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270705
Dec 2, 1963
Docket 367, Page 503
Pima County, Arizona

AFFIDAVIT OF LABOR PERFORMED AND IMPROVEMENTS MADE

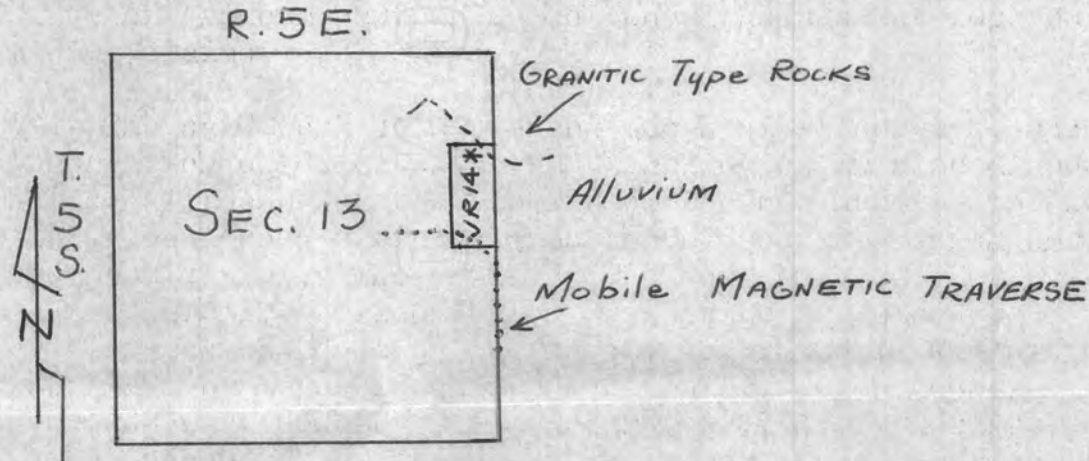
STATE OF ARIZONA)
) ss
COUNTY OF PIMA)

WALTER E. HEINRICHS, JR., being duly sworn, deposes and says that he is a citizen of the United States and more than twenty-one years of age, and resides at Tucson in Pima County, Arizona, and is personally acquainted with the following mining claims situated in the Blackwater Mining District, Pinal County, Arizona, Section 13, T 5 S, R 5 E, the location notices of which are of record in the office of the County Recorder, Pinal County as follows:

<u>NAME</u>	<u>RECORDING DATE</u>	<u>DOCKET</u>	<u>PAGE</u>
J. R. 14	April 17, 1962	321	428

That between August 15 and November 14, 1963 at least \$100.00 worth of geophysical and geological work was done and performed upon said claim; not including location work. The work was done at the expense of Minerals Exploration Company, a California corporation, authorized to do business in the State of Arizona. J. W. Marlatt, E. G. Heinrichs and R. E. Palmer, employees of Heinrichs Geoexploration Company, actually conducted the geophysical and geological surveys for the owners of the above described mining claim; Norman Twenstrup, Florence Sullivan, James L. Sullivan, Agnes Woolsey and James A. Woolsey et. al., for the purpose of complying with the laws of the United States and the State of Arizona pertaining to annual assessment work on unpatented mining claims.

The basic findings of magnetic geophysical work revealed varying distribution of magnetite in both the exposed and non exposed granitic rocks on or near the claim of approximately 125 gammas relief and geological reconnaissance of the claim and vicinity generally conform to this indication.



Confirmed Copy

W. Heinrichs, Jr.
Walter E. Heinrichs, Jr.



Subscribed and sworn to before me this 29th day of November 1963.

M. Jean Heinrichs
Notary Public

AFFIDAVIT OF LABOR PERFORMED AND IMPROVEMENTS MADE

STATE OF ARIZONA)
) ss
COUNTY OF PIMA)

Walter E. Heinrichs, Jr., being duly sworn, deposes and says that he is a citizen of the United States and more than twenty-one years of age, and resides at Tucson in Pima County, Arizona, and is personally acquainted with the following mining claims situated in the Blackwater Mining District, Pinal County, Arizona, Sections 13, 14, 15, 21, 22, 23 and 24, Township 5 S, Range 5 E, the location notices of which are of record in the office of the County Recorder, Pinal County, as follows:

Conformed Copy

<u>NAME</u>	<u>RECORDING DATE</u>	<u>DOCKET</u>	<u>PAGE NO.</u>
Joy No. 1	March 30, 1962	319	586
Joy No. 2	March 30, 1962	319	587
Joy No. 3	March 30, 1962	319	588
Joy No. 4	March 30, 1962	319	589
Joy No. 5	March 30, 1962	319	590
Joy No. 6	March 30, 1962	319	591
Joy No. 7	March 30, 1962	319	592
Joy No. 8	March 30, 1962	319	593
Orbit No. 1	March 30, 1962	319	594
Orbit No. 2	March 30, 1962	319	595
Orbit No. 3	March 30, 1962	319	596
Orbit No. 4	July 16, 1962	329	88
It. No. 1	March 14, 1962	318	407
It No. 2	March 14, 1962	318	408
It No. 3	March 14, 1962	318	409
It No. 4	March 14, 1962	318	410
It No. 5	March 14, 1962	318	411
It No. 6	March 14, 1962	318	412
It No. 7	March 14, 1962	318	413
It No. 8	March 14, 1962	318	414
Agnes No. 1	July 16, 1962	329	89
Agnes No. 2	July 16, 1962	329	90
Agnes No. 3	July 16, 1962	329	91
Agnes No. 4	July 16, 1962	329	92
Agnes No. 5	July 16, 1962	329	93
Agnes No. 6	July 16, 1962	329	94
Agnes No. 7	July 16, 1962	329	95
Agnes No. 8	July 16, 1962	329	96
Agnes No. 9	July 16, 1962	329	97
Agnes No. 10	July 16, 1962	329	98
Agnes No. 11	July 16, 1962	329	99
Agnes No. 12	July 16, 1962	329	100
Agnes No. 13	July 16, 1962	329	101
Agnes No. 14	July 16, 1962	329	102
Agnes No. 15	July 16, 1962	329	103

<u>NAME</u>	<u>RECORDING DATE</u>	<u>DOCKET</u>	<u>PAGE NO.</u>
Agnes No. 16	July 16, 1962	329	104
Agnes No. 17	July 16, 1962	329	105
Agnes No. 18	July 16, 1962	329	106
Agnes No. 19	July 16, 1962	329	107
Agnes No. 20	July 16, 1962	329	108
Agnes No. 21	July 16, 1962	329	109
Agnes No. 22	July 16, 1962	329	110
Agnes No. 23	July 16, 1962	329	111
Agnes No. 24	July 16, 1962	329	112
Agnes No. 25	July 16, 1962	329	113
Agnes No. 26	July 16, 1962	329	114
Agnes No. 27	July 16, 1962	329	115
Agnes No. 28	July 16, 1962	329	116
Agnes No. 29	July 16, 1962	329	117
Agnes No. 30	July 16, 1962	329	118
Agnes No. 31	July 16, 1962	329	119
Agnes No. 32	July 16, 1962	329	120
Agnes No. 33	July 16, 1962	329	121
Agnes No. 34	July 16, 1962	329	122
Agnes No. 35	July 16, 1962	329	123
Agnes No. 36	July 16, 1962	329	124
J.N.J. #1	July 16, 1962	329	83
J.N.J. #2	July 16, 1962	329	84
J.N.J. #3	July 16, 1962	329	85
J.N.J. #4	July 16, 1962	329	86
J.N.J. #5	July 16, 1962	329	87
Mary #1	July 16, 1962	329	143
Mary #2	July 16, 1962	329	144
Mary #3	July 16, 1962	329	145
Mary #4	July 16, 1962	329	146
Mary #5	July 16, 1962	329	147
Mary #6	July 16, 1962	329	148
Mary #7	July 16, 1962	329	149
Mary #8	July 16, 1962	329	150
Mary #9	July 16, 1962	329	151
Mary #10	July 16, 1962	329	152
Mary #11	July 16, 1962	329	153
Mary #12	July 16, 1962	329	154
Mary #13	July 16, 1962	329	155
Mary #14	July 16, 1962	329	156
Mary #15	July 16, 1962	329	157
Mary #16	July 16, 1962	329	158
Mary #17	July 16, 1962	329	159
Mary #18	July 16, 1962	329	160
Mary #23	July 16, 1962	329	165
Mary #24	July 16, 1962	329	166
Mary #25	July 16, 1962	329	167

Confirmed copy

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<u>NAME</u>	<u>RECORDING DATE</u>	<u>DOCKET</u>	<u>PAGE NO.</u>
Mary #26	July 16, 1962	329	168
Mary #27	July 16, 1962	329	169
Mary #28	July 16, 1962	329	170
Mary #29	July 16, 1962	329	171
Mary #30	July 16, 1962	329	172
Mary #31	July 16, 1962	329	173
Mary #32	July 16, 1962	329	174
Mary #33	July 16, 1962	329	175
Mary #34	July 16, 1962	329	176
Mary #35	July 16, 1962	329	177
Mary #36	July 16, 1962	329	178
Mary #37	July 16, 1962	329	179
Mary #38	July 16, 1962	329	180
Mary #39	July 16, 1962	329	181
Flo #1	July 16, 1962	329	125
Flo #2	July 16, 1962	329	126
Flo #3	July 16, 1962	329	127
Flo #4	July 16, 1962	329	128
Flo #5	July 16, 1962	329	129
Flo #6	July 16, 1962	329	130
Flo #7	July 16, 1962	329	131
Flo #8	July 16, 1962	329	132
Flo #9	July 16, 1962	329	133
Flo #10	July 16, 1962	329	134
Flo #11	July 16, 1962	329	135
Flo #12	July 16, 1962	329	136
Flo #13	July 16, 1962	329	137
Flo #14	July 16, 1962	329	138
Flo #15	July 16, 1962	329	139
Flo #16	July 16, 1962	329	140
Flo #17	July 16, 1962	329	141
Flo #18	July 16, 1962	329	142
J. R. No. 1	April 2, 1962	320	105
J. R. No. 2	April 2, 1962	320	106
J. R. No. 3	April 2, 1962	320	107
J. R. No. 4	April 2, 1962	320	108
J. R. No. 5	April 2, 1962	320	109
J. R. No. 6	April 2, 1962	320	110
J. R. No. 7	April 2, 1962	320	111
J. R. No. 8	April 2, 1962	320	112
J. R. No. 9	April 2, 1962	320	113
J. R. No. 10	April 2, 1962	320	114
J. R. No. 11	April 2, 1962	320	115
J. R. No. 12	April 2, 1962	320	116
J. R. No. 14	April 17, 1962	321	428
J. R. No. 18	April 17, 1962	321	429
J. R. No. 19	April 17, 1962	321	430

Confidential Copy

<u>NAME</u>	<u>RECORDING DATE</u>	<u>DOCKET</u>	<u>PAGE NO.</u>
J. R. No. 20	April 17, 1962	321	431
J. R. No. 21	April 17, 1962	321	432
J. R. No. 22	May 18, 1962	324	592
J. R. No. 23	May 18, 1962	324	593
J. R. No. 24	May 18, 1962	324	594
J. R. No. 25	May 18, 1962	324	595
J. R. No. 50	May 18, 1962	324	596
Smile - You're on Candid Camera No. 1	May 18, 1962	324	574
Kevin No. 1	May 18, 1962	324	580
Kevin No. 4	May 18, 1962	324	583
Kevin No. 9	May 18, 1962	324	588
Kevin No. 10	May 18, 1962	324	589
Kevin No. 11	May 18, 1962	324	590
D. L. T. No. 84	May 18, 1962	324	591
J. R. No. 500	May 18, 1962	325	7
J. R. No. 501	May 18, 1962	325	8

Confirmed Copy

That between August 15 and November 14, 1963, at least \$14,500.00 worth of work and improvements were done and performed upon said claims, not including location work. That the work was begun August 15, 1963 and prosecuted diligently, continuously and without interruption to completion on November 14, 1963. The work and improvements were made at the expense of Minerals Exploration Company, a California corporation, authorized to do business in the state of Arizona, by Metler Brothers Drilling Co., Tommy Pearce, contractor and Heinrichs Geoexploration Company for the owners of the above described mining claims: Norman Twenstrup, Florence Sullivan, James L. Sullivan, Agnes Woolsey and James A. Woolsey, et. al., for the purpose of complying with the laws of the United States and the State of Arizona pertaining to annual assessment work on unpatented mining claims.

The said work consisted of geophysical surveys, access roads, preparation of drill sites and drilling of Nx size diamond drill holes, all done for the benefit of the one hundred and forty-five (145) contiguous mining claims above described which form a solid group of claims. The drilling was done by F. C. Metler, A. Greenwood and H. Hewell. Bulldozing of drill site areas and road repair to drill sites was done by T. Pearce, contractor. Geophysical surveys were made by magnetic and induced polarization techniques and equipment and were done by F. A. Seward, Jr., J. W. Marlatt, C. S. Ludwig, H. K. Hensen, F. F. Hanly, R. E. Palmer, G. S. Fedrico, J. B. Fink and W. E. Heinrichs, Jr., engineers, geophysicists geologists and technicians, all employees of Heinrichs Geoexploration Company, 808 W. Grant Road, Tucson, Arizona. The cost of the geophysical surveys was \$4,500.00 and Exhibit "A" herewith appended shows the location, nature and extent of these surveys. Exhibit "B" shows the basic findings.

Walter E. Heinrichs, Jr.

 Walter E. Heinrichs, Jr.



Subscribed and sworn to before me this 29th day of November, 1963.

M. Jean Heinrichs

 Notary Public

100-537-438

EXHIBIT "A"

SHOWING LOCATION OF GEOPHYSICAL SURVEYS
for
AFFIDAVIT OF LABOR ASSESSMENT YEAR 1962-1963

T 5 S, R 5 E
Blackwater Mining District
Pinal County, Arizona

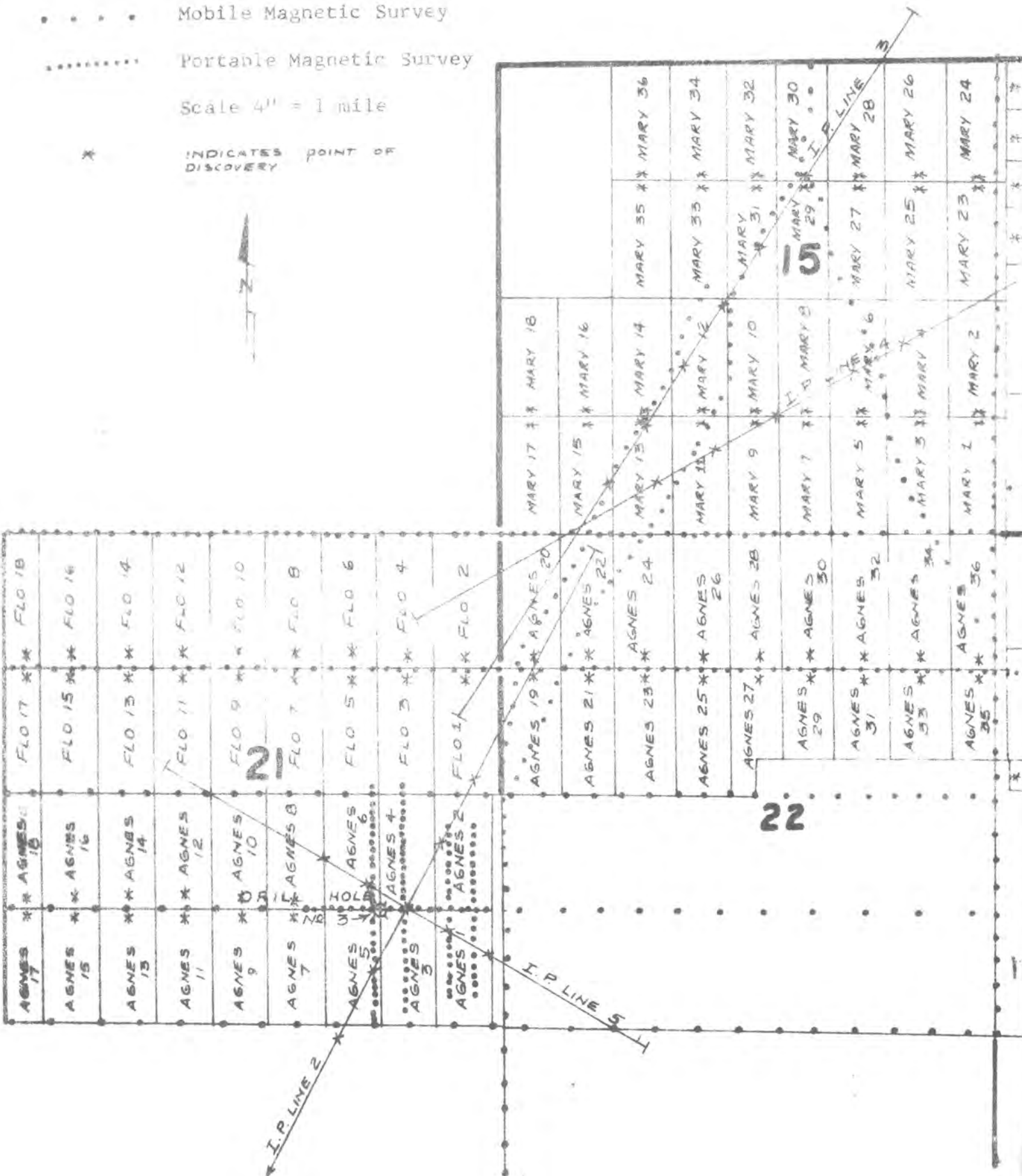
----- Induced Polarization Survey Location

..... Mobile Magnetic Survey

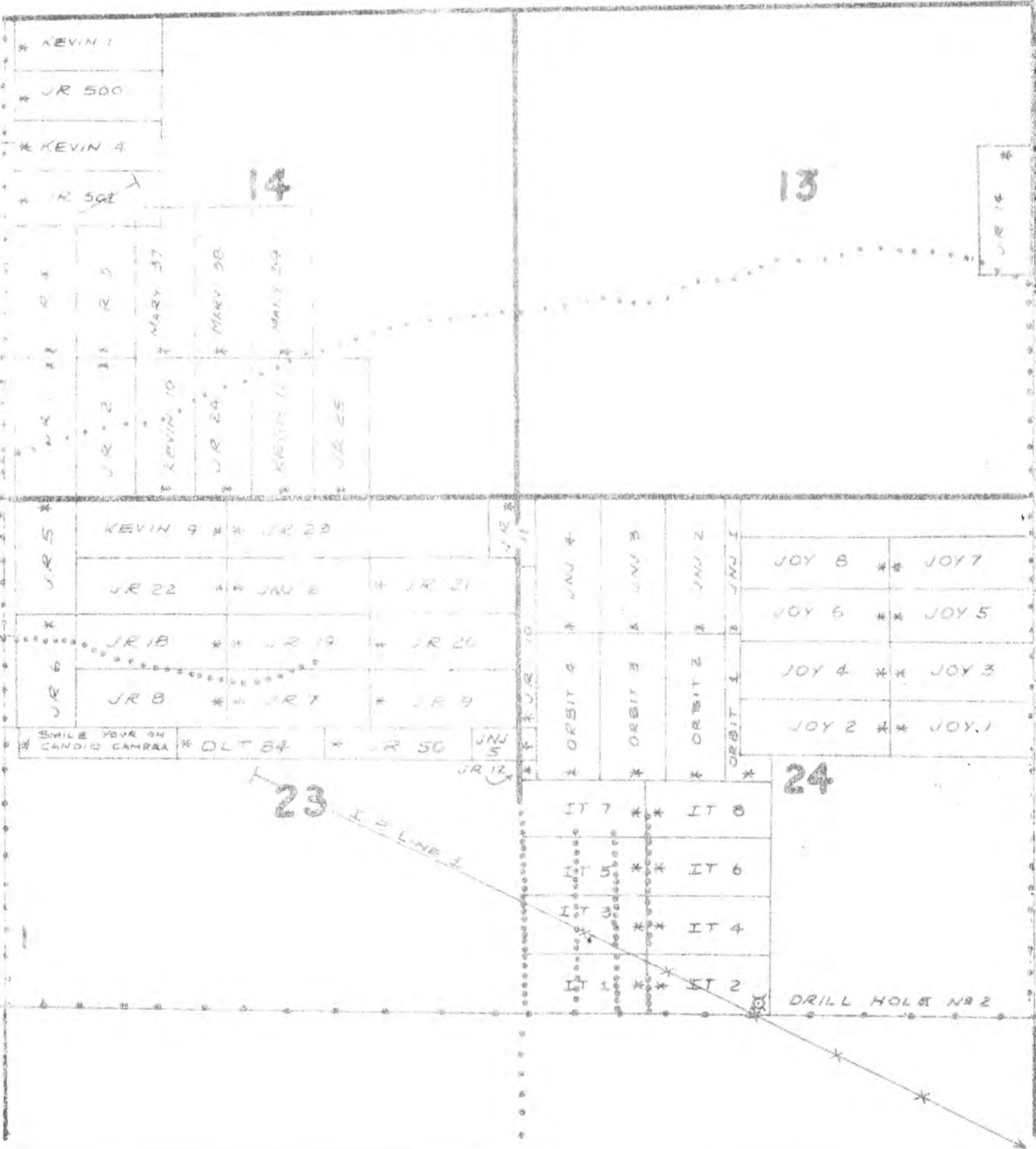
..... Portable Magnetic Survey

Scale 4" = 1 mile

* INDICATES POINT OF DISCOVERY



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Docket 367, Page 500

EXHIBIT "B"

Magnetic readings were taken along the profiles shown on Exhibit "A". The results showed erratic distribution of magnetite in the granitic rocks both exposed and buried. An anomalous zone about 1800 feet long by about 1500 feet wide with a relief of 900 gammas was found on the Agnes group in the southeast quarter of Section 21, T 5 S, R 5 E, with indicated equivalent magnetite strength of a rock type with approximate mafic content of diorite or similar material. This was checked by diamond drill hole No. 3.

Probable northeast-southwest faulting was found crossing the It claim group in the southwest $\frac{1}{4}$ of section 24, T 5 S, R 5 E.

Induced polarization surveys were made on the It claim group, the Agnes claim group and the Mary claim group, as shown on Exhibit "A". No significant anomalism was found in the It claims area or the Mary claims area to a probable maximum penetration depth of about 1,000 ft. to 1,500 ft. In the vicinity of the magnetic anomaly on that portion of the Agnes claim group in the southeast portion of Section 21, T 5 S, R 5 E very weak or marginal anomalism was found which was interpreted as being caused by higher magnetite concentration with possibly small zones of low sulfide content.

