22 W		123	1240		
23 W		138	1390		
24 W		123	1240		
25 W		126	1270		
26 W		145	1460		
27 W		134	1350		
28 W		123	1240		

Raised 1 S/D for drift correction

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Rostrugo
Line "E"
- Going West -

3'24

100' STA.

TRI MK. REG. U.S. PAT. OFF.

Sta	Scale	Read	Con.	Time	Info
29 W	+1	128	1290		
30 W		119	1200	1:28	
31 W		121	1220		
32 W		124	1250		
33 W		130	1310		
34 W		118	1190		
35 W		122	1230		
36 W		125	1260		
37 W		120	1210		
38 W		115	1160		
39 W		116	1170		
40 W		120	1210	1:37	STA. ON power line rd.

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3'24	
100'	STA

TRI MK. REG. U.S. PAT. OFF.

Ros Kruge
Line "F"
- Going West -

Sta.	Scale	Read	Con.	Time	Info
0 E/N	+1	117	1180	2:15	
1 W		115	1160		
2 W		110	1110		
3 W		119	1200		
4 W		125	1260		
5 W		121	1220		
6 W		133	1340		
7 W		131	1320		
8 W		125	1260		
9 W		129	1300		
10 W		132	1330	2:08	
11 W		134	1350		
12 W		137	1380		
13 W		142	1430		
14 W		139	1400		
15 W		139	1400		
16 W		138	1390		
17 W		136	1370		
18 W		135	1360		
19 W		128	1290		
20 W		128	1290	2:01	
21 W		133	1340		
22 W		129	1300		
23 W		132	1330		
24 W		126	1270		
25 W		126	1270		
26 W		125	1260		
27 W		128	1290		
28 W		126	1270		

Raised 1 s/D for drift correction

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Roskruge
Line "F"
- Going West -

3'24	
100'	STA.

TRI MK. REG. U.S. PAT. OFF.

STA.	Scale	Read	Con.	Time	Infor
29 W	+1	127	1280		
30 W		133	1340	1:54	
31 W		127	1280		
32 W		134	1350		
33 W		136	1370		
34 W		130	1310		
35 W		124	1250		
36 W		123	1240		
37 W		122	1230		
38 W		126	1270		
39 W		133	1340		
40 W		126	1270	1:46	STA. ON power line rd.

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Roskuga
Line "F"
- Going EAST -

3'24	
100'	SLA

TRI-MK. REG. U.S. PAT. OFF.

SLA	E/W	Scale	Read	Con.	Time	Infer
0		+1	117	1180	2:30	
1	E		118	1190		
2	E		120	1210		
3	E		122	1230		
4	E		119	1200		
5	E		116	1170		
6	E		110	1110		
7	E		117	1180		
8	E		120	1210		
9	E		121	1220		
10	E		122	1230	2:37	
11	E		123	1240		
12	E		123	1240		
13	E		125	1260		
14	E		125	1260		
15	E		126	1270		
16	E		124	1250		
17	E		125	1260		
18	E		126	1270		
19	E		128	1290		
20	E		130	1310	2:44	
21	E		130	1310		
22	E		127	1280		
23	E		130	1310		
24	E		128	1290		
25	E		128	1290		
26	E		130	1310		
27	E		131	1320		
28	E		129	1300		

Raise 1 pd for drift correction

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3'24	
100'	STA

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Roskruge
Line "F"
- Going East -

STA	Scale	Read	Con.	Time	Infor
29 E	+1	130	1310		
30 E		132	1330	2:51	
31 E		130	1310		
32 E		131	1320		
33 E		131	1320		
34 E		129	1300		
35 E		130	1310		
36 E		132	1330		
37 E		131	1320		
38 E		129	1300		
39 E		128	1290		
40 E		128	1290	2:58	
41 E		130	1310		
42 E		127	1280		
43 E		128	1290		
44 E		126	1270		
45 E		126	1270		
46 E		126	1270		
47 E		125	1260		
48 E		125	1260		
49 E		125	1260		
50 E		124	1250	3:04	
51 E		124	1250		
52 E		124	1250		
53 E		125	1260		
54 E		123	1240		
55 E		124	1250		
56 E		124	1250		
57 E		123	1240		

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Roskruge
Line "F"
-Going-East-

3'24	
100'	STA

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Sta.	Scale	Read	Con.	Time	Infor.
58 E	+1	123	1240		
59 E		123	1240		
60 E		123	1240	3:10	
61 E		121	1220		
62 E		122	1230		
63 E		122	1230		
64 E		120	1210		
65 E		122	1230		
66 E		121	1220		
67 E		120	1210		
68 E		121	1220		
69 E		119	1200		
70 E		121	1220	3:16	
71 E		122	1230		
72 E		120	1210		
73 E		121	1220		
74 E		123	1240		
75 E		120	1210		
76 E		122	1230		
77 E		121	1220		
78 E		122	1230		
79 E		121	1220		
80 E		120	1210	3:22	

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Roskruge
Line "C"
Going 'East'

3'24	
100'	STA.

TRI MK. REG. U.S. PAT. OFF.

Sta.	Scale	Read	Con.	Time	Infor.
70 E	+1	125		3:44	
60 E		124		3:50	
50 E		123		3:54	
40 E		132		3:58	
30 E		137		4:03	
20 E		148		4:07	
10 E		141		4:10	

Returning after reading line "F"

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Roskruge Project

3-23-63

Sta	Scale	Read	Conv.	Info.
Base "A"	+1	149		11:15
Base "A"		145		11:25
Base "A"		146		11:30
Base "A"		145		1:37
Base "A"		146		1:51
Base "B"		134		1:56
Base "C"		122		2:00
Base "C"		123		3:46
Base "D"		123	??	3:48
Base "E"		131		3:52
Base "F"		118		3:55
Base "A"		146		4:04

3-24-63

Base "A"	+1	160		9:48
Base "B"		133		10:58
Base "A"		149		11:01
Base "D"		117		11:17
Base "C"		121		11:22
Line ~~Base~~ "B"	4000' W	117		11:51
Base "D"		117		12:27
Base "C"		123		12:33
Base "D"		117		12:57
Base "F"		114		1:02
Base "E"		130		1:05
Base "F"		117		2:15
Base "E"		130		2:19
Base "F"		117		2:30
Base "C"		123		4:14
Base "F"		118		4:18
Base "A"		146		4:25

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