Confirmed copy

Nov. 29, 1963

Docket 367, Page 494

Sophie M. Smith

County Recorder

Pinal County, Arizona

270702



EXHIBIT "A"

SHOWING LOCATION OF GEOPHYSICAL SURVEYS
for
AFFIDAVIT OF LABOR ASSESSMENT YEAR 1962-1963

T 5 S, R 5 E
Blackwater Mining District
Pinal County, Arizona

W. J. ...
63

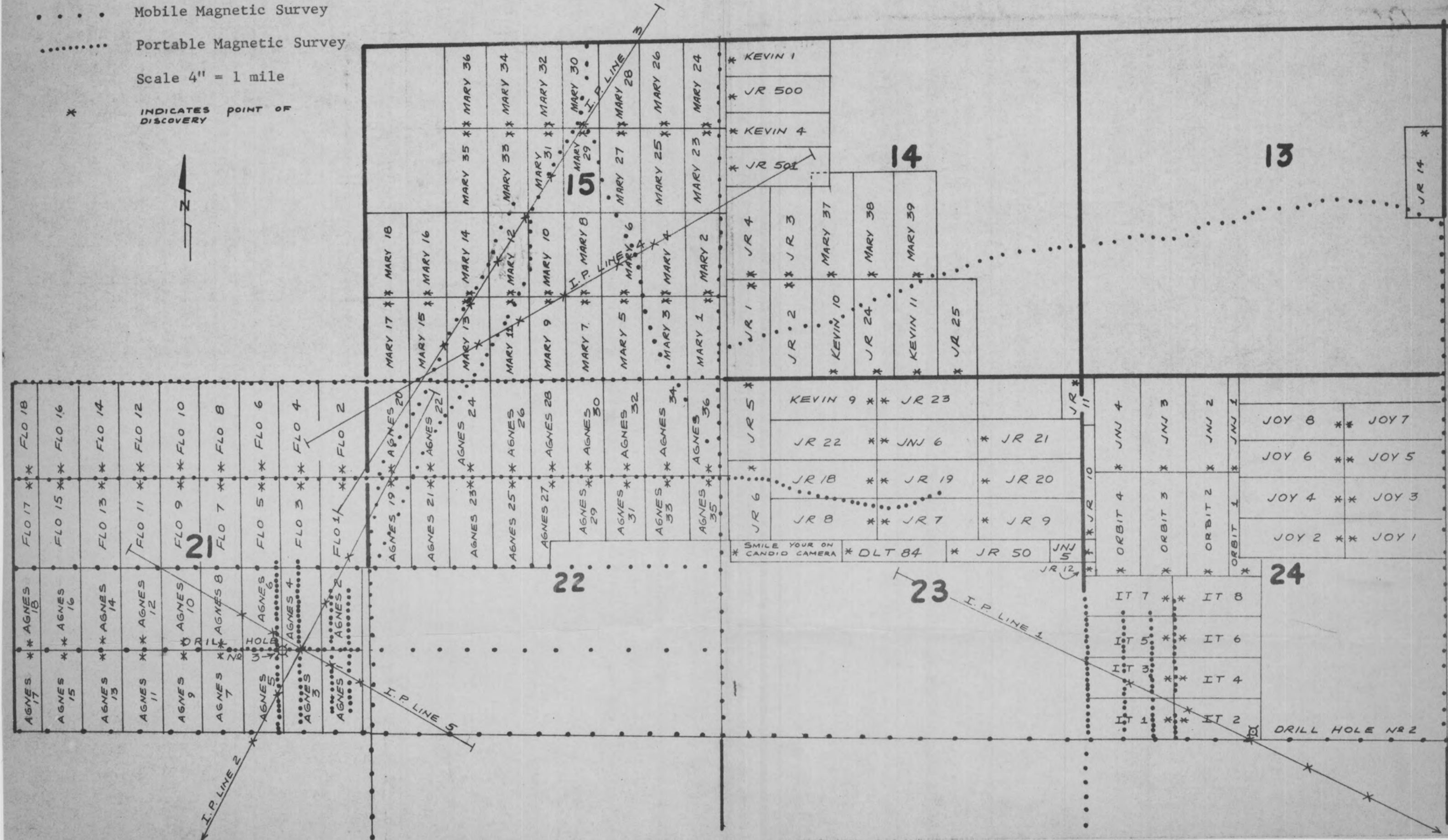
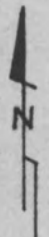
----- Induced Polarization Survey Location

... Mobile Magnetic Survey

..... Portable Magnetic Survey

Scale 4" = 1 mile

* INDICATES POINT OF DISCOVERY



AFFIDAVIT OF LABOR PERFORMED AND IMPROVEMENTS MADE

STATE OF ARIZONA)
) ss
 COUNTY OF PIMA)

WALTER E. HEINRICHS, JR., being duly sworn, deposes and says that he is a citizen of the United States and more than twenty-one years of age, and resides at Tucson in Pima County, Arizona, and is personally acquainted with the following mining claims situated in the Blackwater Mining District, Pinal County, Arizona, Section 1, T 6 S, R 5 E, the location notices of which are of record in the office of the County Recorder, Pinal County as follows:

<u>NAME</u>	<u>RECORDING DATE</u>	<u>DOCKET</u>	<u>PAGE</u>
Winnie No. 1	July 16, 1962	329	67
Winnie No. 2	July 16, 1962	329	68
Winnie No. 3	July 16, 1962	329	69
Winnie No. 4	July 16, 1962	329	70
Winnie No. 5	July 16, 1962	329	71
Winnie No. 6	July 16, 1962	329	72
Winnie No. 7	July 16, 1962	329	73
Winnie No. 8	July 16, 1962	329	74
Winnie No. 9	July 16, 1962	329	75
Winnie No. 10	July 16, 1962	329	76
Winnie No. 11	July 16, 1962	329	77
Winnie No. 12	April 4, 1962	320	293
Winnie No. 13	July 16, 1962	329	78
Winnie No. 14	April 4, 1962	320	295
Winnie No. 15	July 16, 1962	329	79
Winnie No. 16	April 4, 1962	320	297
Winnie No. 17	April 4, 1962	320	298
Winnie No. 18	July 16, 1962	329	80
Winnie No. 19	July 16, 1962	329	81
Winnie No. 20	July 16, 1962	329	82

That between August 20 and September 6, 1963, at least \$2,000 worth of work and improvements were done and performed upon said claims, not including location work. The work and improvements were made by Metler Brothers Drilling Co., Tommy Pearce, contractor and Heinrichs Geoexploration Company at the expense of Minerals Exploration Company, a California corporation for the owners of the above described mining claims, Norman Twenstrup, Florence Sullivan, James L. Sullivan, Agnes Woolsey and James A. Woolsey, for the purpose of complying with the laws of the United States pertaining to annual assessment work, and Frank C. Metler, Augie Greenwood, Hugh Hewell, Tommy Pearce, E. Grover Heinrichs and J. W. Marlatt performed said work which consisted of site preparation and drilling of an Nx size diamond drill hole at the common corner of Winnie #13, #14, #15 and #16, done for the benefit of the 20 mining claims above described, as a single contiguous group.

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

Subscribed and sworn to before me this 8th day of October 1963.

M. Jean Heinrichs
 Notary Public

My commission expires: July 21, 1965

Confirmed Copy

AFFIDAVIT OF LABOR PERFORMED AND IMPROVEMENTS MADE

STATE OF ARIZONA)
) ss
 COUNTY OF PINA)

D 364 p 254

WALTER E. HEINRICHS, JR., being duly sworn, deposes and says that he is a citizen of the United States and more than twenty-one years of age, and resides at Tucson in Pima County, Arizona, and is personally acquainted with the following mining claims situated in the Blackwater Mining District, Pinal County, Arizona, Section 1, T 6 S, R 5 E, the location notices of which are of record in the office of the County Recorder, Pinal County as follows:

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Winnie No. 1	July 16, 1962	329	67
Winnie No. 2	July 16, 1962	329	68
Winnie No. 3	July 16, 1962	329	69
Winnie No. 4	July 16, 1962	329	70
Winnie No. 5	July 16, 1962	329	71
Winnie No. 6	July 16, 1962	329	72
Winnie No. 7	July 16, 1962	329	73
Winnie No. 8	July 16, 1962	329	74
Winnie No. 9	July 16, 1962	329	75
Winnie No. 10	July 16, 1962	329	76
Winnie No. 11	July 16, 1962	329	77
Winnie No. 12	April 4, 1962	320	293
Winnie No. 13	July 16, 1962	329	78
Winnie No. 14	April 4, 1962	320	295
Winnie No. 15	July 16, 1962	329	79
Winnie No. 16	April 4, 1962	320	297
Winnie No. 17	April 4, 1962	320	298
Winnie No. 18	July 16, 1962	329	80
Winnie No. 19	July 16, 1962	329	81
Winnie No. 20	July 16, 1962	329	82

That between August 20 and September 6, 1963, at least \$2,000 worth of work and improvements were done and performed upon said claims, not including location work. The work and improvements were made by Metler Brothers Drilling Co., Tommy Pearce, contractor and Heinrichs Geoexploration Company at the expense of Minerals Exploration Company, a California corporation for the owners of the above described mining claims, Norman Twenstrup, Florence Sullivan, James L. Sullivan, Agnes Woolsey and James A. Woolsey, for the purpose of complying with the laws of the United States pertaining to annual assessment work, and Frank C. Metler, Augie Greenwood, Hugh Hewell, Tommy Pearce, E. Grover Heinrichs and J. W. Marlatt performed said work which consisted of site preparation and drilling of an Nx size diamond drill hole at the common corner of Winnie #13, #14, #15 and #16, done for the benefit of the 20 mining claims above described, as a single contiguous group.

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

Subscribed and sworn to before me this 8th day of October 1963.

M. Jean Heinrichs
 Notary Public

My commission expires: July 21, 1965.

AFFIDAVIT OF LABOR PERFORMED AND IMPROVEMENTS MADE

STATE OF ARIZONA)
) ss
 COUNTY OF PINA)

D 364 p 254

WALTER E. HEINRICHS, JR., being duly sworn, deposes and says that he is a citizen of the United States and more than twenty-one years of age, and resides at Tucson in Pima County, Arizona, and is personally acquainted with the following mining claims situated in the Blackwater Mining District, Pinal County, Arizona, Section 1, T 6 S, R 5 E, the location notices of which are of record in the office of the County Recorder, Pinal County as follows:

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Winnie No. 11	July 16, 1962	329	77
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Winnie No. 16	April 4, 1962	320	297
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Winnie No. 18	July 16, 1962	329	80
Winnie No. 19	July 16, 1962	329	81
Winnie No. 20	July 16, 1962	329	82

That between August 20 and September 6, 1963, at least \$2,000 worth of work and improvements were done and performed upon said claims, net including location work. The work and improvements were made by Metler Brothers Drilling Co., Tommy Pearce, contractor and Heinrichs Geoexploration Company at the expense of Minerals Exploration Company, a California corporation for the owners of the above described mining claims, Norman Twenstrup, Florence Sullivan, James L. Sullivan, Agnes Woolsey and James A. Woolsey, for the purpose of complying with the laws of the United States pertaining to annual assessment work, and Frank C. Metler, Augie Greenwood, Hugh Howell, Tommy Pearce, E. Grever Heinrichs and J. W. Marlatt performed said work which consisted of site preparation and drilling of an 8x six diamond drill hole at the common corner of Winnie #13, #14, #15 and #16, done for the benefit of the 20 mining claims above described, as a single contiguous group.

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

Subscribed and sworn to before me this 8th day of October 1963.

M. Jean Heinrichs
 Notary Public

My commission expires: July 21, 1965.

AFFIDAVIT OF LABOR PERFORMED AND IMPROVEMENTS MADE


STATE OF ARIZONA)
) ss
 COUNTY OF PIMA)

314 p 274

WALTER E. HEINRICHS, JR., being duly sworn, deposes and says that he is a citizen of the United States and more than twenty-one years of age, and resides at Tucson in Pima County, Arizona, and is personally acquainted with the following mining claims situated in the Blackwater Mining District, Pinal County, Arizona, Section 1, T 6 S, R 5 E, the location notices of which are of record in the office of the County Recorder, Pinal County as follows:

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Winnie No. 6	July 16, 1962	329	72
Winnie No. 7	July 16, 1962	329	73
Winnie No. 8	July 16, 1962	329	74
Winnie No. 9	July 16, 1962	329	75
Winnie No. 10	July 16, 1962	329	76
Winnie No. 11	July 16, 1962	329	77
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Winnie No. 13	July 16, 1962	329	78
Winnie No. 14	April 4, 1962	320	295
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 Walter E. Heinrichs, Jr.

Subscribed and sworn to before me this 8th day of October 1963.


 M. Jean Heinrichs
 Notary Public

My commission expires: July 31, 1965

AFFIDAVIT OF LABOR PERFORMED AND IMPROVEMENTS MADE

STATE OF ARIZONA)
) ss
 COUNTY OF PINA)

D 324 p 254

WALTER E. HEINRICHS, JR., being duly sworn, deposes and says that he is a citizen of the United States and more than twenty-one years of age, and resides at Tucson in Pima County, Arizona, and is personally acquainted with the following mining claims situated in the Blackwater Mining District, Pinal County, Arizona, Section 1, T 6 S, R 5 E, the location notices of which are of record in the office of the County Recorder, Pinal County as follows:

NAME	RECORDING DATE	DOCKET	PAGE
Winnie No. 1	July 16, 1962	329	67
Winnie No. 2	July 16, 1962	329	68
Winnie No. 3	July 16, 1962	329	69
Winnie No. 4	July 16, 1962	329	70
Winnie No. 5	July 16, 1962	329	71
Winnie No. 6	July 16, 1962	329	72
Winnie No. 7	July 16, 1962	329	73
Winnie No. 8	July 16, 1962	329	74
Winnie No. 9	July 16, 1962	329	75
Winnie No. 10	July 16, 1962	329	76
Winnie No. 11	July 16, 1962	329	77
Winnie No. 12	April 4, 1962	320	293
Winnie No. 13	July 16, 1962	329	78
Winnie No. 14	April 4, 1962	320	295
Winnie No. 15	July 16, 1962	329	79
Winnie No. 16	April 4, 1962	320	297
Winnie No. 17	April 4, 1962	320	298
Winnie No. 18	July 16, 1962	329	80
Winnie No. 19	July 16, 1962	329	81
Winnie No. 20	July 16, 1962	329	82

That between August 20 and September 6, 1963, at least \$2,000 worth of work and improvements were done and performed upon said claims, net including location work. The work and improvements were made by Metler Brothers Drilling Co., Tommy Pearce, contractor and Heinrichs Geospection Company at the expense of Minerals Exploration Company, a California corporation for the owners of the above described mining claims, Norman Twenstrup, Florence Sullivan, James L. Sullivan, Agnes Woolsey and James A. Woolsey, for the purpose of complying with the laws of the United States pertaining to annual assessment work, and Frank C. Metler, Augie Greenwood, Hugh Howell, Tommy Pearce, E. Grever Heinrichs and J. W. Marlatt performed said work which consisted of site preparation and drilling of an 1 1/2 size diamond drill hole at the common corner of Winnie #13, #14, #15 and #16, done for the benefit of the 20 mining claims above described, as a single contiguous group.

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

Subscribed and sworn to before me this 8th day of October 1963.

M. Jean Heinrichs
 Notary Public

My commission expires: July 21, 1965

AFFIDAVIT OF CLAIM PERFORMED AND IMPROVEMENTS MADE

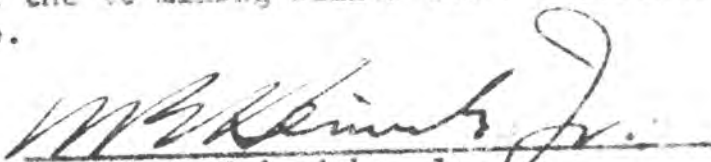
STATE OF ARIZONA)
) ss
 COUNTY OF PIMA)

D 364 p 254

WALTER E. HEINRICH, JR., being in sworn, deposes and says that he is a citizen of the United States and more than twenty-one years of age, and resides at Tucson in Pima County, Arizona, and is personally acquainted with the following mining claims situated in the Blackwater Mining District, Pinal County, Arizona, Section 1, T 33, R 3 E, the location notices of which are of record in the office of the County Recorder, Pinal County, as follows:

NAME	RECORDING DATE	DOCKET	PAGE
Winnie No. 1	July 16, 1962	329	
Winnie No. 2	July 16, 1962	329	
Winnie No. 3	July 16, 1962	329	71
Winnie No. 4	July 16, 1962	329	72
Winnie No. 5	July 16, 1962	329	73
Winnie No. 6	July 16, 1962	329	74
Winnie No. 7	July 16, 1962	329	75
Winnie No. 8	July 16, 1962	329	76
Winnie No. 9	July 16, 1962	329	77
Winnie No. 10	July 16, 1962	329	78
Winnie No. 11	July 16, 1962	329	79
Winnie No. 12	April 4, 1962	320	80
Winnie No. 13	July 16, 1962	329	81
Winnie No. 14	April 4, 1962	320	82
Winnie No. 15	July 16, 1962	329	83
Winnie No. 16	April 4, 1962	320	84
Winnie No. 17	April 4, 1962	320	85
Winnie No. 18	July 16, 1962	329	86
Winnie No. 19	July 16, 1962	329	87
Winnie No. 20	July 16, 1962	329	88

That between August 20 and September 5, 1963, at least \$2,000 worth of work and improvements were done and performed upon said claims, not including location work. The work and improvements were made by Metler Brothers Drilling Co., Tommy Pearce, contractor and Heinrichs Geoprospection Company at the expense of Minerals Exploration Company, a California corporation for the owners of the above described mining claims, Norman Tweenstrup, Florence Sullivan, James L. Sullivan, Agnes Woolsey and James A. Woolsey, for the purpose of complying with the laws of the United States pertaining to annual assessment work, and Frank C. Metler, Arnie Greenwood, Hugh Hawaii, Tommy Pearce, E. Grover Heinrichs and J. W. Marlatt performed said work which consisted of site preparation and drilling of an 8 1/2 inch diamond drill hole at the common corner of Winnie #13, #14, #15 and #16, done for the benefit of the 20 mining claims above described, as a single contiguous group.


 Walter E. Heinrichs, Jr.

Subscribed and sworn to before me this 8th day of October 1963.


 Notary Public

My commission expires: July 21, 1965

12-6-63.

Call from W. R. Moran - a letter, or notice has been prepared to Woolsey et al about termination of Sarcote agreement. Vic has seen it. Mexco now ready to send it but Moran wanted to know if I had any new thoughts about doing anything more, and if I thought ASARCO might be interested in any of the ground. I said I'd feel out Kinnison. I'm to call Robertson next week to give him O.K. to mail the letter or not. (Moran is on vacation). I called Kinnison - not in - left message for him to call.

Moran's home phone - Pasadena - ^{Juni} Sylvan 01529 Area code 213

December 16, 1963

Minerals Exploration Company
Union Oil Center
Los Angeles 17, California

✓
Re: P.P. 565

Gentlemen:

We have your letter of December 13, 1963.

The Commissioner cannot approve the renewal certificate until the day after the expiration. Your renewal certificate is scheduled to be mailed on December 26, 1963.

Yours truly,

Walter V. Murphy
Supervisor
Leasing Division

WVM:mob

MINERALS EXPLORATION COMPANY

UNION OIL CENTER

LOS ANGELES 11, CALIFORNIA

December 13, 1963

State Land Department
State Office Building
Phoenix 7, Arizona

Re: Renewal Prospecting Permit
No. 565, Pinal County, Arizona
Permit dated December 26, 1962

Gentlemen:

On October 29, 1963, we requested a 1-year extension of permit No. 565. We accompanied the request with the filing fee, continuation certificate and an itemized list of expenditures covering work done under this permit.

We have not heard from you. Inasmuch as the permit expires December 26, 1963, we are eager to receive your approval of our request.

Very truly yours,

MINERALS EXPLORATION COMPANY

By

J. Robertson

KJR:ab

AFFIDAVIT OF ANNUAL EXPLORATION EXPENDITURE

CALIFORNIA
STATE OF ~~ARIZONA~~)
County of LOS ANGELES)

SS:

Arizona State Prospecting
Permit No. 565

MINERALS EXPLORATION COMPANY

, being first duly sworn,

(Name of Permittee or Agent)

deposes and says:

That he is Permittee of, or Permittee's authorized agent of record for State
Prospecting Permit No. 565;

That between the 1st day of August, 1963,
and the 30th day of September, 1963, at least
\$200.00 were expended in exploration, as statutorily defined,
for valuable mineral deposits on the State land covered by the above numbered Pro-
specting Permit;

That the documents attached in substantiation of this expenditure reflect a true
and complete accounting of the sum so expended as reported next above.

MINERALS EXPLORATION COMPANY

By [Signature]
(Signature) Vice President

Subscribed and sworn to before me this 2nd day of October,
1963

[Signature]
Notary Public

AUDREY A. BURKE

My Commission Expires:

Notary Public
for the State of California
My Commission Expires September 19, 1966

THE FOLLOWING IS NOT TO BE FILLED IN BY APPLICANT

Advance Rental Received _____ Amount _____ Receipt No. _____

Fee Received 16/30/63 Amount 1.00 Receipt No. 39589

Approved for the period of _____ Beginning _____ Expiring _____

Recorded by _____ Approved as [Signature] Date 12/24/63

DEPUTY STATE LAND COMMISSIONER

If Denied, Cause: _____

Special provisions to be added to permit _____

5-10-62
2-17



INSTRUCTIONS

1. File one copy with the Department.
2. This application for renewal shall be accompanied by a filing fee of \$1.00, and advance rental of \$1.00 per acre. (No rental for first renewal).
3. Fill in either "A" or "B" below but not both.
4. Execute affidavit on reverse side before a Notary Public.
5. Attach data substantiating expenditure to reverse side. Include itemization or receipts, or both.
6. **IMPORTANT:** This application will not be approved unless accompanied by either a Continuation Certificate extending the present bond through the renewal year, or a replacement bond.

STATE LAND DEPARTMENT
 State Office Building
 Phoenix 7, Arizona

APPLICATION FOR RENEWAL OF PROSPECTING PERMIT

The State Land Commissioner:

~~XXXX~~ MINERALS EXPLORATION COMPANY
 (Name)

of 461 South Boylston, Los Angeles CA, California
 (Address)

having expended no less than \$ 200.00 in exploration for valuable mineral deposits on the State land covered by Prospecting Permit No. 565, as attested by the affidavit and evidence attached hereto, do hereby make application for renewal of:

A. Prospecting Permit No. 565
 (To be used when filing for renewal of all of Permit now held)

B. That part of Prospecting Permit No. _____ described below:

Subdivision	Sec.	Twp.	Rge.	Acres	County

(To be used when filing for renewal of part of Permit now held)

I hereby relinquish all acreage presently held in this Permit not above described.

MINERALS EXPLORATION COMPANY

By [Signature]
 (Applicant)
 Vice President

DATED this 22nd day of October, 1963

The following services were performed and the indicated charges therefor were paid by Minerals Exploration Company to Heinrichs Geoexploration Company on Permit No. 565, being an amount in excess of that required for renewal of said Permit:

Services:

Mobile Magnetometer Surveys

August 19 and 20 @ \$250/day	\$500.00
August 21, 22, 23, computation of records	100.00

Induced Polarization

August 19, 20, 22, 23, 27, 28, 29, 30	\$2020.00
August 21, standby-inclement weather	100.00

\$2720.00

MINERALS EXPLORATION COMPANY

UNION OIL CENTER
LOS ANGELES 11, CALIFORNIA

October 29, 1963

State Land Department
State Office Building
Phoenix 7, Arizona

Renewal of Prospecting Permit No. 565
Pinal County, Arizona

Permit Dated December 26, 1962

Gentlemen:

We request a one year extension of Permit No. 565.
This will be the first renewal requested for this permit.

We enclose the following papers in connection with
this request:

1. Application for Renewal dated October 22, 1963.
2. Check in the amount of \$1.00 to cover renewal filing fee.
3. An itemized list of expenditures covering work done under this permit.
4. Continuation Certificate dated October 24, 1963.

We shall appreciate your consideration and approval.

Very truly yours,

MINERALS EXPLORATION COMPANY

By

K. J. Robertson

K. J. Robertson

KJR:ab
Enc.

UNION OIL COMPANY OF CALIFORNIA

UNION OIL CENTER

LOS ANGELES 12, CALIFORNIA

HAROLD H. STREAM
MANAGER OF LANDS

September 11, 1963

Mr. Walter V. Murphy
State Land Department
State of Arizona
State Office Building
Phoenix 7, Arizona

ASSIGNMENT OF PROSPECTING
PERMITS 565 AND 684

Dear Mr. Murphy:

In accordance with the request contained in your letter of August 30, 1963, we are enclosing our check in the amount of \$6 payable to the State Land Department, State of Arizona, to cover the filing fees for the Assignments of Prospecting Permits 565 and 684.

We have also filled out the Supplemental Statement which you forwarded to us and sent this statement to the State of Arizona Corporation Commission for their handling and forwarding to you.

Very truly yours,



G. B. HALL
Land Coordinator

GBH/lfs
Enclosure

August 30, 1963

Mr. G. B. Hall
Union Oil Co. of California
P.O. Box 7600
Los Angeles 54, California

Re: Prospecting Permits #565 & #664

Dear Sir:

We are in receipt of the applications to assign the above numbered permits from Norman Tvenstrup and James L. Sullivan to Minerals Exploration Co., original copies of the permits and replacement bonds.

Please have the enclosed supplemental statement for corporations completed, submit same to the Arizona Corporation Commission with instructions that they in turn forward same to this office.

Fees in the amount of \$3.00 for each assignment must be remitted in advance.

Very truly yours,

Walter V. Murphy, Supervisor
Leasing Division

WVM:bjd
encl.

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

WALTER E. HEINRICHS, JR.
E. GROVER HEINRICHS

February 18, 1964

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

James A. Woolsey
Agnes Woolsey
Norman Twenstrup
James L. Sullivan
Florence Sullivan
c/o Walter W. McMillen
Attorney at Law
1006 Union Title Bldg
222 North Central
Phoenix 4, Arizona

Re: Sacaton Area
Pinal County, Arizona
Twenstrup, et al, Lease
PF 748
and
Minerals Exploration Co.
Union Oil Center
Los Angeles 17, California

Gentlemen:


In reference to the above, your letter of 10 February 1964 to Mr. H. S. Harry and at the request of Mr. W. R. Moran of same company, we are herewith transmitting copies of all maps, logs and data mentioned in paragraph 10 page 7 of your 10 May 1963 agreement with Minerals Exploration Co.

The portions of drill cores not used for testing may be picked up at this office within five days after receipt of this letter. Thereafter, we will be obliged to assess a storage charge of \$0.75 per day. The size and weight of this material is estimated approximately 150 cu. ft. and 1,500 pounds, or one pick-up load, or about 4 passenger car loads.

Copy of annual assessment work affidavit mentioned in paragraph 15 page 9, which partially covers requirements for the current assessment year is enclosed.

Very truly yours,

HEINRICHS GEOEXPLORATION CO.



Walter E. Heinrichs, Jr.
President & General Manager

WEH:jh

BCC: W.R. Moran (2) w/o maps
+ affidavit map
+ tech note

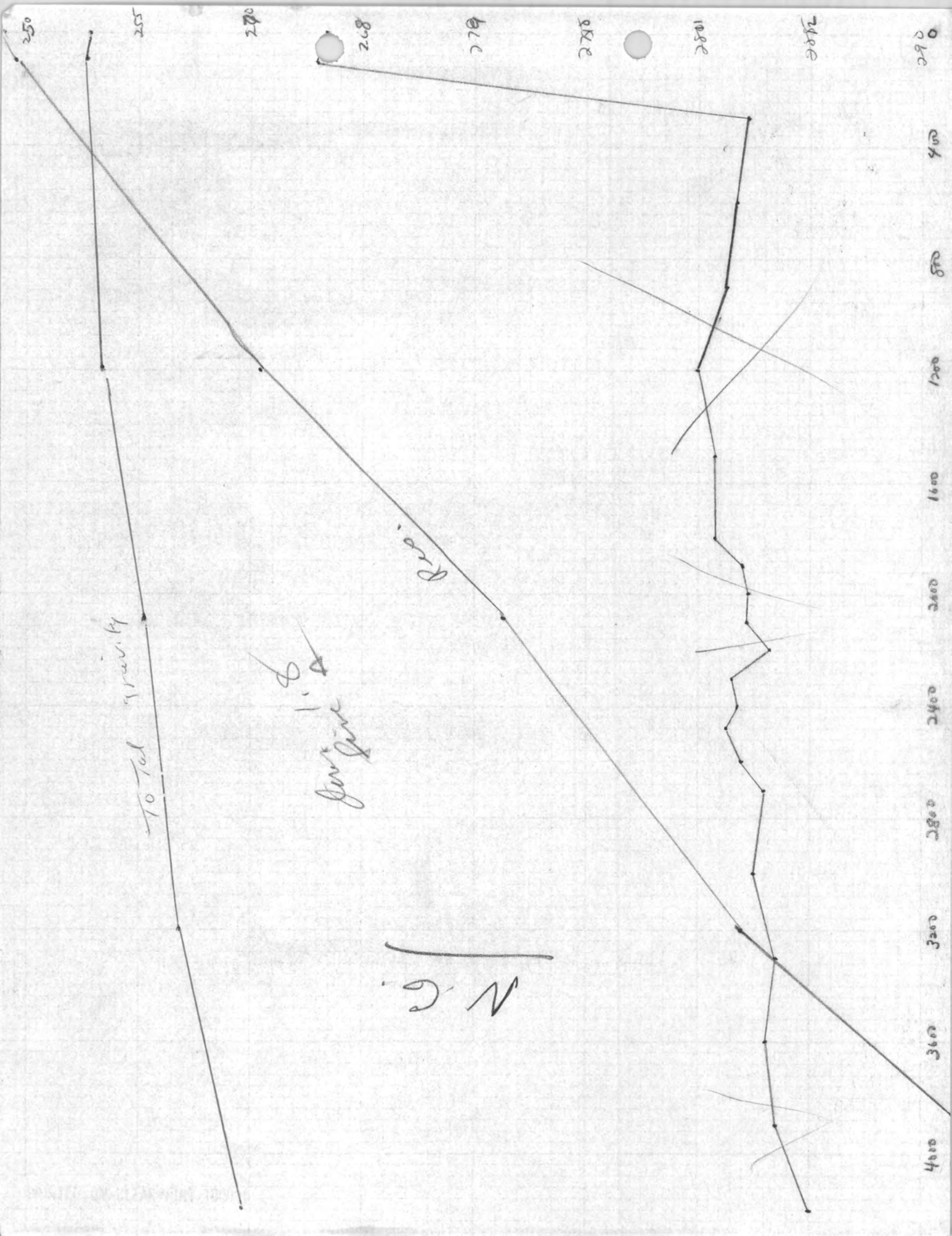
C O N T E N T S

Maps on SACATON PROJECT, Pinal County, Arizona

- ✓ 1. Hand Magnetic Profiles, Winnie Claims
- ✓ 2. Gravity Profile, Line A, Line B. (one sheet)
- ✓ 3. Magnetic Profile, It Claims
- ✓ 4. Hand Magnetic Profiles, Sec. 21 Area Line 1
- ✓ 5. " " " " " " 2
- ✓ 6. " " " " " " 3
- ✓ 7. " " " " " " 4
- ✓ 8. " " " " " " 5
- ✓ 9. Magnetic Survey (Vertical Intensity) It Claim Group
 Contour Map
- ✓ 10. Magnetic Survey (Vertical Intensity) Agnes Claim Group
 Contour Map.
- 11. Drill Logs: Drill Hole #1, 1 page
 Drill Hole #2, 10 pages
 Drill Hole #3, 1 page
 Drill Hole #4, 1 page
 Total: 13 pages
- ✓ 12: Sectional Data Sheet, I. P. Survey Line 1 (1" = 1000')
- ✓ 13. " " " " " Line 2, Spread 1
- ✓ 14. " " " " " Line 2, Spread 2
- ✓ 15. " " " " " Line 3
- ✓ 16. " " " " " Line 4

In Map Pocket

- ✓ Composite map Sacaton Project: 4" = 1 mile
- 15 Mobile Magnetometer Records: 1, 1a, 2 thru 14.



9-13-63

Mexico - Sacaton

Run 1600' S.P. E-W centered at
Agnes 3-4. Results: +2 mV to +18 mV.
∴ N.G.

Located $\frac{1}{4}$ cov. 16/15 and
checked out some of the claims
nearby. Have notes on this.

Went to drill - at 190+ feet
& expect to be at 200 at least
by end of to-day's shift. Making
about 50' per day. Now using
 $3\frac{7}{8}$ " rock bit. Took a core at
155'-159', conglomerate type. No
water loss.

Called Freeman - still out of
town. Was expected back last
night.

Prelim. Log.

D.D.#2 Sacaton, Ariz for Mexico
Loc. "It" claim no 2. 150' west & 100' north
(approx) from south $\frac{1}{4}$ corner Sec. 24,
T5S, R5E. Vertical Hole. Colored
 $5\frac{1}{8}$ " rock bit. Drill co.: Metler Bros.
Driller: Augie Greenwood. Truck
mounted, mast, Longyear 44 drill.

0' - 50' alluvium. Rock bit

50' - 630' Casa Grande conglomerate
(loosely consolidated ferruginous
ground mass with some schist
but mainly granitic angular
fragments). Rock bit.

630 - 830' Broken, soft, loose, variable
fault zone with clay, sand,
and altered conglomerate zones.
Rock bit 630-660. Soft, red
clay.

core 660-670. About 6 inches
recovered. Very altered conglomerate.

Rock bit 660-726 clay, sand,
some conglomerate. A few
minor cuttings of "exotic"
copper oxides came up with
cuttings about 720-726

core 726-830. Recovery poor
to nil.

726-732. 3 inches from
conglomerate.

732-737 2 foot recovery
altered cong. & limonite
& hematite fragments & clay.

737-762 3 inches of
fragments. Rest sand

- 762-787 very altered cong & much hematite. Sludge running very red 3 foot recovery.
- 787-797 soft, white quartz and alt. feldspars. 2 inches recovered.
- 797-806. As above 2 inches recovered.
- 806-807 Same. 2 inches recovered.
- 807-815 same 3 inches recovered.
- 815-825 Altered cong. 2 foot recovery.
- 825-830 Alt. cong. possibly at bottom grading into rotten monzonite. 5 foot recovery.

Most of the Rosco Bob's were re-located as Droug by Walker. We will have to determine date, & if filed. Floyd notes in file mention one Droug - did he get date at that time?

Mexco - Sacaton

9/23/63

on 9/19, rock bit 85' to 580'

on 9/20, " " 80' to 660'

on 9/21, cored 10' to 670' & reamed.

on 9/23, rock bit to 726' & prepared for coring again.

At about 630' encountered a soft red clay with sludge-mud running blood red. at 660' seemed to firm a little so tried a core run. Drilling 660' to 670' gave only about 5 inches of core (appearance of shear, fault, or highly altered gossan zone) so rock bit put back on again. Sludge became brown again and seemed to be the same old conglomerate at 700' - 710' no sign of mineral. Below 720' began to see a few specks of exotic copper. Stopped the rock bit at 726' and pulled out of hole, put on core barrel and prepared to core early 9/24/63.

John Kinnison arrived about 2:00 p.m. just as exotic Cu appeared. He examined sludge by screening, panning, weighing & volume & visual & thought top of bedrock probably reached.

Borrowed maps from Freeman which

I will copy first thing in A.M. & return. Send copies to Stanton

Socaton I.P. survey

9/13[±]/63

Line 1 is essentially over deep alluvium or conglomerate becoming somewhat shallower towards the west end. Nothing of structural significance in the resistivity data and an I.P. anomaly, improbable.

Line 2 Spread 1 shows a possible ^{buried} fault scarp or buried bedrock "cliff" between ^{Station} 1.505 and 0^s most probably between .755 and 0^s near .755. In any event basement is much shallower towards the northern end of the line. There is no ~~good~~ I.P. pattern indicative of an anomaly although a few scattered depth points are anomalous in the PFE (percent frequency effect).

Line 2 spread 2 was centered on outcrop. Alluvium deepens in both directions from center to ~~at~~ 3.75 H. where again an apparent scarp, cliff or outcrop appears in the resistivity data. No good anomalous pattern in the MCF but PFE background at depth ~~and~~ ~~is~~ ~~fairly~~ ~~high~~ ~~for~~ ~~near~~ ~~surface~~ ~~basement~~ ~~is~~ ~~fairly~~ ~~high~~. May be instrumental or human factor.

Line 3 is a "layer cake" situation. A depth curve on line three indicates a depth of 375 ft but ~~basement~~ ~~is~~ ~~probably~~ ~~shallower~~ because the north end of the line is actually on outcropping crystalline rock and only shows a modest increase in the shallower (2nd sep) resistivities.

These lines indicate a buried ridge striking ~~south~~ ~~easterly~~ ~~1~~
From about the center of Line 2 Spread 2 bounded on the ~~west~~ ~~west~~ by a probable fault at about station 1.755 Line #2 Spread #1.

Line # 4 was run through the center and normal to line 2, spread # 7 over a mag anomaly and about 750 ft NE of the indicated fault. Patterns are poor but a buried conductor may be indicated between 0 and 2E with some low order I.P. anomalous associated. This may be human ~~or instrumental anomaly~~

Recommendations

More I.P. ^{coverage} is justified to further delineate this low order I.P. anomaly. Present coverage indicates low order ^{I.P.} anomalous in the SE corner of Sec. 21 T55, R5E, Agnes claim area.

Mexico - Sacaton Area

On Aug 19 & 20, 1963 the M & M Mag ran 35 miles of original profiles and 4 miles of repeat of a portion of Record No 1. Recording scales of 50 gamma per half inch vertically and 400 feet per inch horizontally were used and the tapper bar set for one tap for each 5 feet of distance travelled. The purpose was to check whether magnetics have any useful, interpretable value over and near a group of claims held by Woolsey & associates and optioned to Minerals Exploration company. Most of the profiles were made on existing roads & trails. However, a quarter mile spaced grid of east-west lines was used to obtain coverage on sections 21 & 22, T5 S, R5 E.

In general the results were as pre-expected. The granite, or crystalline rocks exhibit low magnitude erratic anomalies due to random concentration of magnetite & or other mafic minerals. Also as expected a few narrow veins of probable magnetite were crossed, as can be seen on records No 2 & 7. Buried extensions of outcropping hills are easily defined as are other buried hills. No anomaly of

a character to suggest strong contact metamorphic type environment was found.

Aside from possibly significant structural trends, only one anomalous area has been selected as being uniquely different enough to justify immediate follow up work by magnetic or other geophysical work. Presently an induced polarization survey is being made over this area as a result of its disclosure by the MoMag. It is a moderate high and pronounced low followed by another high lying on the traverse of Record No 12 and found in the southeast quarter of section 21 ^{and parallel} Combined evidence from adjoining ^{traverses} indicate it may be at a triple structural ^{lineament} intersection and may represent an altered shear zone. Bedrock here is a structural high probably under not over 100 feet of cover.

"hashy"

The original records are ~~not~~ ^{fairly} ~~first~~ ^{good} quality in appearance and ^{therefore} have been traced in case reproductions are desired. Profiles in sections 21 & 22 were plotted to scale and reduced by pantograph to approximately 4" = 1 mile so they could be plotted on the

already existent base map of that scale. This then makes the vertical scale of the profiles very roughly 1" = 300 gammas.

Record No 14 was made ^{near head of the dry arroyo} ~~with the same~~ ~~equipment~~ returning to Tucson. The intent was to run easterly along the bottom of sections 1 & 6 T 6 S, R 5 & 6 E, but the road was not readily found at the time and record was run parallel to the desired, but one mile south, or east along the south side of sections 12 & 7. A moderately deep magnetic high was disclosed about at the point where it could be positioned as being a strike between out-cropping hills to the north & south.

Considerable drift occurred making ties between records difficult in places and impossible in others. Note different level between Record No 1 and its repeat as example. They were made about an hour apart. Basic causes of this drift are as follows:

- (a) Poor ^{detector} compensation, giving bad ties on different headings at this sensitivity.
- (b) Quite different levels on

(4)

successive days, even after hours of warmup and operation.

(c) Apparent small voltage change with time. Stability seems not to be obtained either by standing warmup, or by driving warmup, but only by driving with recorder in operation. After 2-3 hours of operation, level seems to stabilize.

Jmy.

Pertinent figures.

The elevation correction, (although they can be worked separately), is usually a combination of the Free-air correction and the Bouguer correction. Add this ^{combined} correction to stations at higher elevation than the reference station & subtract from stations at lower elevations.

First decide on the appropriate density - either by running a density profile on the ground or by experience-educated guess factor.

From Nettleton, page 55, we take a density usually of 1.8 for deeper alluvium and a combined elev. factor of 0.07109 Mg/ft and a density of 2.6 for granitic type rocks and an elev. corr. factor of 0.06088 Mg/ft.

Latitude correction is: $K = 1.307 \sin 2\phi =$
mg/mile

for 33° , $K = 1.194$ mg/mile, or 0.023 ^{mg}/100 ft.
or 0.0226

In this particular case (Sacaton) use 0 Lat. corr. for most northerly station, which is 0+00, and add the appropriate corr. to every other station as they are all south of 0+00.

The field reading is taken in scale divisions - three ^{digit}s plus a decimal, as 531.8. This is multiplied by a constant (shown on each meter) to convert to gravity units or milligals, usually the latter.

2/17/64

Mexico Section

1963-1964 Annual labor compile

1962-1963 used \$9826.00 for letters

~~22
385
450
1920
1935
300
115~~

see over ↓

January 31, 1964

S T A T E M E N T

To: Minerals Exploration Company
Union Oil Center
Los Angeles 17, California

Attn: Mr. W. R. Moran, Manager

Re: Sacaton Project, Pinal County, Arizona January 1964

Services: January 27 & 28, 1964
W. E. Heinrichs, Jr. Phoenix conference:
Messers Herb. Harry, Twenstrup,
J. A. Woolsey, Jim Sullivan-----\$125.00

Expenses:

Travel-----Tucson - Phoenix - Tucson----- 26.03
Meals----- 3.00

TOTAL: \$154.03

January 31, 1964

S T A T E M E N T

To: Minerals Exploration Company
Union Oil Center
Los Angeles 17, California

Attn: Mr. W. R. Moran, Manager

Re: Sacaton Project, Pinal County, Arizona December 1963

Services: @ \$125.00/day

December 6 and 11

Mr. J. W. Marlatt review data with Mr. John
Kinnison, AS&RCO, reports & affidavits, etc.-----

(Charge half day----- \$62.50

Expenses: Pearce Contracting Co.
Preparation of drill site-----\$136.00
Reproductions----- 5.00
Communications----- 2.07

TOTAL: \$205.57

January 17, 1964

Mr. W. R. Moran
Union Oil Company of California
Union Oil Center Room 5 - 212
Los Angeles 17, California

Mexco F
Re: Sacaton Project

Dear Bill:

Enclosed for your file is a map showing all of the insufficiencies known as of July 1963 on the claim group of Woolsey, Twenstrup, Sullivan, et al. This reconnaissance was requested by Mexco and no accurate surveying method was used to determine surveying errors except to compare the claim location on the ground with the U.S.G.S. topo map; in addition, occasionally both Brunton and pace as well as a foot survey meter mounted on a vehicle.

Also enclosed is a table showing claim groups and amounts due, expended, and the totals.

The following explanation will help understand the table:

Claims located after September 1, 1962
GROUP 4: Agnes 1A GROUP 5: JNJ 6
 Agnes 2A

<u>GROUP 3:</u> JNJ 7	Flo 19	Flo 32
JNJ 8	Flo 20	Flo 33
Mary 40	Flo 21	Flo 34
Mary 41	Flo 22	Flo 35
Mary 41A	Flo 23	Flo 36
Mary 42	Flo 24	Flo 37
Mary 42A	Flo 25	Flo 38
Mary 43	Flo 26	Flo 39
Mary 43A	Flo 27	Flo 40
Mary 44	Flo 28	Flo 41
Mary 45	Flo 29	Flo 42
	Flo 30	Flo 43
	Flo 31	Flo 44

January 17, 1964

Requirements for assessment work to hold these claims first occurred during the period of September 1, 1963 to September 1, 1964. Of these claims, all but three (37 total) located in the NE portion of the area are contiguous. In the SW corner of this group (NE $\frac{1}{4}$ Sec. 23) lies JNJ #7 which corners JNJ #6. Thus the contiguity of the JNJ #6 may be questioned. Also in the SE $\frac{1}{4}$ of Sec. 21 lie Agnes 1A and Agnes 2A which are contiguous in themselves but not contiguous with the group of 37 claims mentioned above.

All of the remaining claims involved in the agreement were located prior to September 1, 1962 and required assessment work for the period Sept. 1, 1962 to Sept. 1, 1963. During this period only, these claims comprised three separate groups: GROUP 7: the 20 Winnies being one group located in Sec. 1, T 6 S, R 5 E. GROUP 2: J.R. 14 located NE $\frac{1}{4}$ Sec. 13 and GROUP 1: all the remaining 144 claims not heretofore mentioned, located in Sec. 14, 15, 21, 22, 23, 24 T 5 S, R 5 E.

Summarizing:

- GROUP 1: Claims located prior to September 1, 1962 consisting of 144 contiguous claims.
GROUP 2: JR 14, one isolated claim.
GROUP 3: 37 claims located after September 1, 1962
GROUP 4: Agnes 1A, Agnes 2A, two claims located after September 1, 1962
GROUP 5: JNJ 6, one claim located after September 1, 1962
GROUP 6: Total 185 claims of Group 1 thru 5 after September 1, 1962.
GROUP 7: Winnie 1 - 20 not contiguous with any of the other 185 claims.

If you have any questions, please let us know. We are enclosing a chart of obligations to date.

Sincerely yours,

EGH:jh
Enclosures

E. Grover Heinrichs

SACATON PROJECT - MINERALS EXPLORATION COMPANY. January 17, 1964 OBLIGATIONS: PAST, PRESENT AND FUTURE

Groups of Contiguous Claims	ASSESSMENT PERIODS				Required	Expended	Due	Required	Expended	Due	Required	Expended	Due
	1962 - 1963 Assessment Year	1963 - 1964 Assessment Year	1964 - 1965 Assessment Year	1965 - 1966 Assessment Year									
Group #1: 144	\$14,400.00	\$14,400.00	None	\$14,400.00	5,150.48	\$13,349.52	\$28,800.00	\$19,650.48	\$13,349.52				
Group #2: JR 14	100.00	100.00	"	100.00			200.00						
Group #3: 37	NONE	NONE	NONE	\$3700.00			3,700.00						
Group #4 Agnes 1A Agnes 2A	NONE	NONE	NONE	200.00	100.00	200.00	200.00	2,002.00	\$2,000.00				
Group #5 ---JNF 6	NONE	NONE	NONE	100.00									
Groups #1 thru 5- GROUP #6 185 Claims TOTAL	\$14,500.00	\$14,500.00	"	\$18,500.00	\$5150.48	\$13,349.52	\$33,000.00	\$19,650.48	\$13,349.52				
Group #7: 20 Winnies	2,000.00	2,002.00	"	2,000.00	NONE	\$2,000.00	4,000.00	2,002.00	\$2,000.00				
TOTALS OF ITEMS #6 and #7 ONLY	\$16,500.00	\$16,502.00	"	\$20,500.00	\$5,150.48	\$15,349.52	\$37,000.00	\$21,652.48	\$15,349.52				

All claims (185 total) are contiguous except 20 Winnies for 1963 - 1964 Assessment Year

Totals to Date January 1964

January 21, 1964

Mr. W. R. Moran
Union Oil Company of California
Union Oil Center Room 5 - 212
Los Angeles 17, California

Dear Bill:

Enclosed for your files is a much better map of the
Sacaton Project.

Duval Corporation has expressed strong interest in the
Courtland-Gleeson Property, although they had turned it
down cold about three years ago, are now talking about
"first refusal" though nothing formal has come from them
as yet. One of their geologists has requested that we
accompany him on a field trip to the property this week.

Sincerely yours,

E. Grover Heinrichs

EGH:jh
Enclosure: 1

January 8, 1964

Mr. W. R. Moran
Union Oil Company of California
Union Oil Center Room 5 - 212
Los Angeles 17, California

Re: Sacaton Project
Pinal County, Arizona

Dear Bill:

Expenditures by Minerals Exploration Company that are applicable toward annual assessment work are as follows:

Total Metler Bros. billings for drilling:	\$16,291.08
Total T. Pearce billings for bulldozing:	360.00
Total Georex billings for geophysics:	<u>5,001.40</u>
	\$21,652.48

For the affidavit filed for the Winnie Claim Group there was used:

Metler (D.H. #1)-----	\$1,902.00
Pearce (Dozing)-----	50.00
Georex (Geol. & Surveying)-----	50.00
	<u>\$2,002.00</u>

1962-1963

For the affidavit covering 145 claims:

Metler (Drilling)-----	\$9,826.00
Pearce (Dozing)-----	174.00
Georex (Geophysics)-----	<u>4,500.00</u>
	\$14,500.00

Balance that could be applied toward 1964 work on 185 claims (Winnie Group is not contiguous and has to be considered separately in the total of 205 claims),

Metler (Drilling)-----	\$4,563.08
Pearce (Dozing)-----	136.00
Georex (Gravity)-----	<u>451.40</u>
	\$5,150.48

Sincerely yours,

JWM: jh

J. W. Marlatt

MA-3-6541

LONG DISTANCE PHONE CALL REPORT

Request of Mr. W.

Date 1/17/63

Number Called HU 2-7600 $6.00-17.$
6.60
6.60

Time Requested _____ A.M.
P.M.

Individual Bill Moran

KIND OF SERVICE DESIRED

Station to Station Person to Person

Firm Mexco

Time Called 11:00 A.M.
P.M.

Street Address 410 Center

Time Connected 11:01 A.M.
P.M.

City L.A. State Cal.

Time Off 11:16 A.M.
P.M.

Remarks: Senator. C.G.

Minutes Elapsed Time 15:17

CHARGES: \$ 7.50

Phone Company Verification of Charge Given by _____

Switchboard Operator's Notations

Company Business
 Personal Call

Charge to Senator. C.G. A/C No. _____
4 Gen.

Signed W.

Switchboard Operator

LONG DISTANCE PHONE CALL REPORT

Request of Mr. _____

Date 1/17/64

Number Called HU 2-7600

Time Requested _____ A.M.
P.M.

Individual Bill Moran Exchange _____ Number _____

KIND OF SERVICE DESIRED

Firm _____

Station to Station Person to Person

Street Address W/O Mexico

Time Called 5:08 A.M.
P.M.

City L.A. State Cal.

Time Connected 5:08 A.M.
P.M.

Remarks: _____

Time Off 5:13 A.M.
P.M.

\$5000⁰⁰ done on 1964

Minutes Elapsed Time 5

6000⁰⁰

CHARGES: \$ 4.25

Op. on Varsity - Mexico - B.C.

Phone Company Verification of Charge Given by _____

Call A.C.G. etc.

Switchboard Operator's Notations _____

Company Business

Personal Call

Charge to Mexico A/C No. 59

Signed W.

Switchboard Operator

12-18-63

1:45 p.m.

SACATON PROJECT

Mr. Robert Costello called. He and some relatives have some land in Sacaton area and wishes to know if all the talk they have heard about a mine or mines there will make his land valuable for such.

He has 40 acres - Lot 6, Sec 31, T5S, R6E and 3 relatives each have 40 acres adjoining. He has moved to Casa Grande from Calif. Seldom home. Owns or works at Phillips Gas Station, 810 E. Florence Blvd. - Te. 836-5180.

I told him I'd pass on the information to our client (unnamed), also suggested he could contact ASARCO office in Casa Grande.

This is about two miles east of the little hill in the center of ASARCO's ground, and about one mile north of the Winnie claim group.

Jerry

Copy sent to W.R. Moran

12-18-63

1:45 p.m.

SACATON PROJECT

Mr. Robert Costello called. He and some relatives have some land in Sacaton area and wishes to know if all the talk they have heard about a mine or mines there will make his land valuable for such.

He has 40 acres - Lot 4, Sec 31, T5S. R6E and 3 relatives each have 40 acres adjoining. He has moved to Casa Grande from Calif. Seldom home. Owns or works at Phillips Gas Station, 310 E. Florence Blvd. - Te. 836-5180.

I told him I'd pass on the information to our client (unnamed), also suggested he could contact ASARCO office in Casa Grande.

*It was a 40 acre tract east
of the center of the section at
the corner of the section north of
the main stream of the*

Jewell

December 17, 1963

Mr. W. R. Moran
Manager
Minerals Exploration Company
Union Oil Center: Room 5-212
Los Angeles 17, California

Re: Sacaton Project
Pinal County, Arizona

Dear Bill:

Would like to pass on to you the gist of two phone calls from J. A. Woolsay. On December 13th he called Grover, said he had a letter from Mexco wishing to terminate the Sacaton agreement. He commented that Union must really not like the area because it would cost Union about \$8000 more in royalty to terminate. He also asked why affidavits were filed for only 165 claims instead of 205. Grover explained this to him.

On December 15th Walt had a call from him. This time he commented that \$25,000 more assessment work was required for 1964, wondered why the letter was dated December 2 but not mailed until December 11, and said he was going to get in touch with you. Walt informed him you were presently on vacation and did not make any influencing comments -- just left everything as "being up to Minerals Exploration Company".

I suppose Woolsay et al are studying the agreement and consulting their lawyers. If they are not going to give you a release for just the royalty, Walt feels you may as well put more money into the ground rather than in their pockets, and the best way to do it would be to deepen D. H. No. 2 to find out about fresh sulfide in unaltered

bedrock, or drill a new hole to such near site No. 2.

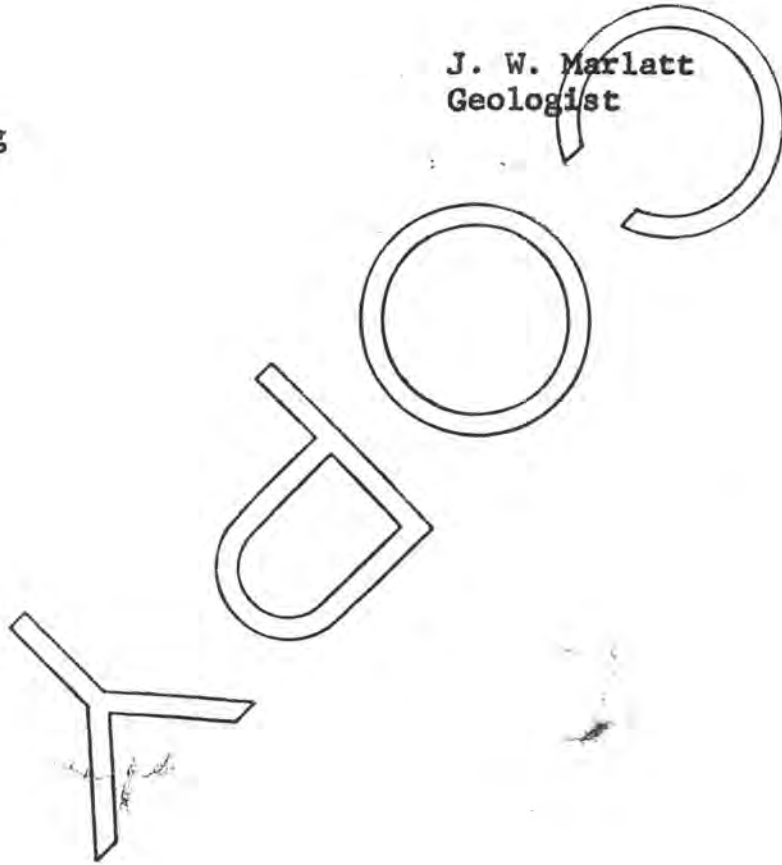
We would naturally be interested in the progress of the negotiations if you care to keep us informed.

Sincerely,

HEINRICHS GEOEXPLORATION CO.

J. W. Marlatt
Geologist

JWM:sig



December 11, 1963

Mr. W. R. Moran
Union Oil Company of California
Union Oil Center Room 5 - 212
Los Angeles 17, California

Dear Bill:

John Kinnison of ASARCO finally came by today, with apologies for having forgotten appointments a couple of times. I showed him a portion of the core, we discussed a few aspects of this and other properties and I felt him out on a few things.

My impressions are that they will complete their re-evaluation of their Sacaton property soon, they probably will hold the ground for some indefinite period, may even consider trying for patents even if only for the real estate value, their only interest in the property under lease to Mexco would be on part of the It claims and even there the interest would be in the space rather than in the mineral potential, and they likely wouldn't want to pay much in any fashion to get it. These, naturally, are impressions at a low level and may or may not be reflected in anything that transpires on higher levels between Mexco and ASARCO.

Sincerely yours,

JWM: jh

J. W. Marlatt

cc: K. J. Robertson (encl.)

LONG DISTANCE PHONE CALL REPORT

Request of Mr. Moran to J.W.M.

Date 12-10-63

Number Called HUNTLEY 2-7600 Area code 213
Exchange Number

Time Requested 10:05 A.M. P.M.

Individual MR. K. J. Robertson

KIND OF SERVICE DESIRED
 Station to Station Person to Person

Firm MEXCO - UNION OIL

Time Called 10:05 A.M. P.M.

Street Address _____

Time Connected 10:06 A.M. P.M.

City L.A. State _____

Time Off 10:09 A.M. P.M.

Remarks: To relate: Haven't been able to do anything with Kinnison. Suggest they might try having Tower contact Suddon. ^(MEXCO) They are having a meeting this P.M. - Robertson will tell Moran.

Minutes Elapsed Time 3

CHARGES: \$ 1.80 + tax

Phone Company Verification of Charge Given by _____

Company Business Personal Call
 Charge to MEXCO A/C No. _____

Switchboard Operator's Notations _____

Signed J.W.M.
 Switchboard Operator

12-5-63

Total Mettler Bros. Billing \$ 16,291.08

T. Pearce billings sites 1 & 2 112.00
site 3 112.00
site 4 136.00

336.00 360.00

Geoex for geo. work applicable toward annual labor requirements

4563.08
1902.00 Sept.
2661.08 Aug.
5.63

Aug-- Sept. 4550.00
Nov. gravity 451.40

5001.40

21,628.48

Affidavit on Winnie used

21,652.48

Mettler 1902.

Pearce 50.

Geoex 50.

\$ 2002.00

Affidavit for 145 claims used 1962-63

Geoex 4500.00

Pearce 174.00

Metler 9826.00
14,500.00

how armed at, ?

Balance that can be applied for 1963-64 on contiguous 185 claims

Geoex 451.40 (gravity survey)

Pearce 136.00 (?)

metler 4563.08

5126.48

5150.48

A, J, & Roberts (Site 4)

December 9, 1963

Mr. James A. Woolsey
P. O. Box 4054
Tucson, Arizona

Dear Bud:

Enclosed are four (4) conformed copies each of the three recorded affidavits of labor for annual assessment work done on the claims in the Sacaton Area. You were previously sent one copy of the affidavit for the Winnie Group. Mr. Sullivan called later to inquire why he had not received a copy--although we do not interpret the Lease Agreement to read that each member of the Lessor group receive a copy, enough are now furnished so that each may have one.

In accordance with paragraph 23, page 12 these are being sent to your address via registered mail.

Very truly yours,

HEINRICHS GEOEXPLORATION CO.

J. W. Marlatt

JWM: jh

cc: W. R. Moran

See
Letter to W.R. Moran
of 12/6/63
Copy of J.R. 14
affidavit not
attached here.

REGISTERED NO. 51217

Value \$ *1.00* Spec. del'y fee \$

Fee \$ *60* Ret. receipt fee \$ *10*

Surcharge \$ Rest. del'y fee \$

Postage \$ *30* Airmail



Postmaster By

From *Hansen's Co.*
P.O. Box 567

To *J A Walsley*
Box 4054

Tucson

SAVE THIS RECEIPT. Present it when making inquiry or claim.

Claim must be filed within 1 year from the date of mailing.

Consult postmaster as to fee chargeable on registered parcel post packages addressed to foreign countries.

INSTRUCTIONS TO DELIVERING EMPLOYEE

Deliver *ONLY* to addressee

Show address where delivered.

(Additional charges required for these services)

RECEIPT

Received the numbered article described on other side.

SIGNATURE OR NAME OF ADDRESSEE *(must always be filled in)*

James A. Woolsey

SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

James Woolsey

DATE DELIVERED

SHOW WHERE DELIVERED *(only if requested)*

1/1/5

Station
meets with
office

POST OFFICE DEPARTMENT
SPECIAL BUSINESS

PENALTY FOR PRIVATE USE TO AVOID
PAYMENT OF POSTAGE, \$300



DEPARTMENT OF
DELIVERING OFFICE



INSTRUCTIONS: Fill in items below and complete instructions on other side, if applicable. Moisten gummed ends, attach and hold firmly to back of article. Print on front of article RETURN RECEIPT REQUESTED.

RETURN
TO

REGISTERED NO.

151217

NAME OF SENDER

Heinrichs Greengeneration Co.

CERTIFIED NO.

STREET AND NO. OR P. O. BOX

P.O. Box 5671

INSURED NO.

CITY, ZONE AND STATE

Tucson, Ariz 85703

C55-16-71548-5-F

POD Form 3811 Apr. 1962

AFFIDAVIT OF LABOR PERFORMED AND IMPROVEMENTS MADE

STATE OF ARIZONA)
) ss
 COUNTY OF PIMA)

Walter E. Heinrichs, Jr., being duly sworn, deposes and says that he is a citizen of the United States and more than twenty-one years of age, and resides at Tucson in Pima County, Arizona, and is personally acquainted with the following mining claims situated in the Blackwater Mining District, Pinal County, Arizona, Sections 13, 14, 15, 21, 22, 23 and 24, Township 5 S, Range 5 E, the location notices of which are of record in the office of the County Recorder, Pinal County, as follows:

<u>NAME</u>	<u>RECORDING DATE</u>	<u>DOCKET</u>	<u>PAGE NO.</u>
Joy No. 1	March 30, 1962	319	586
Joy No. 2	March 30, 1962	319	587
Joy No. 3	March 30, 1962	319	588
Joy No. 4	March 30, 1962	319	589
Joy No. 5	March 30, 1962	319	590
Joy No. 6	March 30, 1962	319	591
Joy No. 7	March 30, 1962	319	592
Joy No. 8	March 30, 1962	319	593
Orbit No. 1	March 30, 1962	319	594
Orbit No. 2	March 30, 1962	319	595
Orbit No. 3	March 30, 1962	319	596
Orbit No. 4	March 30, 1962	329	593
It. No. 1	March 14, 1962	318	91
It. No. 2	March 14, 1962	318	92
It. No. 3	March 14, 1962	318	93
It. No. 4	March 14, 1962	318	94
It. No. 5	March 14, 1962	318	95
It. No. 6	March 14, 1962	318	96
It. No. 7	March 14, 1962	318	97
It. No. 8	March 14, 1962	318	98
Agnes No. 1	July 16, 1962	329	99
Agnes No. 2	July 16, 1962	329	100
Agnes No. 3	July 16, 1962	329	101
Agnes No. 4	July 16, 1962	329	102
Agnes No. 5	July 16, 1962	329	103
Agnes No. 6	July 16, 1962	329	104
Agnes No. 7	July 16, 1962	329	105
Agnes No. 8	July 16, 1962	329	106
Agnes No. 9	July 16, 1962	329	107
Agnes No. 10	July 16, 1962	329	108
Agnes No. 11	July 16, 1962	329	109
Agnes No. 12	July 16, 1962	329	110
Agnes No. 13	July 16, 1962	329	111
Agnes No. 14	July 16, 1962	329	112
Agnes No. 15	July 16, 1962	329	113

<u>NAME</u>	<u>RECORDING DATE</u>	<u>DOCKET</u>	<u>PAGE NO.</u>
Agnes No. 16	July 16, 1962	329	104
Agnes No. 17	July 16, 1962	329	105
Agnes No. 18	July 16, 1962	329	106
Agnes No. 19	July 16, 1962	329	107
Agnes No. 20	July 16, 1962	329	108
Agnes No. 21	July 16, 1962	329	109
Agnes No. 22	July 16, 1962	329	110
Agnes No. 23	July 16, 1962	329	111
Agnes No. 24	July 16, 1962	329	112
Agnes No. 25	July 16, 1962	329	113
Agnes No. 26	July 16, 1962	329	114
Agnes No. 27	July 16, 1962	329	115
Agnes No. 28	July 16, 1962	329	116
Agnes No. 29	July 16, 1962	329	117
Agnes No. 30	July 16, 1962	329	118
Agnes No. 31	July 16, 1962	329	119
Agnes No. 32	July 16, 1962	329	120
Agnes No. 33	July 16, 1962	329	121
Agnes No. 34	July 16, 1962	329	122
Agnes No. 35	July 16, 1962	329	123
Agnes No. 36	July 16, 1962	329	124
J.N.J. #1	July 16, 1962	329	83
J.N.J. #2	July 16, 1962	329	84
J.N.J. #3	July 16, 1962	329	85
J.N.J. #4	July 16, 1962	329	86
J.N.J. #5	July 16, 1962	329	87
Mary #1	July 16, 1962	329	143
Mary #2	July 16, 1962	329	144
Mary #3	July 16, 1962	329	145
Mary #4	July 16, 1962	329	146
Mary #5	July 16, 1962	329	147
Mary #6	July 16, 1962	329	148
Mary #7	July 16, 1962	329	149
Mary #8	July 16, 1962	329	150
Mary #9	July 16, 1962	329	151
Mary #10	July 16, 1962	329	152
Mary #11	July 16, 1962	329	153
Mary #12	July 16, 1962	329	154
Mary #13	July 16, 1962	329	155
Mary #14	July 16, 1962	329	156
Mary #15	July 16, 1962	329	157
Mary #16	July 16, 1962	329	158
Mary #17	July 16, 1962	329	159
Mary #18	July 16, 1962	329	160
Mary #23	July 16, 1962	329	165
Mary #24	July 16, 1962	329	166
Mary #25	July 16, 1962	329	167

NAME

RECORDING DATE

DOCKET

PAGE NO.

Mary #26	July 16, 1962	329	168
Mary #27	July 16, 1962	329	169
Mary #28	July 16, 1962	329	170
Mary #29	July 16, 1962	329	171
Mary #30	July 16, 1962	329	172
Mary #31	July 16, 1962	329	173
Mary #32	July 16, 1962	329	174
Mary #33	July 16, 1962	329	175
Mary #34	July 16, 1962	329	176
Mary #35	July 16, 1962	329	177
Mary #36	July 16, 1962	329	178
Mary #37	July 16, 1962	329	179
Mary #38	July 16, 1962	329	180
Mary #39	July 16, 1962	329	181

Flo #1	July 16, 1962	329	125
Flo #2	July 16, 1962	329	126
Flo #3	July 16, 1962	329	127
Flo #4	July 16, 1962	329	128
Flo #5	July 16, 1962	329	129
Flo #6	July 16, 1962	329	130
Flo #7	July 16, 1962	329	131
Flo #8	July 16, 1962	329	132
Flo #9	July 16, 1962	329	133
Flo #10	July 16, 1962	329	134
Flo #11	July 16, 1962	329	135
Flo #12	July 16, 1962	329	136
Flo #13	July 16, 1962	329	137
Flo #14	July 16, 1962	329	138
Flo #15	July 16, 1962	329	139
Flo #16	July 16, 1962	329	140
Flo #17	July 16, 1962	329	141
Flo #18	July 16, 1962	329	142

J. R. No. 1	April 2, 1962	320	105
J. R. No. 2	April 2, 1962	320	106
J. R. No. 3	April 2, 1962	320	107
J. R. No. 4	April 2, 1962	320	108
J. R. No. 5	April 2, 1962	320	109
J. R. No. 6	April 2, 1962	320	110
J. R. No. 7	April 2, 1962	320	111
J. R. No. 8	April 2, 1962	320	112
J. R. No. 9	April 2, 1962	320	113
J. R. No. 10	April 2, 1962	320	114
J. R. No. 11	April 2, 1962	320	115
J. R. No. 12	April 2, 1962	320	116
J. R. No. 14	April 17, 1962	321	428
J. R. No. 18	April 17, 1962	321	429
J. R. No. 19	April 17, 1962	321	430

<u>NAME</u>	<u>RECORDING DATE</u>	<u>DOCKET</u>	<u>PAGE NO.</u>
J. R. No. 20	April 17, 1962	321	431
J. R. No. 21	April 17, 1962	321	432
J. R. No. 22	May 18, 1962	324	592
J. R. No. 23	May 18, 1962	324	593
J. R. No. 24	May 18, 1962	324	594
J. R. No. 25	May 18, 1962	324	595
J. R. No. 30	May 18, 1962	324	596
Smile - You're on			
Candid Camera No. 1	May 18, 1962	324	574
Kevin			
Kevin No. 1	May 18, 1962	324	580
Kevin No. 4	May 18, 1962	324	583
Kevin No. 9	May 18, 1962	324	588
Kevin No. 10	May 18, 1962	324	589
Kevin No. 11	May 18, 1962	324	590
D. L. T. No. 84	May 18, 1962	324	591
J. R. No. 500	May 18, 1962	325	7
J. R. No. 501	May 18, 1962	325	8

That between August 15 and November 14, 1963, at least \$14,500.00 worth of work and improvements were done and performed upon said claims; not including location work. That the work was begun August 15, 1963 and prosecuted diligently, continuously and without interruption to completion on November 14, 1963. The work and improvements were made at the expense of Minerals Exploration Company, a California corporation, authorized to do business in the state of Arizona, by Metler Brothers Drilling Co., Tommy Pearce, contractor and Heinrichs Geoexploration Company for the owners of the above described mining claims: Norman Twenstrup, Florence Sullivan, James L. Sullivan, Agnes Woolsey and James A. Woolsey, et. al., for the purpose of complying with the laws of the United States and the State of Arizona pertaining to annual assessment work on unpatented mining claims.

The said work consisted of geophysical surveys, access roads, preparation of drill sites and drilling of Nx size diamond drill holes, all done for the benefit of the one hundred and forty-five (145) contiguous mining claims above described which form a solid group of claims. The drilling was done by F. C. Metler, A. Greenwood and H. Newell. Bulldozing of drill site areas and road repair to drill sites was done by T. Pearce, contractor. Geophysical surveys were made by magnetic and induced polarization techniques and equipment and were done by F. A. Seward, Jr., J. W. Marlett, C. S. Ludwig, H. K. Hansen, F. F. Hanly, R. E. Palmer, G. S. Fedrico, J. B. Fink and W. E. Heinrichs, Jr., engineers, geophysicists geologists and technicians, all employees of Heinrichs Geoexploration Company, 588 W. Grant Road, Tucson, Arizona. The cost of the geophysical surveys was \$4,500.00 and Exhibit "A" herewith appended shows location, nature and extent of these surveys. Exhibit "B" shows findings.



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



Subscribed and sworn to before me this 29 day of November, 1963.

Notary Public Expires July 26, 1965

- 4 - *W. Jean Heinrichs*
 Notary Public

EXHIBIT "A"

SHOWING LOCATION OF GEOPHYSICAL SURVEYS
for
AFFIDAVIT OF LABOR ASSESSMENT YEAR 1962-1963

T 5 S, R 5 E
Blackwater Mining District
Pinal County, Arizona

----- Induced Polarization Survey Location

..... Mobile Magnetic Survey

..... Portable Magnetic Survey

Scale 1" = 1 mile

* INDICATES POINT OF DISCOVERY

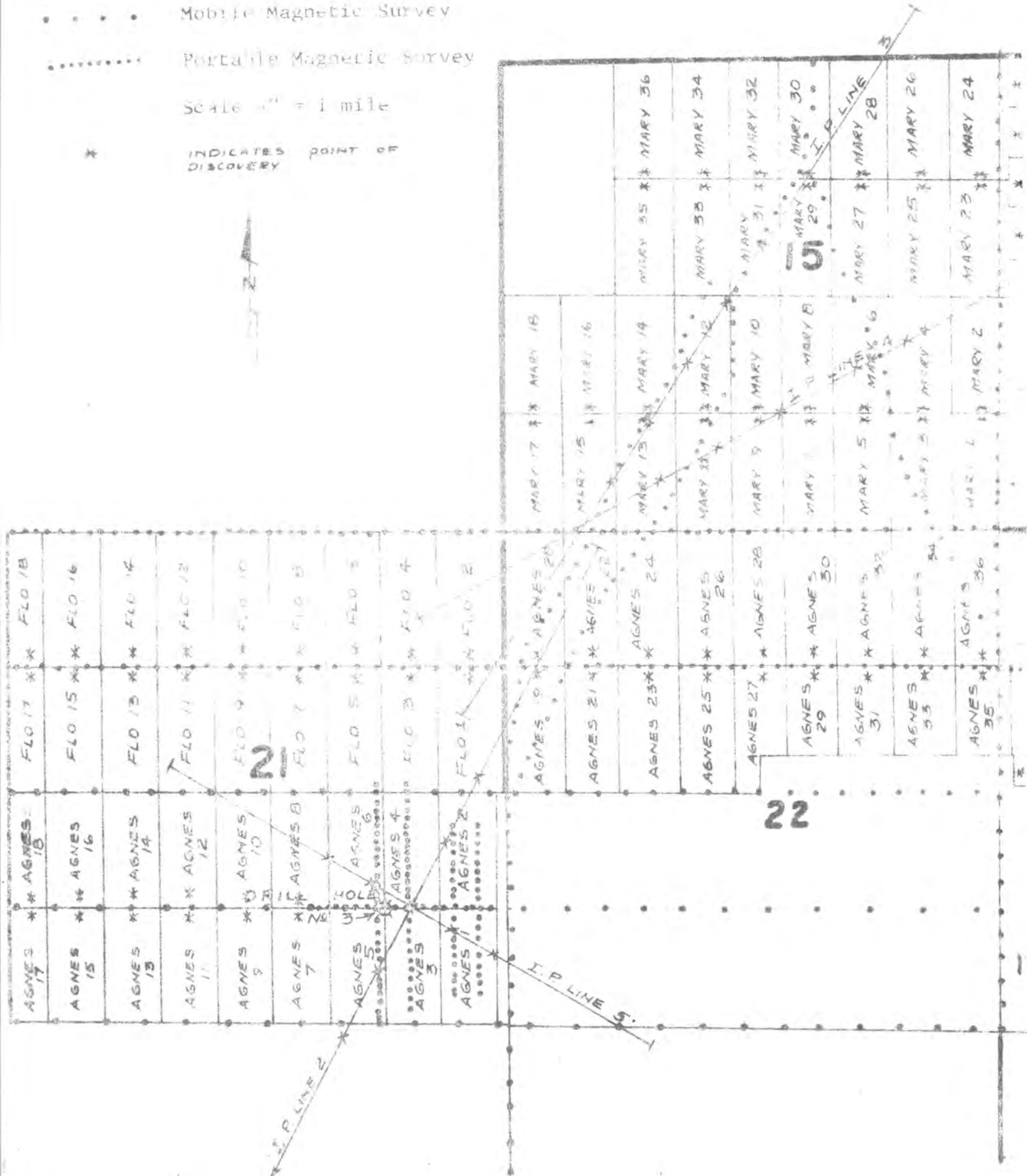


EXHIBIT "B"

Magnetic readings were taken along the profiles shown on Exhibit "A". The results showed erratic distribution of magnetite in the granitic rocks both exposed and buried. An anomalous zone about 1800 feet long by about 1500 feet wide with a relief of 900 gammas was found on the Agnes group in the southeast quarter of Section 21, T 5 S, R 5 E, with indicated equivalent magnetite strength of a rock type with approximate mafic content of diorite or similar material. This was checked by diamond drill hole No. 3.

Probable northeast-southwest faulting was found crossing the It claim group in the southwest 1/4 of section 24, T 5 S, R 5 E.

Induced polarization surveys were made on the It claim group, the Agnes claim group and the Mary claim group, as shown on Exhibit "A". No significant anomalies were found in the It claims area or the Mary claims area to a probable maximum penetration depth of about 1,000 ft. to 1,500 ft. In the vicinity of the magnetic anomaly on that portion of the Agnes claim group in the southeast portion of Section 21, T 5 S, R 5 E very weak or marginal anomaly was found which was interpreted as being caused by higher magnetite concentration with possibly small zones of low sulfide content.

STATE OF ARIZONA }
County of MARICOPA } ss.
I, the undersigned, being the within
mentioned county clerk and duly
qualified, do hereby certify that the within
instrument is a true and correct copy
of the original as the same appears
from the records of the County Clerk
of Maricopa County, Arizona.
NOV 27 1962 at 2:50 PM
1962
194
SOPHE
1962
1962

Walter E. Heinrichs, Jr.
Registered Professional Engineer



20002

AFFIDAVIT OF LABOR PERFORMED AND IMPROVEMENTS MADE

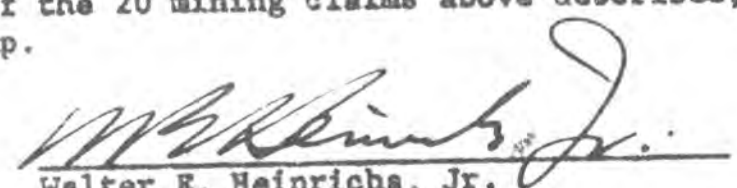
STATE OF ARIZONA)
) ss
 COUNTY OF PINA)

2364 p. 57

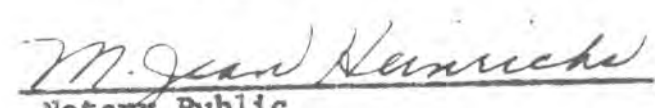
WALTER E. HEINRICHS, JR., being duly sworn, deposes and says that he is a citizen of the United States and more than twenty-one years of age, and resides at Tucson in Pima County, Arizona, and is personally acquainted with the following mining claims situated in the Blackwater Mining District, Pinal County, Arizona, Section 1, T 6 S, R 5 E, the location notices of which are of record in the office of the County Recorder, Pinal County as follows:

NAME	RECORDING DATE	DOCKET	PAGE
Winnie No. 1	July 16, 1962	329	67
Winnie No. 2	July 16, 1962	329	68
Winnie No. 3	July 16, 1962	329	69
Winnie No. 4	July 16, 1962	329	70
Winnie No. 5	July 16, 1962	329	71
Winnie No. 6	July 16, 1962	329	72
Winnie No. 7	July 16, 1962	329	73
Winnie No. 8	July 16, 1962	329	74
Winnie No. 9	July 16, 1962	329	75
Winnie No. 10	July 16, 1962	329	76
Winnie No. 11	July 16, 1962	329	77
Winnie No. 12	April 4, 1962	320	293
Winnie No. 13	July 16, 1962	329	78
Winnie No. 14	April 4, 1962	320	295
Winnie No. 15	July 16, 1962	329	79
Winnie No. 16	April 4, 1962	320	297
Winnie No. 17	April 4, 1962	320	298
Winnie No. 18	July 16, 1962	329	80
Winnie No. 19	July 16, 1962	329	81
Winnie No. 20	July 16, 1962	329	82

That between August 20 and September 6, 1963, at least \$2,000 worth of work and improvements were done and performed upon said claims, not including location work. The work and improvements were made by Metler Brothers Drilling Co., Tommy Pearce, contractor and Heinrichs Geoexploration Company at the expense of Minerals Exploration Company, a California corporation for the owners of the above described mining claims, Norman Twenstrup, Florence Sullivan, James L. Sullivan, Agnes Woolsey and James A. Woolsey, for the purpose of complying with the laws of the United States pertaining to annual assessment work, and Frank C. Metler, Augie Greenwood, Hugh Hewell, Tommy Pearce, E. Grover Heinrichs and J. W. Marlatt performed said work which consisted of site preparation and drilling of an Nx size diamond drill hole at the common corner of Winnie #13, #14, #15 and #16, done for the benefit of the 20 mining claims above described, as a single contiguous group.


 Walter E. Heinrichs, Jr.

Subscribed and sworn to before me this 8th day of October 1963.


 Notary Public

My commission expires: July 21, 1965.

December 6, 1963

Mr. W. R. Moran
Union Oil Company of California
Union Oil Center Room 5 - 212
Los Angeles 17, California

Re: Sacaton Project
Pinal County, Arizona

Dear Bill:

Enclosed are several items for your files:

1. The recorded affidavits covering 145 claims for the assessment year 1962-63.
2. Copy of a letter to Mr. Robertson
3. A brief resume of the project.
4. A log sheet for D. D. H. #4.

Copies of the assessment affidavit are being sent to Mr. Robertson, and copies will be sent to the Lessors.

In response to your phone call this morning I called John Kinnison at ASARCO - he wasn't in and I left a message for him to contact me. After I talk to him I will call Mr. Robertson next week.

Hope you can enjoy your vacation without too many business interruptions.

Sincerely,

JWM: jh

J. W. Marlatt

Enclosures

INDEXED COMPARED
 SOPHIE SMITH, County Recorder,
Barney Citey, Deputy.

AFFIDAVIT OF LABOR PERFORMED AND EXPENSES MADE DOCKET 321 PAGE 503

STATE OF ARIZONA)
) ss
 COUNTY OF PIMA)

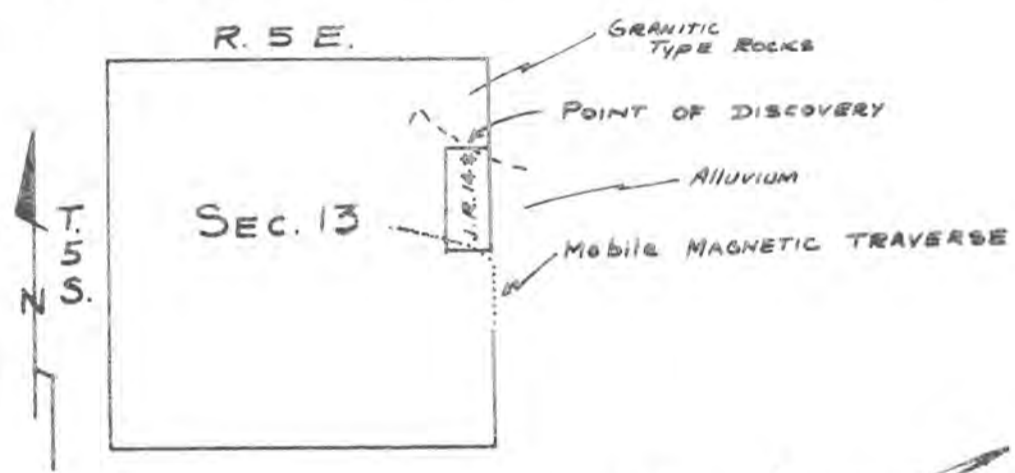


WALTER E. HEINRICHS, JR., being duly sworn, deposes and says that he is a citizen of the United States and more than twenty-one years of age, and resides at Tucson, Pinal County, Arizona, and is personally acquainted with the following mining claims situated in the Blackwater Mining District, Pinal County, Arizona, Section 13, T 5 S, R 5 E, the location notices of which are of record in the office of the County Recorder, Pinal County as follows:

NAME	RECORDING DATE	DOCKET	PAGE
J. R. 14	April 17, 1962	321	428

That between August 15 and November 14, 1963 at least \$100.00 worth of geophysical and geological work was done and performed upon said claim; not including location work. The work was done at the expense of Minerals Exploration Company, a California corporation, authorized to do business in the State of Arizona. J. W. Marlatt, E. G. Heinrichs and R. E. Palmer, employees of Heinrichs Geoexploration Company, actually conducted the geophysical and geological surveys for the owners of the above described mining claim; Norman Twenstrup, Florence Sullivan, James L. Sullivan, Agnes Woolsey and James A. Woolsey et. al., for the purpose of complying with the laws of the United States and the State of Arizona pertaining to annual assessment work on unpatented mining claims.

The basic findings of magnetic geophysical work revealed varying distribution of magnetite in both the exposed and non exposed granitic rocks on or near the claim of approximately 125 gammas relief and geological reconnaissance of the claim and vicinity generally conform to this indication.



Walter E. Heinrichs, Jr.
 Walter E. Heinrichs, Jr.
 Registered Professional Engineer (Mining)
 WALTER E. HEINRICHS, JR.
 DEC 31 1963
 ARIZONA, U. S. A.



Subscribed and sworn to before me this 29th day of November 1963

M. Jean Heinrichs
 Notary Public

AFFIDAVIT OF LABOR PERFORMED AND IMPROVEMENTS MADE

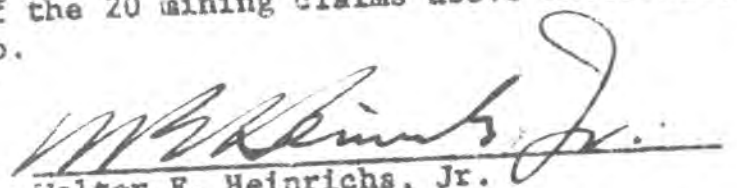
D 364 p 254

STATE OF ARIZONA)
) ss
 COUNTY OF PIMA)


WALTER E. HEINRICHS, JR., being duly sworn, deposes and says that he is a citizen of the United States and more than twenty-one years of age, and resides at Tucson in Pima County, Arizona, and is personally acquainted with the following mining claims situated in the Blackwater Mining District, Pinal County, Arizona, Section 1, T 6 S, R 3 E, the location notices of which are of record in the office of the County Recorder, Pinal County as follows:

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Winnie No. 5	July 16, 1962	329	71
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Winnie No. 7	July 16, 1962	329	73
Winnie No. 8	July 16, 1962	329	74
Winnie No. 9	July 16, 1962	329	75
Winnie No. 10	July 16, 1962	329	76
Winnie No. 11	July 16, 1962	329	77
Winnie No. 12	April 4, 1962	320	793
Winnie No. 13	July 16, 1962	329	78
Winnie No. 14	April 4, 1962	320	295
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Winnie No. 16	April 4, 1962	320	297
Winnie No. 17	April 4, 1962	320	296
Winnie No. 18	July 16, 1962	329	80
Winnie No. 19	July 16, 1962	329	81
Winnie No. 20	July 16, 1962	329	82

That between August 20 and September 6, 1963, at least \$2,000 worth of work and improvements were done and performed upon said claims, not including location work. The work and improvements were made by Metler Brothers Drilling Co., Tommy Pearce, contractor and Heinrichs Geoporation Company at the expense of Minerals Exploration Company, a California corporation for the owners of the above described mining claims, Norman Twenstrup, Florence Sullivan, James L. Sullivan, Agnes Woolsey and James A. Woolsey, for the purpose of complying with the laws of the United States pertaining to annual assessment work, and Frank C. Metler, Augie Greenwood, Hugh Hewell, Tommy Pearce, E. Grover Heinrichs and J. W. Marlatt performed said work which consisted of site preparation and drilling of an Nx size diamond drill hole at the common corner of Winnie #13, #14, #15 and #16, done for the benefit of the 20 mining claims above described, as a single contiguous group.


 Walter E. Heinrichs, Jr.

Subscribed and sworn to before me this 8th day of October 1963.


 M. Jean Heinrichs
 Notary Public

My commission expires: July 21, 1965

SECRET COPY FILE NO. 367-7494
AFFIDAVIT OF LABOR PERFORMED AND IMPROVEMENTS MADE

STATE OF ARIZONA)
) ss
 COUNTY OF PIMA)

D 367-7494

Walter E. Heinrichs, Jr., being duly sworn, deposes and says that he is a citizen of the United States and more than twenty-one years of age, and resides at Tucson in Pima County, Arizona, and is personally acquainted with the following mining claims situated in the Blackwater Mining District, Pinal County, Arizona, Sections 13, 14, 15, 21, 22, 23 and 24, Township 5 S, Range 5 E, the location notices of which are of record in the office of the County Recorder, Pinal County, as follows:

<u>NAME</u>	<u>RECORDING DATE</u>	<u>DOCKET</u>	<u>PAGE NO.</u>
Joy No. 1	March 30, 1962	319	586
Joy No. 2	March 30, 1962	319	587
Joy No. 3	March 30, 1962	319	588
Joy No. 4	March 30, 1962	319	589
Joy No. 5	March 30, 1962	319	590
Joy No. 6	March 30, 1962	319	591
Joy No. 7	March 30, 1962	319	592
Joy No. 8	March 30, 1962	319	593
Orbit No. 1	March 30, 1962	319	594
Orbit No. 2	March 30, 1962	319	595
Orbit No. 3	March 30, 1962	319	596
Orbit No. 4	July 16, 1962	329	88
It. No. 1	March 14, 1962	318	407
It No. 2	March 14, 1962	318	408
It No. 3	March 14, 1962	318	409
It No. 4	March 14, 1962	318	410
It No. 5	March 14, 1962	318	411
It No. 6	March 14, 1962	318	412
It No. 7	March 14, 1962	318	413
It No. 8	March 14, 1962	318	414
Agnes No. 1	July 16, 1962	329	89
Agnes No. 2	July 16, 1962	329	90
Agnes No. 3	July 16, 1962	329	91
Agnes No. 4	July 16, 1962	329	92
Agnes No. 5	July 16, 1962	329	93
Agnes No. 6	July 16, 1962	329	94
Agnes No. 7	July 16, 1962	329	95
Agnes No. 8	July 16, 1962	329	96
Agnes No. 9	July 16, 1962	329	97
Agnes No. 10	July 16, 1962	329	98
Agnes No. 11	July 16, 1962	329	99
Agnes No. 12	July 16, 1962	329	100
Agnes No. 13	July 16, 1962	329	101
Agnes No. 14	July 16, 1962	329	102
Agnes No. 15	July 16, 1962	329	103

<u>NAME</u>	<u>RECORDING DATE</u>	<u>DOCKET</u>	<u>PAGE NO.</u>
Agnes No. 16	July 16, 1962	329	104
Agnes No. 17	July 16, 1962	329	105
Agnes No. 18	July 16, 1962	329	106
Agnes No. 19	July 16, 1962	329	107
Agnes No. 20	July 16, 1962	329	108
Agnes No. 21	July 16, 1962	329	109
Agnes No. 22	July 16, 1962	329	110
Agnes No. 23	July 16, 1962	329	111
Agnes No. 24	July 16, 1962	329	112
Agnes No. 25	July 16, 1962	329	113
Agnes No. 26	July 16, 1962	329	114
Agnes No. 27	July 16, 1962	329	115
Agnes No. 28	July 16, 1962	329	116
Agnes No. 29	July 16, 1962	329	117
Agnes No. 30	July 16, 1962	329	118
Agnes No. 31	July 16, 1962	329	119
Agnes No. 32	July 16, 1962	329	120
Agnes No. 33	July 16, 1962	329	121
Agnes No. 34	July 16, 1962	329	122
Agnes No. 35	July 16, 1962	329	123
Agnes No. 36	July 16, 1962	329	124
J.N.J. #1	July 16, 1962	329	83
J.N.J. #2	July 16, 1962	329	84
J.N.J. #3	July 16, 1962	329	85
J.N.J. #4	July 16, 1962	329	86
J.N.J. #5	July 16, 1962	329	87
Mary #1	July 16, 1962	329	143
Mary #2	July 16, 1962	329	144
Mary #3	July 16, 1962	329	145
Mary #4	July 16, 1962	329	146
Mary #5	July 16, 1962	329	147
Mary #6	July 16, 1962	329	148
Mary #7	July 16, 1962	329	149
Mary #8	July 16, 1962	329	150
Mary #9	July 16, 1962	329	151
Mary #10	July 16, 1962	329	152
Mary #11	July 16, 1962	329	153
Mary #12	July 16, 1962	329	154
Mary #13	July 16, 1962	329	155
Mary #14	July 16, 1962	329	156
Mary #15	July 16, 1962	329	157
Mary #16	July 16, 1962	329	158
Mary #17	July 16, 1962	329	159
Mary #18	July 16, 1962	329	160
Mary #23	July 16, 1962	329	165
Mary #24	July 16, 1962	329	166
Mary #25	July 16, 1962	329	167

<u>NAME</u>	<u>RECORDING DATE</u>	<u>DOCKET</u>	<u>PAGE NO.</u>
Mary #26	July 16, 1962	329	168
Mary #27	July 16, 1962	329	169
Mary #28	July 16, 1962	329	170
Mary #29	July 16, 1962	329	171
Mary #30	July 16, 1962	329	172
Mary #31	July 16, 1962	329	173
Mary #32	July 16, 1962	329	174
Mary #33	July 16, 1962	329	175
Mary #34	July 16, 1962	329	176
Mary #35	July 16, 1962	329	177
Mary #36	July 16, 1962	329	178
Mary #37	July 16, 1962	329	179
Mary #38	July 16, 1962	329	180
Mary #39	July 16, 1962	329	181
Flo #1	July 16, 1962	329	125
Flo #2	July 16, 1962	329	126
Flo #3	July 16, 1962	329	127
Flo #4	July 16, 1962	329	128
Flo #5	July 16, 1962	329	129
Flo #6	July 16, 1962	329	130
Flo #7	July 16, 1962	329	131
Flo #8	July 16, 1962	329	132
Flo #9	July 16, 1962	329	133
Flo #10	July 16, 1962	329	134
Flo #11	July 16, 1962	329	135
Flo #12	July 16, 1962	329	136
Flo #13	July 16, 1962	329	137
Flo #14	July 16, 1962	329	138
Flo #15	July 16, 1962	329	139
Flo #16	July 16, 1962	329	140
Flo #17	July 16, 1962	329	141
Flo #18	July 16, 1962	329	142
J. R. No. 1	April 2, 1962	320	105
J. R. No. 2	April 2, 1962	320	106
J. R. No. 3	April 2, 1962	320	107
J. R. No. 4	April 2, 1962	320	108
J. R. No. 5	April 2, 1962	320	109
J. R. No. 6	April 2, 1962	320	110
J. R. No. 7	April 2, 1962	320	111
J. R. No. 8	April 2, 1962	320	112
J. R. No. 9	April 2, 1962	320	113
J. R. No. 10	April 2, 1962	320	114
J. R. No. 11	April 2, 1962	320	115
J. R. No. 12	April 2, 1962	320	116
J. R. No. 14	April 17, 1962	321	428
J. R. No. 18	April 17, 1962	321	429
J. R. No. 19	April 17, 1962	321	430

<u>NAME</u>	<u>RECORDING DATE</u>	<u>DOCKET</u>	<u>PAGE NO.</u>
J. R. No. 20	April 17, 1962	321	431
J. R. No. 21	April 17, 1962	321	432
J. R. No. 22	May 18, 1962	324	592
J. R. No. 23	May 18, 1962	324	593
J. R. No. 24	May 18, 1962	324	594
J. R. No. 25	May 18, 1962	324	595
J. R. No. 30	May 18, 1962	324	596
Smile - You're on Candid Camera No. 1	May 18, 1962	324	574
Kevin No. 1	May 18, 1962	324	580
Kevin No. 4	May 18, 1962	324	583
Kevin No. 9	May 18, 1962	324	588
Kevin No. 10	May 18, 1962	324	589
Kevin No. 11	May 18, 1962	324	590
D. L. T. No. 84	May 18, 1962	324	591
J. R. No. 500	May 18, 1962	325	7
J. R. No. 501	May 18, 1962	325	8

That between August 15 and November 14, 1963, at least \$14,500.00 worth of work and improvements were done and performed upon said claims, not including location work. That the work was begun August 15, 1963 and prosecuted diligently, continuously and without interruption to completion on November 14, 1963. The work and improvements were made at the expense of Minerals Exploration Company, a California corporation, authorized to do business in the state of Arizona, by Metler Brothers Drilling Co., Tommy Pearce, contractor and Heinrichs Geoexploration Company for the owners of the above described mining claims: Norman Twenstrup, Florence Sullivan, James L. Sullivan, Agnes Woolsey and James A. Woolsey, et. al., for the purpose of complying with the laws of the United States and the State of Arizona pertaining to annual assessment work on unpatented mining claims.

The said work consisted of geophysical surveys, access roads, preparation of drill sites and drilling of Nx size diamond drill holes, all done for the benefit of the one hundred and forty-five (145) contiguous mining claims above described which form a solid group of claims. The drilling was done by F. C. Metler, A. Greenwood and M. Hewell. Bulldozing of drill site areas and road repair to drill sites was done by T. Pearce, contractor. Geophysical surveys were made by magnetic and induced polarization techniques and equipment and were done by F. A. Seward, Jr., J. W. Marlatt, C. S. Ludwig, H. K. Hensen, F. F. Nanly, R. E. Palmer, G. S. Fedrico, J. B. Fink and W. E. Heinrichs, Jr., engineers, geophysicists geologists and technicians, all employees of Heinrichs Geoexploration Company, 808 W. Grant Road, Tucson, Arizona. The cost of the geophysical surveys was \$4,500.00 and Exhibit "A" herewith appended shows the location, nature and extent of these surveys. Exhibit "B" shows findings.

Subscribed and sworn to before me this 29th day of November, 1963.

Walter E. Heinrichs, Jr.

My Commission Expires July 20, 1965

- 4 -

Notary Public



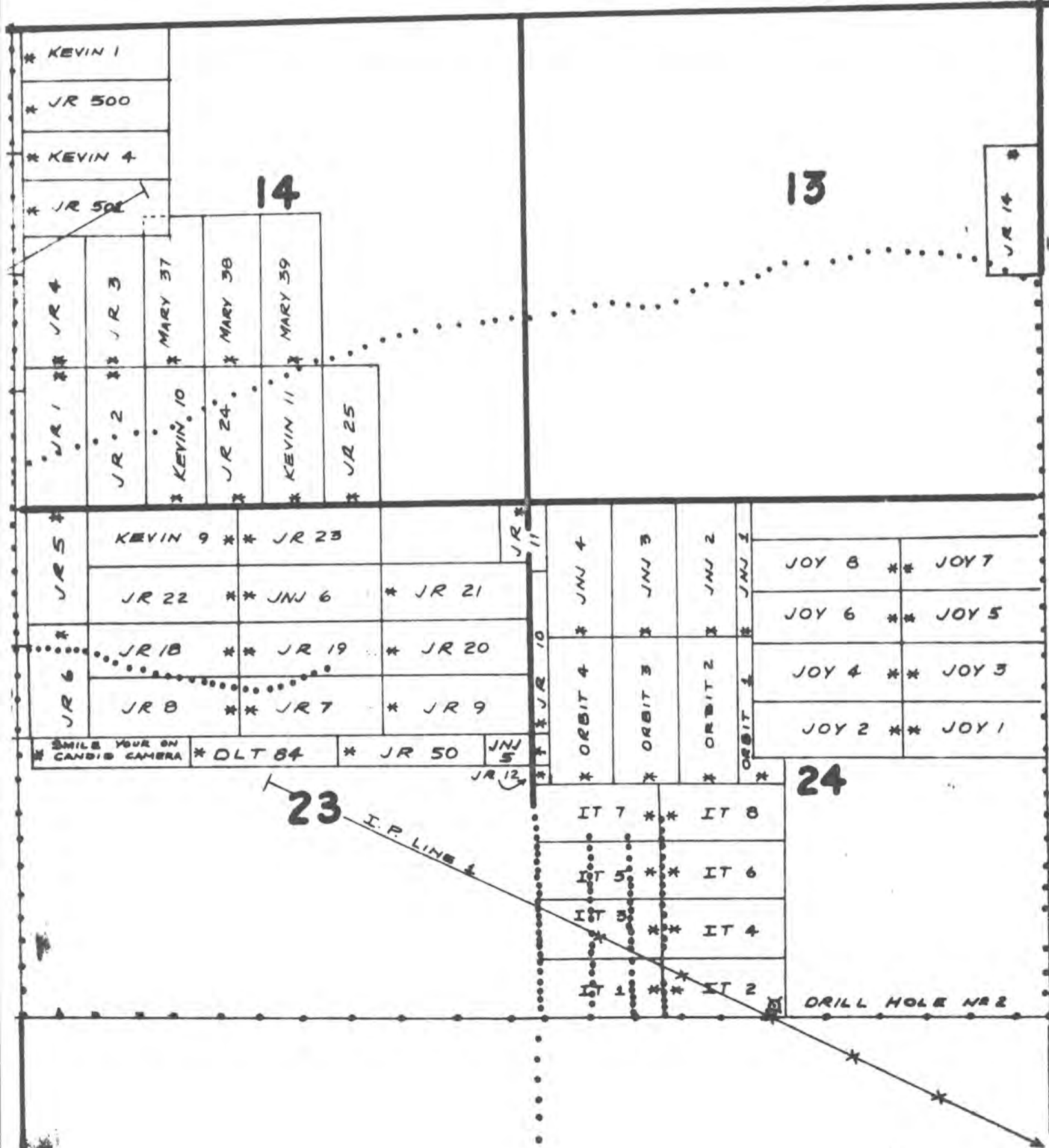


EXHIBIT "B"

Magnetic readings were taken along the profiles shown on Exhibit "A". The results showed erratic distribution of magnetite in the granitic rocks both exposed and buried. An anomalous zone about 1800 feet long by about 1500 feet wide with a relief of 900 gammas was found on the Agnes group in the southeast quarter of Section 21, T 5 S, R 5 E, with indicated equivalent magnetite strength of a rock type with approximate mafic content of diorite or similar material. This was checked by diamond drill hole No. 3.

Probable northeast-southwest faulting was found crossing the It claim group in the southwest 1/4 of section 24, T 5 S, R 5 E.

Induced polarization surveys were made on the It claim group, the Agnes claim group and the Mary claim group, as shown on Exhibit "A". No significant anomolism was found in the It claims area or the Mary claims area to a probable maximum penetration depth of about 1,000 ft. to 1,500 ft. In the vicinity of the magnetic anomaly on that portion of the Agnes claim group in the southeast portion of Section 21, T 5 S, R 5 E very weak or marginal anomolism was found which was interpreted as being caused by higher magnetite concentration with possibly small zones of low sulfide content.

STATE OF ARIZONA }
County of Pinal } ss.

I hereby cert. that the within instrument was filed and recorded

at request of *Hennrichs & Exploration Co.*
NOV 29 1963 2:50 P.M.

In Docket **DOCKET 337 PAGE 494**

on page

with the original seal

the date of recording

SOPHIE T. DIVIN,

County Recorder

By *Blissard Aguilar*
Deputy Recorder

Walter I. ...
Registered Professional Engineer



INDEXED COMPARTED



SACATON PROJECT - PINAL COUNTY, ARIZONA

Minerals Exploration Company through its then manager, Mr. W. Layton Stanton, negotiated a lease on certain unpatented mining claims with Mr. James A. Woolsey, et. al. A total of 205 claims were involved and are located on and near the Sacaton Mountains north of Casa Grande, Arizona. The lease was signed May 10, 1963.

Heinrichs Geoexploration Company of Tucson, Arizona was retained by Minerals Exploration Company to act as their agent in the following capacities:

1. Inspect the claims on the ground and report as to their existence and validity.
2. Do a limited amount of geophysical and geological work on the property.
3. Arrange for and supervise some exploratory drilling.
4. Be the agent to handle certain other matters that might arise on the local level.

The claims were inspected and a map prepared showing them, along with such discrepancies and deviations from proper claim locations as were found. This was submitted to Minerals Exploration Company on July 26, 1963. During this period a few, scattered, minor shows of mineralization were noted.

In August and September a reconnaissance geophysical evaluation was accomplished by magnetic and induced polarization techniques. The mobile magnetometer made magnetic profiles over representative portions of the area. Subsequently a couple of small locally anomalous areas were detailed by a portable magnetometer. Maps showing location of the work along with profiles were submitted. The induced polarization work consisted of five lines run over what were considered to be the areas most likely to have any potential mineralization. These locations and resultant data were also plotted and submitted in map and data form. Basic conclusions from both types of work and geologic observations was that neither method disclosed anything that could be definitely related to economic mineralization or any great amount of sulfides. In November two short gravity profiles were read on the It claim group to check on probable NE-SW faulting crossing the group, suggested by magnetic

work and the pattern of ASARCO drilling. The gravity data confirmed this to the extent of showing a structural change about where predicted.

Concurrently with the geophysical work, bids were taken for an estimated minimum of 3,000 feet of drilling. Metler Bros. of Tucson were awarded the drilling on the basis of the bids received.

Drill Hole No. 1 was located on the Winnie group and the hole stopped when sufficient money had been spent to comply with annual assessment requirements. The total depth was 364 feet and to that depth penetrated only a rock type made up mainly of loosely cemented angular fragments of granitic material designated as a breccia, probably a sedimentary breccia.

Drill Hole No. 2 was located on the It Claim No. 2 close to a former American Smelting and Refining Company drill hole across the property boundary to test the mineralization they reportedly obtained in it. This hole bottomed at 1,455 feet and was mainly in a shattered and faulted breccia with probably some altered monzonite at the bottom. Some zones contained green oxide or "exotic" copper minerals, mostly chrysocolla. The longest such interval was at 1,034' to 1,066' and averaged 1.34% copper by assay. Under existing conditions this is no where near economic even if in blanket form. However, it was considered possible, if not likely, that the penetration was through a narrow, steeply dipping shear zone which would make it even more unattractive. No sulfides were encountered in the hole.

Drill Hole No. 3 was located at the common corner of Agnes 3, 4, 5, 6 claims to be sure no mineral of interest existed in relationship to a magnetic anomaly located there. Barren granodiorite was encountered, and the hole was stopped at a depth of 344 feet.

Drill Hole No. 4 was located at the common corner of It 1, 2, 3, 4. Fresh barren granite was found at shallow depth and the hole was stopped at 675 feet.

It was concluded that even if the mineral found in Hole No. 2 was indicative of more and better such nearby, the property limits allowed for only a small portion of the leased ground to be over it. Operations and activity ceased for an indefinite period on November 29, 1963.

Affidavits of annual assessment work performed were prepared and filed. Drilling totalled 2,838 feet at a cost of \$16,291.08 for an average cost of \$5.74 per foot. Heinrichs Geoexploration Company billings for all work, services, expenses and costs totalled \$8,856.01. One bill for bulldozer site preparation and road work has not yet been received but presumably may be in the amount of \$112.00 as the previous ones were.

Drill core is presently stored at 812 West Grant Road, Tucson, Arizona. This, along with maps, data and any information GEOEX has will be furnished to Lessors when Minerals Exploration Company directs GEOEX to do so.

Respectfully submitted,

HEINRICHS GEOEXPLORATION COMPANY

J. W. Marlatt
Geologist

SACATON PROJECT - PINAL COUNTY, ARIZONA

Minerals Exploration Company through its then manager, Mr. W. Layton Stanton, negotiated a lease on certain unpatented mining claims with Mr. James A. Woolsey, et. al. A total of 205 claims were involved and are located on and near the Sacaton Mountains north of Casa Grande, Arizona. The lease was signed May 10, 1963.

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3. Arrange for and supervise some exploratory drilling.
4. Be the agent to handle certain other matters that might arise on the local level.

The claims were inspected and a map prepared showing them, along with such discrepancies and deviations from proper claim locations as were found. This was submitted to Minerals Exploration Company on July 26, 1963. During this period a few, scattered, minor shows of mineralization were noted.

In August and September a reconnaissance geophysical evaluation was accomplished by magnetic and induced polarization techniques. The mobile magnetometer made magnetic profiles over representative portions of the area. Subsequently a couple of small locally anomalous areas were detailed by a portable magnetometer. Maps showing location of the work along with profiles were submitted. The induced polarization work consisted of five lines run over what were considered to be the areas most likely to have any potential mineralization. These locations and resultant data were also plotted and submitted in map and data form. Basic conclusions from both types of work and geologic observations was that neither method disclosed anything that could be definitely related to economic mineralization or any great amount of sulfides. In November two short gravity profiles were read on the It claim group to check on probable NE-SW faulting crossing the group, suggested by magnetic

work and the pattern of ASARCO drilling. The gravity data confirmed this to the extent of showing a structural change about where predicted.

Concurrently with the geophysical work, bids were taken for an estimated minimum of 3,000 feet of drilling. Metler Bros. of Tucson were awarded the drilling on the basis of the bids received.

Drill Hole No. 1 was located on the Winnie group and the hole stopped when sufficient money had been spent to comply with annual assessment requirements. The total depth was 364 feet and to that depth penetrated only a rock type made up mainly of loosely cemented angular fragments of granitic material designated as a breccia, probably a sedimentary breccia.

Drill Hole No. 2 was located on the It Claim No. 2 close to a former American Smelting and Refining Company drill hole across the property boundary to test the mineralization they reportedly obtained in it. This hole bottomed at 1,455 feet and was mainly in a shattered and faulted breccia with probably some altered monzonite at the bottom. Some zones contained green oxide or "exotic" copper minerals, mostly chrysocolla. The longest such interval was at 1,034' to 1,066' and averaged 1.34% copper by assay. Under existing conditions this is no where near economic even if in blanket form. However, it was considered possible, if not likely, that the penetration was through a narrow, steeply dipping shear zone which would make it even more unattractive. No sulfides were encountered in the hole.

Drill Hole No. 3 was located at the common corner of Agnes 3, 4, 5, 6 claims to be sure no mineral of interest existed in relationship to a magnetic anomaly located there. Barren granodiorite was encountered, and the hole was stopped at a depth of 344 feet.

Drill Hole No. 4 was located at the common corner of It 1, 2, 3, 4. Fresh barren granite was found at shallow depth and the hole was stopped at 675 feet.

It was concluded that even if the mineral found in Hole No. 2 was indicative of more and better such nearby, the property limits allowed for only a small portion of the leased ground to be over it. Operations and activity ceased for an indefinite period on November 29, 1963.

Affidavits of annual assessment work performed were prepared and filed. Drilling totalled 2,838 feet at a cost of \$16,291.08 for an average cost of \$5.74 per foot. Heinrichs Geoexploration Company billings for all work, services, expenses and costs totalled \$8,856.01. One bill for bulldozer site preparation and road work has not yet been received but presumably may be in the amount of \$112.00 as the previous ones were.

Drill core is presently stored at 812 West Grant Road, Tucson, Arizona. This, along with maps, data and any information GEOEX has will be furnished to Lessors when Minerals Exploration Company directs GEOEX to do so.

Respectfully submitted,

HEINRICHS GEOEXPLORATION COMPANY

J. W. Marlatt
Geologist

SACATON PROJECT - PINAL COUNTY, ARIZONA

Minerals Exploration Company through its then manager, Mr. W. Layton Stanton, negotiated a lease on certain unpatented mining claims with Mr. James A. Woolsey, et. al. A total of 205 claims were involved and are located on and near the Sacaton Mountains north of Casa Grande, Arizona. The lease was signed May 10, 1963.

Heinrichs Geoexploration Company of Tucson, Arizona was retained by Minerals Exploration Company to act as their agent in the following capacities:

1. Inspect the claims on the ground and report as to their existence and validity.
2. Do a limited amount of geophysical and geological work on the property.
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Respectfully submitted,

HEINRICHS GEOEXPLORATION COMPANY

J. W. Mariatt
Geologist

C O R P

December 6, 1963

Mr. K. J. Robertson
Land Department
Union Oil Company of California
Union Oil Center
Los Angeles 17, California

Dear Mr. Robertson:

Thank you for the copy of the ~~final~~ recorded Lease Agreement between Minerals Exploration Company and James A. Woolsey, et.al. on the Sacaten area mining claims which you sent this week.

We note on this copy that Exhibit "A" page 4, shows that J. R. No. 12 and J. R. No. 14 do not require assessment work for the year 1962-63 but not having known this previously, they have already been included in the affidavits filed last week.

Sincerely yours,

J. W. Marlatt

JWM: jh

cc: Mr. W. R. Moran

Copies of the recorded affidavits also enclosed.

December 3, 1963

Mr. W. R. Moran
Union Oil Company of California
Union Oil Center Room 5 - 212
Los Angeles 17, California

Re: Sacaton Project
Pinal County, Arizona

Dear Bill:

Drill hole #4 was stopped November 29, 1963. The
drill and all drill equipment will be moved off the property
this week. Total depth of the hole was 675 ft. Total foot-
age for the four drill holes was 2838 feet.

Affidavits of labor were prepared and rushed to the
county recorder at Florence, Arizona. When they are returned
they will be forwarded to you with copies sent to the
Lessors.

Sincerely,

J. W. Marlatt

JWM: jh

SPEED LETTER®

TO County Recorder FROM Heinrichs Geoexploration Co.
Pinal County Courthouse P. O. Box 5671
Florence, Arizona Tucson, Arizona 85703

SUBJECT Record & Return

— FOLD MESSAGE DATE November 29 19 63

Enclosed find an Affidavit of Labor and our check in the amount of \$1.75. Please record and return to the above address.

Sacaton Pray

SIGNED M. Jean Heinrichs

REPLY DATE _____ 19 _____

— FOLD

SIGNED _____

November 22, 1963

Mr. W. R. Moran
Union Oil Company of California
Union Oil Center Room 5 - 212
Los Angeles 17, California

Re: Sacaton Project
Pinal County, Arizona
GRAVITY REPORT

Dear Mr. Moran:

On November 13, 1963 stations were established along two profile lines for a test gravity survey and level surveying started for elevation control. Leveling was completed and the stations occupied and readings taken on a gravimeter on November 14. Each profile line is 4200 ft. long, and they are north-south. Line "A" crosses the center of Sec. 24, T 5 S, R 5 E and goes 1200 ft. south of the south $\frac{1}{2}$ corner and 3000 ft. north of the south $\frac{1}{2}$ corner. The most northerly 300 feet are on outcropping granite. This line is along the east boundary of the It claim group. Line "B" is 1320 ft. west of Line "A", also goes 1200 ft. south, 3000 ft. north of the south section line of Sec. 24 and goes along the end lines of the center of the It claim group. It also is on outcrop for the most northerly 500 ft.

The purpose was to see if gravity measurements would confirm the probable existance of a NE-SW trending buried structural feature, and if so to help to localize it. Clearly such scanty reconnaissance coverage would not provide detail information, but it was felt that it would be helpful.

Elevation control was held to +/- .02 ft. A Worden gravity meter was used for obtaining the readings. Data computations involved latitude, free air and Bouguer corrections, with reduction to sea level elevation. Terrain corrections were not made. Computations and plots of the results were made several times using different density factors for the earth material, and at different elevations to see the effects of regional gradient. The final plot, submitted with this letter, is at a median density of 2.2 gm/cc rather than 1.8 for alluvium, or 2.6 for granite, and for sea level elevation.

Mr. W. R. Moran

- 2 -

November 22, 1963

A gravity low does exist in the southeast part of the It claim group and appears to conform to and confirm earlier suppositions deduced from drilling and magnetic information.

If more drill holes are planned, consideration should be given to the southeast corner of It No. 6 and the east end center of It No. 4 as possible sites. Depending on what is found in the present hole (No. 4) it may become advisable to consider a detailed gravity survey on the It claim ground and its environs.

Walt or someone from GEOEX will be at the airport to meet you, Monday November 25.

Sincerely,

J. W. Marlatt

JWM: jh

Enclosure

November 20, 1963

Mr. W. R. Moran
Union Oil Company of California
Union Oil Center Room 5-212
Los Angeles 17, California

Dear Mr. Moran:

Enclosed for your files are two copies each of the following:

Revised composite map

Logs for Drill Holes #1, #2 & #3.

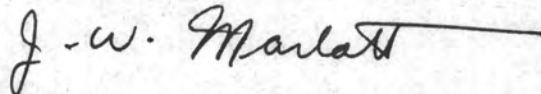
Magnetic data, part of Agnes Claim Group

Magnetic data, part of It Claim Group.

Calculations and plotting of the gravity results are not yet completed.

Your letter to Walt arrived in the morning mail. We have reservations for you at the HiWay House Motel for the 25th and 26th of November. Looking forward to seeing you then.

Sincerely yours,



J. W. Marlatt

JWM: jh

Enclosures

November 18, 1963

Mr. W. R. Moran
Union Oil Company of California
Union Oil Center Room 5 - 212
Los Angeles 17, California

Dear Mr. Moran:

After the enclosed copy of a letter to Mr. Sullivan was written, he again called Grover at our office. Three things, among others, developed from this conversation. He has another (?) signed copy of the October 24 letter to him from Mr. H. S. Harry and will send it back by registered mail. Due to personal, private reasons of his own he wanted very badly to visit the drill site tomorrow (Tues. Nov. 19th) even though I cannot go there until Wednesday. Even though I told him the location of the site and that it was not coring he was a little insistent to "just see where it is", so I told him O.K.

Lastly, he remarked "I could break this contract any time I choose." I inquired how he might do this and he said (more or less) "because no affidavit of labor was filed by September 1. I pointed out that such is not actually required and he said "Oh, yes, it is in the agreement." This remark is undoubtedly based on the opening sentence in Paragraph 15 page 9 of the agreement, the latter which, according to your letter of Nov. 14 your land department lawyers are already examining. I am enclosing a booklet "Laws and Regulations Governing Mineral Rights in Arizona". Pages 30 - 35 have information on this question and I have underlined certain pertinent sections. Possibly your legal department has a copy of this booklet. If not they might like to have it in connection with their evaluation of the Sacaton Option Agreement.

As far as we are concerned, we have been on the ground and actively and continuously doing work applicable toward annual assessment since August 19th. As brought out in my

Mr. W. R. Moran

- 2 -

November 18, 1963

letters to you of November 11 and November 15 the only question is how to divide and apply the work between the two assessment years.

We will look forward to your visit next week.

Sincerely yours,

HEINRICHS GEOEXPLORATION CO.

J. W. Marlatt
Geologist

JWM: jh

Enclosures

C O R

November 18, 1963

Mr. James L. Sullivan
P. O. Box 3222
Scottsdale, Arizona

Re: Sacaton Project
Pinal County, Arizona

Dear Mr. Sullivan:

In response to your phone calls on November 16 & 18, 1963 to Mr. W. E. Heinrichs and Mr. E. G. Heinrichs, I would like to advise you of the following:

1. Paragraph 10, page 7 of the option agreement between Minerals Exploration Company as Lessee and you, Mr. Woolsey, and Mr. Twenstrup as Lessors, states that information and data obtained by the Lessee will be furnished to Lessor after termination of the Lease Agreement. It is neither customary nor obligatory (in this case) for a Lessee to release findings while in possession and fulfilling its requirements.

2. A letter was sent to you by Minerals Exploration Co. on October 24, 1963 for signature of all principal Lessors authorizing you to be the only person acting for the Lessors. Mr. Moran has advised me that this has not been returned to him.

3. Paragraph 23, page 12 requires any communications to be addressed to 2232 E. 17th St. Tucson, Arizona.

4. Heinrichs GeosExploration Company is retained as agent by Minerals Exploration Company to supervise their interests in this project. Consequently, we act as we think best for their behalf and any deviation must be authorized in writing by Mr. W. R. Moran, Manager, Minerals Exploration Co. Room 5-212, Union Oil Center, Los Angeles 17, California.

5. You were told that I was the GEOEX employee most actively engaged in supervision and evaluation of this program, and advised to call me for information. You not only failed to do this but subsequently called Mr. E. G. Heinrichs at his home and Mr. Moran at his office.

November 18, 1963

6. When you have signed authorization from all Lessors and written permission from Minerals Exploration Co. to have data, maps, core, assay results, or any other information disclosed to you, I will then arrange to do so.

7. A copy of the recorded affidavit of labor for the Winnie Group was sent, as perscribed by Paragraph 15, page 9 to the Lessors address as given on page 12.

8. Paragraph 6, page 4 of the Option Agreement gives Lessee sole and exclusive possession of the property. Paragraph 11, page 7, allows you inspection at reasonable times, when accompanied by a representative of the Lessee to visit the property. The next date at which I will be on the property is Wednesday, November 20, 1963. If you care to visit it at that time, between 10:00 a.m. and 4:00 p.m. will be suitable.

9. For your information the drill has been recently moved to site No. 4 and in presently engaged in rockbitting through alluvium and no core is being obtained at this time.

A copy of this letter is being sent to Mr. Moran.

Very truly yours,

HEINRICHS GEOEXPLORATION CO.

J. W. Marlatt

J. W. Marlatt
Geologist

JWM: jh

cc: Mr. W. R. Moran

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November 18, 1963

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Very truly yours,

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J. W. Marlatt

J. W. Marlatt
Geologist

JWM:jh

cc: Mr. W. R. Moran

November 15, 1963

Mr. W. R. Moran
Union Oil Company of California
Union Oil Center Room 5 - 212
Los Angeles 17, California

Re: Sacaton Project
Pinal County, Arizona

Dear Mr. Moran:

Drill Hole #3 was stopped at 344 ft. The rock from it is a granodiorite with high mafic content but no mineralization of interest. Drill Hole #4 is located at the common corner of It 1, 2, 3, & 4 in Section 24.

On November 13 & 14 stations were surveyed for two short gravity profiles (4200 Ft. each profile) across the It Claim Group and the stations occupied and readings taken with the gravimeter. Calculations and reductions of this data are proceeding today.

The composite map of the area is being revised to show recent data--drill hole locations, gravity lines, etc., and will be sent next week along with the gravity profiles and some older magnetic coverage which may not have been previously sent to you. Summary data on the drill holes with a log of No. 2 will accompany them.

Of the approximately \$20,000 expended prior to about a week ago, \$2,000 was applied toward annual labor requirements on the Winnie Group, and has been so recorded. Roughly \$3,500 of the geophysics, etc. can be applied only toward the assessment year ending September 1, 1963. Thus the remaining \$14,000 plus can be applied toward either assessment year according to the needs, or interpretation of the option agreement.

As we see it, there may be three possibilities to choose from, taking into consideration what may follow as a result of

November 15, 1963

Hole #4, and legal opinion or interpretation of the option, etc.,

1. Do the required annual labor for both years--a minimum applicable expenditure of \$37,000 (165 claims for the 1962-1963 year, 205 claims for the 1963-1964 year).

2. Disregard the year 1962-1963 since it has already passed and you are still (now) in effective possession of the ground---this may (?) have some risk (?) and do the work and file for the year 1963-1964. Applicable minimum \$20,500 required.

3. If option may be dropped (if so desired) prior to March 1, 1964 by paying the remaining monthly royalty payments, but without having to do assessment work for 1963-1964, then the minimum needed for 1962-1963 has already been met.

A firm decision on which of the above is applicable is necessary so we know whether or not to prepare the necessary affidavit for 1962-1963.

Sincerely yours,

HEINRICHS GEOEXPLORATION CO.

J. W. Marlatt
Geologist

JWM:jh

cc: W. L. Stanton) Encl.
Extra)

~~XXXXXXXXXX~~
Tommy Pierce

Res. TE 6 7859

bus. TE 68252?



3/2

HEINRICH'S GEOEXPLORATION COMPANY
MINERAL ENGINEERING CONSULTANTS AND CONTRACTORS
GEOPHYSICAL, GEOLOGICAL AND ECONOMIC APPRAISALS
TUCSON, ARIZONA, 85703

WALTER E. HEINRICH, JR.
E. GROVER HEINRICH

November 11, 1963

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

Mr. W. R. Moran
Union Oil Company of California
Union Oil Center
Room 5-212
Los Angeles 17, California

Re: Sacaton Project
Pinal County, Arizona

Dear Mr. Moran:

Drill Hole #3 intersected a basic rock below 200 ft. about 215 ft. Coring started at 225 ft. and the hole is now being reamed. The rock is identified as granodiorite, with 20% or more mafic minerals, about 5% being magnetite. This accounts for the magnetic anomaly. There is so far no copper or any of the other usual economic minerals found locally. We plan to continue the hole for a few days to get a significant penetration.

A little over a mile to the northeast, on the Mary group in Sec. 15 there are low outcropping hills with some minor alteration and copper shows. Layton Stanton had favored a short hole there, of 200-300 ft. to see if there might be improvement at depth. So the drill could move there the latter part of this week.

An up to date approximation of money spent is as follows:

Metler Bros. Drilling, Billed and Paid-----	\$8240.50
Estimated thru Nov. 9, including casing left in D.D.H. #2-----	4431.00
GEOEX, billed and paid thru September-----	6223.40
GEOEX, estimated billing thru Nov. 9-----	1158.20
	<u>\$20053.10</u>

The option agreement with the Lessors calls for payments of \$1,250 monthly, so presumably \$5,000 or \$6250 has been paid to them in addition to the above. According to the agreement

they continue to receive these payments for a minimum of one year. (Paragraph 8, page 6). Paragraph 15, page 9 calls for all assessment work due before September 1, 1963 to be done at Lessee's expense, and also for any year in which the lease continues past March 1. Since the minimum life of the agreement is one year, Mexco is obligated to expend an amount equivalent to \$100 per claim for federal annual labor during this present assessment year (which started 1 September 1963 and terminates 1 September 1964) not counting any amount spent prior to 1 September 1963.

There are a total of 205 claims, of which 40 were located at a date late enough that annual labor was not required for them for the year ending September 1, 1963. Thus the minimum assessment expenditures for the past year is \$16,500.00, while for the present one which expires September 1, 1964 it is an additional \$20,500. Drilling, road work, geology, and geophysics apply toward assessment work. Royalty payments do not. We have now met the requirements for the past year, and can continue on the new year, or slow down or suspend operations temporarily.

So long as the drill is on the ground, we recommend the following: Since the only encouragement to date was in D.D.H.#2 drill a short hole in Sec. 15 to test that ground while a couple of gravity profiles are being run north-south across the middle of Sec. 24 to see if the apparent fault in the vicinity of D.D.H.#2 can be located accurately and some information gained as to its position and trend, depth below surface, dip and displacement, etc. From this information drill one or two more holes 1,500' +/- on the It claims in Sec. 24 to further evaluate the known mineral there.

To eliminate any doubt about the copper oxide zone in Hole #2, assay samples were cut from the intervals on each side of the better zones. Complete assays to date are tabulated.

<u>INTERVAL</u>	<u>%Cu</u>	<u>INTERVAL</u>	<u>%Cu</u>
1022' - 1034'	0.26	1076' - 1086	0.36
1034' - 1046'	1.30	Weighted average 64'	= 0.98
1046' - 1056'	1.41	1.41	
1056' - 1066'	1.57		
1066' - 1076'	1.07		

Mr. W. R. Moran

- 3 -

November 11, 1963

<u>INTERVAL</u>	<u>%Cu</u>
1146' - 1156'	0.24
1156' - 1166'	1.23
1166' - 1176'	0.19
Weighted average 30' = 0.55%	
1168' - 1377	0.38

Sincerely,

HEINRICHS GEOEXPLORATION COMPANY

JWM: jh

J. W. Marlatt
Geologist

Enclosures

November 11, 1963

Mr. W. R. Moran
Union Oil Company of California
Union Oil Center
Room 5-212
Los Angeles 17, California

Re: Sacaton Project
Pinal County, Arizona

Dear Mr. Moran:

Drill Hole #3 intersected a basic rock below 200 ft. about 215 ft. Coring started at 225 ft. and the hole is now being reamed. The rock is identified as granodiorite, with 20% or more mafic minerals, about 5% being magnetite. This accounts for the magnetic anomaly. There is so far no copper or any of the other usual economic minerals found locally. We plan to continue the hole for a few days to get a significant penetration.

A little over a mile to the northeast, on the Mary group in Sec. 15 there are low outcropping hills with some minor alteration and copper shows. Layton Stanton had favored a short hole there, of 200-300 ft. to see if there might be improvement at depth. So the drill could move there the latter part of this week.

An up to date approximation of money spent is as follows:

Metler Bros. Drilling, Billed and Paid-----	\$8240.50
Estimated thru Nov. 9, including casing left in D.D.H. #2-----	4431.00
GEOEX, billed and paid thru September-----	6223.40
GEOEX, estimated billing thru Nov. 9-----	1158.20
	<u>\$20053.10</u>

The option agreement with the Lessors calls for payments of \$1,250 monthly, so presumably \$5,000 or \$6250 has been paid to them in addition to the above. According to the agreement

they continue to receive these payments for a minimum of one year. (Paragraph 8, page 6). Paragraph 15, page 9 calls for all assessment work due before September 1, 1963 to be done at Lessee's expense, and also for any year in which the lease continues past March 1. Since the minimum life of the agreement is one year, Mexco is obligated to expend an amount equivalent to \$100 per claim for federal annual labor during this present assessment year (which started 1 September 1963 and terminates 1 September 1964) not counting any amount spent prior to 1 September 1963.

There are a total of 205 claims, of which 40 were located at a date late enough that annual labor was not required for them for the year ending September 1, 1963. Thus the minimum assessment expenditures for the past year is \$16,500.00, while for the present one which expires September 1, 1964 it is an additional \$20,500. Drilling, road work, geology, and geophysics apply toward assessment work. Royalty payments do not. We have now met the requirements for the past year, and can continue on the new year, or slow down or suspend operations temporarily.

So long as the drill is on the ground, we recommend the following: Since the only encouragement to date was in D.D.H.#2 drill a short hole in Sec. 15 to test that ground while a couple of gravity profiles are being run north-south across the middle of Sec. 24 to see if the apparent fault in the vicinity of D.D.H.#2 can be located accurately and some information gained as to its position and trend, depth below surface, dip and displacement, etc. From this information drill one or two more holes 1,500' +/- on the It claims in Sec. 24 to further evaluate the known mineral there.

To eliminate any doubt about the copper oxide zone in Hole #2, assay samples were cut from the intervals on each side of the better zones. Complete assays to date are tabulated.

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1046'	- 1056'	1.41		1.41	
1056'	- 1066'	1.57			
1066'	- 1076'	1.07			

Mr. W. R. Moran

- 3 -

November 11, 1963

<u>INTERVAL</u>	<u>%Cu</u>
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1156' - 1166'	1.23
1166' - 1176'	0.19
Weighted average 30' = 0.55%	
1168' - 1377	0.38

Sincerely,

HEINRICHS GEOEXPLORATION COMPANY

J. W. Marlatt
Geologist

JWM: jh

Enclosures

C O R P

1250
8
400

3569.36 } aug.
2654.04 } 4th. Grook billed
858.20 } Oct.

200.00 ± Nov. (Thru 9th)

100.00 ± Tom. Peaner

✓ 4257.50 } matter billed thru Oct. 20
✓ 3983.00 }

4431.00 ← thru Nov. 9

20053.10

20,053.10

Oct 21 - Nov. 9

Shifts - 10, 10, 10, 10, 10, 6, 9, 10, 11, 10, 10, 8, 10, 10,
10, 10, 10 = 20.5 shifts at 80 = 1640.00
water 1, 1, 1, 2, 1, 2, 1, 1, 1 = 13 130.00
+ 260 miles = 260.00
NK 19, 40, 32, 20, 29, 36, 29, 20, 40 = 260 = 997.50
Rock bit 80, 90 = 179 + 46 = 225 337.50
3130.00
+ 886 ft casing = 1300.00
✓ 4431.00

.00 T

3569.36
2654.04
858.20
200.00
100.00
4000.00
257.50
3983.00
4431.00
20053.10 S

Ac of 11/9/63 paid out \$25,000⁰⁰ +

" " 7/19/64 " " 35,000⁰⁰ Min

Plus any further Gen. G.P. & dialy etc.

LONG DISTANCE PHONE CALL REPORT

Request of Mr. _____

Date Nov. 4 1963

Number Called HUNTLEY 2-7500 Areas. 213
Exchange Number

Time Requested _____ A. M.
P. M.

Individual MR. W. R. MORAN

KIND OF SERVICE DESIRED

Station to Station Person to Person

Firm Union Oil

Time Called 8:55 A. M.
P. M.

Street Address _____

Time Connected _____ A. M.
P. M.

City L. A. State _____

Time Off _____ A. M.
P. M.

Remarks: _____

Minutes Elapsed Time 5 min

Re: Shutting down D.D.H #2
& moving to #3

CHARGES: \$ 2.40 + tap

Phone Company Verification of Charge Given by _____

Switchboard Operator's Notations

Company Business Charge to MEXCO A/C No. _____
 Personal Call

Signed Jum Switchboard Operator

November 1, 1963

Mr. W. R. Moran
Union Oil Company of California
Union Oil Center Room 5 - 212
Los Angeles 17, California

Re: Sacaton Project
Pinal County, Arizona

Dear Mr. Moran:

Wednesday afternoon, October 30, the drill stuck in Hole #2 at 1454 ft. After twisting off the drill stem, and fishing, all tools were finally recovered yesterday, Oct. 31. This morning they were inserted again and the hole found to have at least 100 feet of caved material at the bottom.

The driller has done a very admirable job of keeping the hole open to date in very bad ground. Now the only possibility for continuing the hole is to clean it, case to the bottom inside the present casing (which extends only to 886 ft) and drill with reduction in diameter to Bx. We had hoped to get another 100-150 ft. before completion of the hole. However, in all probability, it would not be possible to get the casing out and if such happened the cost of cleaning, setting the casing, price of the casing, and the additional footage would mean an expenditure of possibly three or four thousand dollars for only a hundred feet plus of hole. Although the circumstances and procedures are standard and normal enough, it hardly seems justified here for so little additional information in a hole that has shown so little.

Wishing to allow you the final decision, I tried to reach you by phone today. Drilling will be shut down over the week-end but a prompt decision is needed by Monday a.m. so they can be told to continue here or move to site #3.

Mr. W. R. Moran

- 2 -

November 1, 1963

With regret and disappointment for not having seen fresh bedrock, I recommend moving. This hole has been in or at the edge of a major fault and conditions might not improve and mineral occurrences throughout the 1454' were spotty, sparse and low grade. The nearby ASARCO Hole #77 did not penetrate economic mineralization either.

Sincerely yours,

HEINRICHS GEOEXPLORATION CO.

JWM: jh

cc: W. L. Stanton (encl.)

J. W. Marlatt
Geologist

C O R P

October 28, 1963

Mr. W. R. Moran
Union Oil Company of California
Union Oil Center
Room 5 - 212
Los Angeles 17, California

Re: Sacaton Project
Pinal County, Arizona

Dear Mr. Moran:

As of 2:00 p.m. today, (October 28) Drill Hole #2 was at 1386 ft. and still going down. There have been some changes in the rock though it is still highly altered and broken with only rare spots of oxide copper. Information from American Smelting & Refining Co. indicates that although their drill hole #77 is only slightly more than 300 ft. to the south, the character is quite different. They encountered oxide coppers at different horizons and of much lower grade, and first encountered sulfides at nearly 1,500 ft. The hole was stopped at 1,615 ft. Hopefully we may encounter fresher rock with sulfides at about 1,500 ft also.

In anticipation of the possibility that this hole may be stopped in the next week or two, I have arranged with the local Casa Grande contractor, Tommie Pearce, to prepare the site for Hole #3 and repair the access roads to it--they were badly damaged by heavy rains last week. This hole will be at the common corner of the Agnes Claims #3, 4, 5 & 6 located in Sec. 21, T 5 S, R 5 E. As Mr. Stanton may have told you, and your files will show, this site was picked on the basis of three considerations.

1. To test a different part of the lease area.
2. Geophysical anomalism (though ~~is~~ no outstanding degree has been located to date, this is, so far, the best.)
3. Geologic projections.

The assay for the interval 1156' - 1166' which showed fairly strong oxide copper mineralization was 1.23%.

Sincerely yours,

JWM:jh
Encl: cc: Extza
W. L. Stanton

J. W. Marlatt

October 31, 1963

REGISTERED LETTER

Mr. James A. Woolsey
P. O. Box 4054
Tucson, Arizona

Dear Bud:

Enclosed is a conformed copy of the affidavit of labor performed that was recorded for annual assessment work covering the Winnie Claims 1 thru 20, located in Sec. 1, T 6 S, R 5 E, Pinal County, Arizona.

Section we, page 12 of the option agreement gives the address to which notices are to be sent as 2232 E. 17th St., Tucson, unless a notice of change of address is given in writing. I believe this is your old address. Anyway, this goes to the above address. Please acknowledge receipt of it and give formal verification of any change of address.

Sincerely yours,

HEINRICHS GEOEXPLORATION CO.

J. W. Marlatt
Geologist

JWM:jh
Enclosure: 1

AFFIDAVIT OF LABOR PERFORMED AND IMPROVEMENTS MADE

STATE OF ARIZONA)
) ss
 COUNTY OF PIMA)

D 364 P 254

WALTER E. HEINRICHS, JR., being duly sworn, deposes and says that he is a citizen of the United States and more than twenty-one years of age, and resides at Tucson in Pima County, Arizona, and is personally acquainted with the following mining claims situated in the Blackwater Mining District, Pinal County, Arizona, Section 1, T 6 S, R 5 E, the location notices of which are of record in the office of the County Recorder, Pinal County as follows:

<u>NAME</u>	<u>RECORDING DATE</u>	<u>DOCKET</u>	<u>PAGE</u>
Winnie No. 1	July 16, 1962	329	67
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Winnie No. 3	July 16, 1962	329	69
Winnie No. 4	July 16, 1962	329	70
Winnie No. 5	July 16, 1962	329	71
Winnie No. 6	July 16, 1962	329	72
Winnie No. 7	July 16, 1962	329	73
Winnie No. 8	July 16, 1962	329	74
Winnie No. 9	July 16, 1962	329	75
Winnie No. 10	July 16, 1962	329	76
Winnie No. 11	July 16, 1962	329	77
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Winnie No. 13	July 16, 1962	329	78
Winnie No. 14	April 4, 1962	320	295
Winnie No. 15	July 16, 1962	329	79
Winnie No. 16	April 4, 1962	320	297
Winnie No. 17	April 4, 1962	320	298
Winnie No. 18	July 16, 1962	329	80
Winnie No. 19	July 16, 1962	329	81
Winnie No. 20	July 16, 1962	329	82

That between August 20 and September 6, 1963, at least \$2,000 worth of work and improvements were done and performed upon said claims, not including location work. The work and improvements were made by Metler Brothers Drilling Co., Tommy Pearce, contractor and Heinrichs Geospection Company at the expense of Minerals Exploration Company, a California corporation for the owners of the above described mining claims, Norman Twenstrup, Florence Sullivan, James L. Sullivan, Agnes Woolsey and James A. Woolsey, for the purpose of complying with the laws of the United States pertaining to annual assessment work, and Frank C. Metler, Augie Greenwood, Hugh Howell, Tommy Pearce, E. Greyer Heinrichs and J. W. Marlatt performed said work which consisted of site preparation and drilling of an 8x size diamond drill hole at the common corner of Winnie #13, #14, #15 and #16, done for the benefit of the 20 mining claims above described, as a single contiguous group.

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

Subscribed and sworn to before me this 8th day of October 1963.

M. Jean Heinrichs
 Notary Public

My commission expires: July 31, 1965

Copied from copy

October 24, 1963

Mr. W. R. Moran
Union Oil Company of California
Union Oil Center
Room 5 - 212
Los Angeles 17, California

Re: Sacaton Project
Pinal County, Arizona

Dear Mr. Moran:

Enclosed find the original and one copy of the recorded affidavit of labor for annual assessment work done on the Winnie Claim Group, Sec. 1, T 6 S, R 5 E, Pinal County, Arizona.

One copy has also been sent to Mr. James A. Woolsey as representative of the Lessor, in accordance with Sec. 15, page 9 of the option agreement.

Sincerely yours,

JWM:jh

J. W. Marlatt

Enclosures: 3

AFFIDAVIT OF LABOR PERFORMED AND IMPROVEMENTS MADE


STATE OF ARIZONA)
) ss
 COUNTY OF PIMA)

D 364 p 254

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Winnie No. 6	July 16, 1962	329	72
Winnie No. 7	July 16, 1962	329	73
Winnie No. 8	July 16, 1962	329	74
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 Walter E. Heinrichs, Jr.

Subscribed and sworn to before me this 8th day of October 1963.


 Notary Public

My commission expires: July 21, 1965.

REGISTERED NO.

181649

Value \$ NV Spec. del'y fee \$

Fee \$ 00 Ret. receipt fee \$ 10

Surcharge \$ Rest del'y fee \$

Postage \$ 05 Airmail



Postmaster, By

From

Heinrichs Geo Exp
Co Bx 5671

To

James A. Woolsey
720 N. Cherry
Tucson

107131

SAVE THIS RECEIPT. Present it when making inquiry or claim.

Claim must be filed within 1 year from the date of mailing.

Consult postmaster as to fee chargeable on registered parcel post packages addressed to foreign countries.

October 24, 1963

REGISTERED LETTER

Mr. James A. Woolsey
720 N. Cherry
Tucson, Arizona

Dear Bud:

Enclosed is a copy of the affidavit of labor performed (conformed copy) that was recorded for annual assessment work covering the Winnie Claims 1 ~~thru 20~~, located in Sec. 1, T 6 S, R 5 E, Pinal County, Arizona.

Section 23, page 12 of the option agreement gives the address to which notices are to be sent as 2232 E 17th St, Tucson, unless a notice of change of address is given in writing. I believe this is your old address. Anyway, this goes to you at your present address. Please acknowledge receipt of it and give formal verification of any change of address.

Sincerely yours,

HEINRICHS GEOEXPLORATION CO.

J. W. Marlatt
Geologist

JWM:jh
Enclosure: 1

bcc: W. R. Moran
Union Oil Co.

AFFIDAVIT OF LABOR PERFORMED AND IMPROVEMENTS MADE

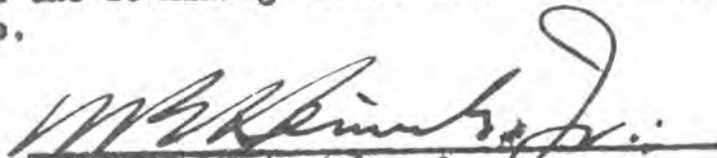
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) ss
 COUNTY OF PIMA)

D 364 P 254

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 Walter E. Heinrichs, Jr.

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 M. Jean Heinrichs
 Notary Public

My commission expires: July 21, 1965

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Walter E. Heinrichs, Jr.

Subscribed and sworn to before me this _____ day of _____
1963.

Notary Public

My Commission expires: _____.

October 22, 1963

Mr. W. R. Moran
Union Oil Center
Room 5 - 212
Los Angeles 17, California

Re: Sacaton Project
Pinal County, Arizona

Dear Mr. Moran:

Diamond drilling on Hole #2 resumed Thursday, October 17th and on Monday, October 21 the hole was at 1227 ft. Other than the interval 1034' - 1076' which was assayed and reported on by letter to Mr. Stanton dated October 15, the only interval below this showing much sign of copper is 1156' - 1166' which has been split and sent for assay. This is also oxide copper. Drilling is continuing and we hope that fresh bedrock will be reached soon, with possible sulfide mineralization.

The property owners, particularly Mr. James Sullivan have been somewhat annoying in their frequent unannounced visits to the drill site, phone calls and rumor spreading. Paragraph 11, Page 7 of the option agreement states clearly that they may enter on the property, etc., accompanied by a representative of Lessee. No one has ever given us any prior notice of their desire or intention to visit the property. The driller has been told to show no one any core or discuss the drilling, but much can be observed by experienced people on a casual visit. We suggest the various property holders be told officially and politely to stick to the letter of the agreement and to quit dropping by unannounced. Any information these people pick up about amount, kinds, depths of mineralization, or assay results or any other information is used to quickly spread embellished stories for their own promotional gains.

Unless we hear differently from you, you will be informed by letter every few days of the progress of the drilling and of any significant changes as well as any other related developments. Anything seeming to warrant it will be brought to your

Mr. W. R. Moran

- 2 -

October 22, 1963

immediate attention by telephone.

Our congratulations on your new position and we will look forward to a personal visit with you here in the near future.

Sincerely,

J. W. Marlatt

JWM:jh

cc: W. L. Stanton
extra enclosed.

COOPY

October 15, 1963

Mr. W. Layton Stanton
Union Oil Company of California
Union Oil Center
Los Angeles 17, California

Re: Sacaton Project
Drill Hole #2

Dear Mr. Stanton:

The assay returns show the following:

Sample 1580, Interval	1034' - 1046'	-----	1.30 Cu
" 1581, "	1046' - 1056'	-----	1.41 Cu
" 1582, "	1056' - 1066'	-----	1.57 Cu
" 1583, "	1066' - 1076'	-----	1.07 Cu

This is an average of 1.34% for 42 ft. For oxide at this depth and grade it isn't in itself particularly exciting, but is encouraging for continuing to go deeper in search of sulfide.

The drillers got unstuck and all rods out, but in doing so, damaged a drum on the drill rig. Replacement parts were ordered sent by air and are expected today. When repairs are completed the hole will be washed and cleaned and the drilling resumed, hopefully, the latter part of this week.

Sincerely,

JWM: jh

J. W. Marlatt

October 12, 1963

Mr. W. L. Layton Stanton
Minerals Exploration Co.
Union Oil Center
Los Angeles 17, California

Re: Sacaton Project
Pinal County, Arizona

Dear Mr. Stanton:

Drill hole #2 on Thursday afternoon was at 1097 feet. The copper shows are between the interval 1054 - 1075 ft. and are green and blue weak oxides and stains which will not assay very high. At 1075 the rock again becomes red (hematite) granite breccia almost devoid of any show of copper. At 1097 ft. the drill stuck fast and the drillers are still working to relieve it. They do not know yet if it is just heavy ground, a split rod, or what. If they are unable to free it, the only recourse will be to go down inside it, chop off the bit, and continue the drilling with reduction in size to BX. Then the stuck rods would act as casing. However, they are hopeful of freeing it so as to continue with the NX size.

Samples for assaying from the oxide interval will be sent to the assayer on Monday.

Some figures on costs to date:

Drilling thru Sept. 21 (billed & Paid)	-- \$4,257.50	
" " Oct. 9 (my figures)	-- 3,222.00	(est.)
Drilling total to Oct. 9	-----	\$7,479.50 "

Geophysics w/office, living, vehicle
and other expenses to date----- 4,500.00

Drill site preparation, drilling
supervision, geology, claim checking,
logging & care of core, various
GEOEX activities connected with the
drilling program, related travel
and communications, expenses to date-- 1,723.40
Approximate total to date--\$13,702.90

Sincerely,

JWM:jh

J. W. Marlatt

Encl: Statement for September 1963

10-7-63

Mexco-Sacaton

At 1:30 p.m. to-day D.D.H. #2 was at 978'. Core recovery is good - usually 100%. No change in formation - apparently an altered monzonite or granite, soft & crumbly, feldspars altered to kaolin & sericite, very red with hematite in fractures & mud zones. No visible copper either oxide or sulfide. In fact no sulfide of any kind.

Called ASARCO - Courtright knows little. Called Kinnison at Casa Grande. In their D.H. #77 hit a little oxide about 830', then some more about 1200' & sulfide at 1500' or so. Ran only 0.2% Cu, (approx). Told him he could visit drill & look at core even if I wasn't there. He denies all of rumor about ASARCO hiring men, planning to sink a test shaft or buying up property to N.E.

Called Stanton & relayed info. He wants a drill site prepared as we may move soon. Pick one in Sec. 21 on G.P. anomolism & look at Oxi Cu show Grover plots on claim map N.W. of D.D.H. #2.

Work up expenditures to date. Stanton will call Suddon tomorrow.

LONG DISTANCE PHONE CALL REPORT

Request of Mr. _____

Date 10/7/63

Number Called HUNTLEY 2-7600

Time Requested _____ A. M.
P. M.

Exchange

Number

KIND OF SERVICE DESIRED

Individual LAYTON STANTON

Station to Station

Person to Person

Firm Union Oil

Time Called _____ A. M.
P. M.

Street Address _____

Time Connected 4:28 A. M.
P. M.

City L. A. State CALIF

Time Off 4:39 A. M.
P. M.

Remarks: Re: D.B.H. # 2 & what

Minutes Elapsed Time 11 min

learned from ASARCO To-day.

CHARGES: \$ 4.30 + tax

Phone Company Verification of Charge Given by _____

Switchboard Operator's Notations

Company Business

Personal Call

Charge to MEXCO/SACATON A/C No. _____

Signed Juni

Switchboard Operator

AREA CODE 213

LONG DISTANCE PHONE CALL REPORT

Request of Mr. _____

Date 10/7/63

Number Called 8365801

Time Requested _____ A. M.
P. M.

Exchange

Number

Individual JOHN KINNISON

KIND OF SERVICE DESIRED

Station to Station

Person to Person

Firm ASARCO

Time Called 3:25 A. M.
P. M.

Street Address _____

Time Connected _____ A. M.
P. M.

City CASA GRANDE State ARIZ.

Time Off _____ A. M.
P. M.

Remarks: _____

Minutes Elapsed Time 10

Re: SACHATON DDH # 2

CHARGES: \$ 3.31 + tax

Phone Company Verification of Charge Given by _____

Switchboard Operator's Notations

Company Business

Personal Call

Charge to MEXCO A/C No. _____

Signed John

Switchboard Operator

John Kimison

Home (Tucson) 792-3875

ASARCO LAB at

CASA GRANDE 8365801

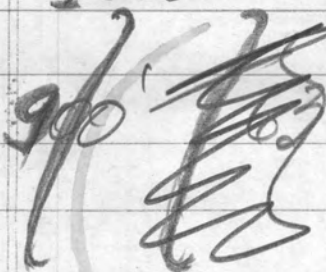
Starston Called 1900' ± bott.

(10/7/63)

1500'

Sulfide

Call
Countryright

900' 

%

Concerned



$\frac{1}{12} \frac{6}{7}$

October 2, 1963

Mr. W. Layton Stanton
Union Oil Company of California
Union Oil Center
Los Angeles 17, California

Re: Sacaton Project
Pinal County, Arizona

Dear Mr. Stanton,

Yesterday Drill Hole #2 was at 386 feet. Today it was to be reamed to this depth and insertion of casing started. If all goes well coring should recommence late tomorrow.

The ground for approximately 250' has been alternately soft and broken and drilling slow as we felt for bedrock carefully. What core was recovered as well as sludge and mud in the water return indicates faulting, high alteration, even possibly an old lake bed. Harder rock, although highly fractured, sericitized, kaolinized and containing such hematite was found below 350 feet.

No copper has been seen in either sludge or core. We ran two chemical analyses - one on straight sludge indicates 50 parts per million, one on the hematite mud indicates 600 parts per million (0.06%). The core from the present bottom of the hole shows the hematite filled cavities of former metalization.

Casing will eliminate the whipping of the drill stem in the enlarged, often reamed - cleaned hole and allow for better core recovery in the harder rock.

Sincerely yours,

JWM/ep

J. W. Marlatt

September 27, 1963

Mr. W. Layton Stanton
Union Oil Company of California
Union Oil Center
Los Angeles 17, California

Re: Sacaton Project
Pinal County, Arizona

Dear Layton:

Last week I delivered to you, in person, at your office, the following items contained in a folder:

- 15 MoMag record copies 1, 1 part re-run and 2 thru 14.
- 1 sheet MoMag stacked profiles -- Lines 5, 7, 6, 12, 3
Section 21 & 22
- 1 Hand mag. profile A-A₁ looking north about across the
center of the SE $\frac{1}{4}$ of Sec. 21.
- 5 I. P. sectional data sheets, Line 1, Line 2, spreads
1 & 2, Lines 3 & 4.
- 1 composite index map. Scale: 1" = 1 mile.
- 1 composite map. Scale: 4" = 1 mile

Enclosed is a revised to 9/25/63 composite map; 4" = 1 mi. which shows the claim data in Sec. 16 and one sheet showing Hand Mag profiles 1 & 2 across the Winnie Claims.

Total depth of Drill Hole #1 was 364' in conglomerate all the way except for the very near surface. This shows on the 4" = 1 mile composite map.

We will prepare an annual labor affidavit for the Winnie Group.

As of yesterday, Hole #2 was at 830'. Since about 630' interval has been very red clay alternating with reddish gossan? material, hard fragments (brecciated?) and buff sand with rather poor core recovery. A few specks of blue copper material were noted in the sludge, apparently from about 725 as a center, but none since then.

Mr. W. Layton Stanton

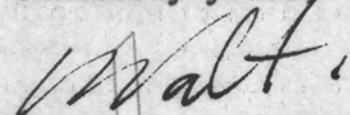
- 2 -

September 27, 1963

Coring was to continue today.

We now understand Mr. Roland Mulchey most likely will be in Tucson next week.

Sincerely yours,

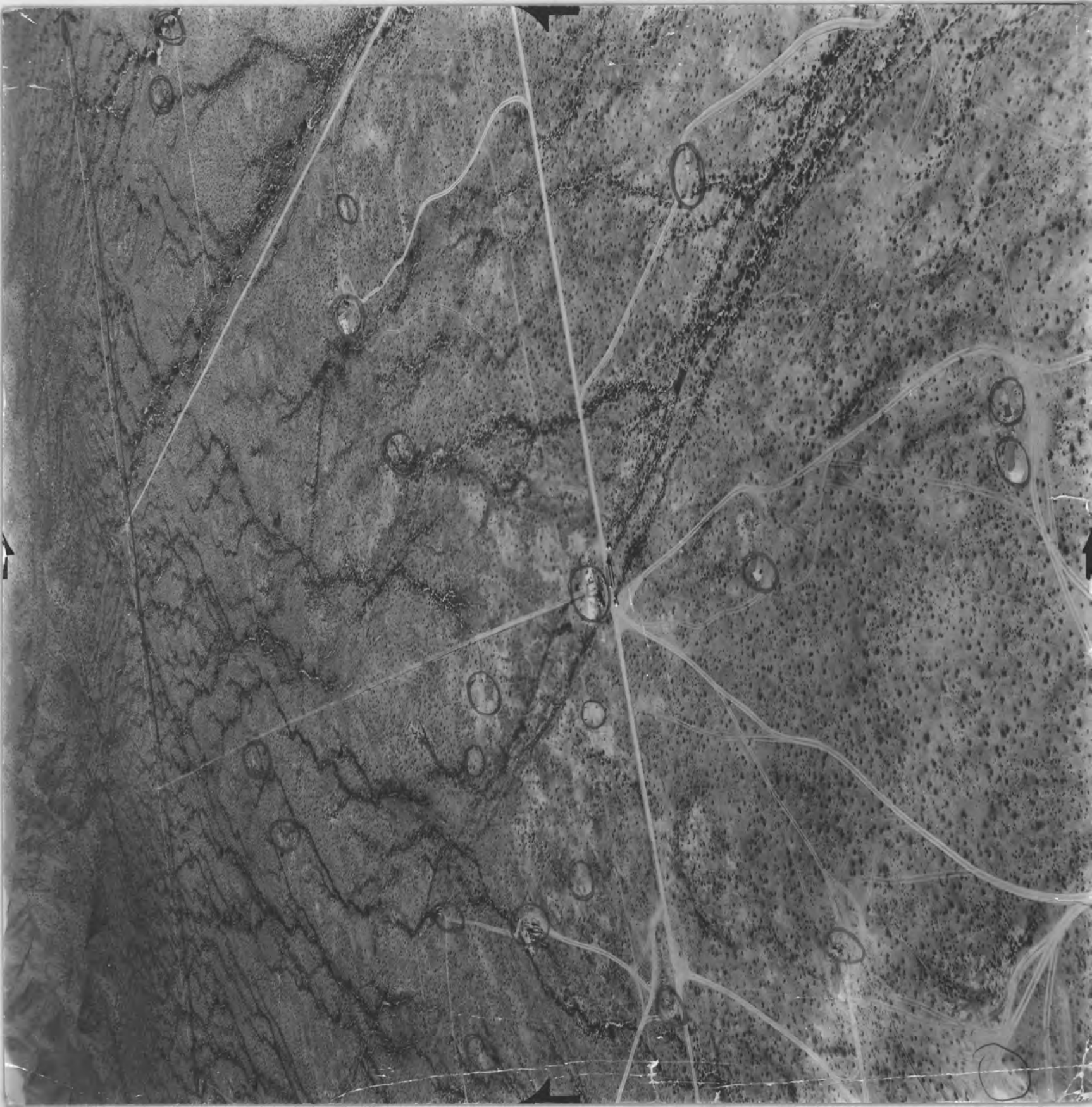


Walter E. Heinrichs, Jr.

WEH: jh

Enclosures

COOP



February 18, 1964

James A. Woolsey
Agnes Woolsey
Norman Twenstrup
James L. Sullivan
Florence Sullivan
c/o Walter W. McMillen
Attorney at Law
1006 Union Title Bldg
222 North Central
Phoenix 4, Arizona

Re: Sacaton Area
Pinal County, Arizona
Twenstrup, et al, Lease
PF 748
and
Minerals Exploration Co.
Union Oil Center
Los Angeles 17, California

Gentlemen:

In reference to the above, your letter of 10 February 1964 to Mr. H. S. Harry and at the request of Mr. W. R. Moran of same company, we are herewith transmitting copies of all maps, logs and data mentioned in paragraph 10 page 7 of your 10 May 1963 agreement with Minerals Exploration Co.

The portions of drill cores not used for testing may be picked up at this office within five days after receipt of this letter. Thereafter, we will be obliged to assess a storage charge of \$0.75 per day. The size and weight of this material is estimated approximately 150 cu. ft. and 1,500 pounds, or one pick-up load, or about 4 passenger car loads.

Copy of annual assessment work affidavit mentioned in paragraph 15 page 9, which partially covers requirements for the current assessment year is enclosed.

Very truly yours,

HEINRICHS GEOEXPLORATION CO.



Walter E. Heinrichs, Jr.
President & General Manager

WEH:jh

bcc: W. R. Moran (2) w/o maps
1/2 affidavit map
1/2 tech note.

February 1964

C O N T E N T S

Maps on SACATON PROJECT, Pinal County, Arizona

1. Hand Magnetic Profiles, Winnie Claims
2. Gravity Profile, Line A, Line B. (one sheet)
3. Magnetic Profile, It Claims
4. Hand Magnetic Profiles, Sec. 21 Area Line 1
5. " " " " " " 2
6. " " " " " " 3
7. " " " " " " 4
8. " " " " " " 5
9. Magnetic Survey (Vertical Intensity) It Claim Group
Contour Map
10. Magnetic Survey (Vertical Intensity) Agnes Claim Group
Contour Map.
11. Drill Logs: Drill Hole #1, 1 page
Drill Hole #2, 10 pages
Drill Hole #3, 1 page
Drill Hole #4, 1 page
Total: 13 pages
12. Sectional Data Sheet, I. P. Survey Line 1 (1" = 1000')
13. " " " " " " Line 2, Spread 1
14. " " " " " " Line 2, Spread 2
15. " " " " " " Line 3
16. " " " " " " Line 4

In Map Pocket

- Composite map Sacaton Project: 4" = 1 mile
15 Mobile Magnetometer Records: 1, 1a, 2 thru 14.

INSTRUCTIONS TO DELIVERING EMPLOYEE

Deliver *ONLY* to
addressee

Show address where
delivered

(Additional charges required for these services)

RECEIPT

Received the numbered article described on other side.

SIGNATURE OR NAME OF ADDRESSEE (must always be filled in)

Wm W. Mc Miller

SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

F. Lodrick

DATE DELIVERED

1/20/64

SHOW WHERE DELIVERED (only if requested)

Mexco-Sacaton-Woodson-Transport Co.



CS 71548-5-F 23456789

February 19, 1964

Mr. W. R. Moran
Minerals Exploration Co.
Union Oil Building
Los Angeles 17, California

Dear Bill:

Attached in duplicate, are copies of correspondence with Woolsey-Twenstrup et al as per your phoned instructions on 2/12/64 confirmed in the Minerals Exploration Company's termination acknowledgment letter to Woolsey et al, of same date, signed by K. J. Robertson. These were sent certified return receipt requested. Trust this may be Amen to that.

They picked up the core today. The question regarding additional multiple copies of data came up. I stated you authorized one blue line only and any more copies at their expense would require your permission. However, I assume additional prints would be ok and we will act accordingly if we do not hear from you otherwise.

Sincerely,

Walter E. Heinrichs, Jr.

WEH:cp

cc: Mr. Robertson

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

WALTER E. HEINRICHS, JR.
E. GROVER HEINRICHS

February 18, 1964

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

James A. Woolsey
Agnes Woolsey
Norman Twenstrup
James L. Sullivan
Florence Sullivan
c/o Walter W. McMillen
Attorney at Law
1006 Union Title Bldg
222 North Central
Phoenix 4, Arizona

Re: Sacaton Area
Pinal County, Arizona
Twenstrup, et al, Lease
PF 748
and
Minerals Exploration Co.
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Los Angeles 17, California

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The portions of drill cores not used for testing may be picked up at this office within five days after receipt of this letter. Thereafter, we will be obliged to assess a storage charge of \$0.75 per day. The size and weight of this material is estimated approximately 150 cu. ft. and 1,500 pounds, or one pick-up load, or about 4 passenger car loads.

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HEINRICHS GEOEXPLORATION CO.



Walter E. Heinrichs, Jr.
President & General Manager

WEH:jh

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In Map Pocket

- Composite map Sacaton Project: 4" = 1 mile
15 Mobile Magnetometer Records: 1, 1a, 2 thru 14.

11-21-63

Sacaton Gravity - Line "B"

Latitude corr. is 0.023 mg/100ft (1.194 mg/mile)

Instrument calibration is 0.4994 mg/scale div.

Elev. corr. is combined free air - Bouguer corrected
to sea level at 0.06599 for density of 2.2

A B C D E

Read x .4994 .023/100 Elev. x .06599

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

Station	Read. in s/d after drift corr.	Stat. Elev.	Stat. read. in mg.	Lat. Corr.	Elev. corr.	Terrain corr.	Sum of 4-5-6	Sum less 400
0	556.2	2060.45	277.77	0	135.97		413.74	13.74
3+00s	557.4	2049.20	278.37	+ .07	135.23		413.67	13.67
6+00s	558.2	2037.42	278.77	+ .14	134.45		413.36	13.36
9+00s	558.6	2033.88	278.96	+ .21	134.22		413.39	13.39
12+00s	558.9	2028.18	279.11	+ .28	133.84		413.23	13.23
15+00s	558.8	2021.99	279.06	+ .35	133.43		412.84	12.84
18+00s	558.9	2016.31	279.11	+ .41	133.06		412.58	12.58
21+00s	559.2	2010.44	279.26	+ .48	132.67		412.41	12.41
24+00s	559.6	2005.42	279.46	+ .55	132.34		412.35	12.35
25+00s	559.8	2003.80	279.56	+ .58	132.23		412.37	12.37
26+00s	56.00	2002.08	279.66	+ .60	132.12		412.38	12.38
27+00s	559.6	2000.29	279.46	+ .62	132.00		412.08	12.08
28+00s	560.3	1998.73	279.81	+ .64	131.90		412.35	12.35
29+00s	56.05	1996.81	279.91	+ .67	131.77		412.35	12.35
30+00s	560.6	1995.06	279.96	+ .69	131.65		412.30	12.30
31+00s	560.7	1993.36	280.01	+ .71	131.54		412.26	12.26
33+00s	561.2	1990.51	280.26	+ .76	131.35		412.37	12.37
36+00s	56.19	1986.01	280.61	+ .83	131.06		412.50	12.50
39+00s	562.2	1981.56	280.76	+ .90	130.76		412.42	12.42
42+00s	562.5	1977.22	280.91	+ .97	130.48		412.36	12.36

Line B

06599

STA	Drift on Read S/D	Read in mg IS	LAT-corr	ELV COR	Sum	
0	556.2	277.77	0	135.97	413.74	3.74
3	557.4	278.37	.07	135.23	413.67	3.67
6	558.2	278.77	.14	134.45	413.36	3.36
9	558.6	278.96	.21	134.22	413.39	3.39
12	558.79	279.01	.28	133.84	413.23	3.23
15	558.8	279.06	.35	133.43	412.84	2.84
18	558.9	279.11	.41	133.06	412.58	2.58
21	559.2	279.26	.48	132.67	412.41	2.41
24	559.6	279.96	.55	132.34	412.35	2.35
26	559.8	279.56	.6	132.12	412.28	2.28
27	559.6	279.46	.62	132.00	412.08	2.08
30	560.6	279.96	.69	131.65	412.30	2.30
33	561.2	280.26	.76	131.35	412.37	2.37
36	561.9	280.61	.83	131.06	412.50	2.50
39	562.2	280.76	.90	130.76	412.42	2.42
42	562.5	280.91	.97	130.48	412.36	2.36

Sacaton Gravity - Line "A"

11/21/63

Latitude correction is 0.023 mg/100ft (1.194 mg/mile)

Instrument calibration is 0.4994 mg/scale division

Elevation correction is combined free air - Bouguer of 0.06599 for a density of 2.2. Corrected to sea level.

①	②	③	④	⑤	⑥	⑦	⑧	⑨
Sta.	Read in Scale Div. after drift cor.	Sta. Elev.	Sta. Read in mgs	Lat. CORR.	Elev. CORR.	Terrain CORR.	Sum of 4-5-6	Sum less 400
0	548.0	2109.72	273.67	0	139.22		412.89	12.89
1+00s	551.7	2079.66	275.52	+0.2	137.24		412.78	12.78
3+00s	555.7	2051.05	277.52	+0.7	135.35		412.94	12.94
6+00s	555.8	2045.25	277.57	+1.4	134.97		412.68	12.68
9+00s	555.8	2038.11	277.57	+2.1	134.49		412.27	12.27
12+00s	555.6	2031.99	277.47	+2.8	134.09		411.81	11.81
15+00s	556.2	2026.47	277.77	+3.5	133.73		411.85	11.85
18+00s	556.7	2020.58	278.02	+4.1	133.34		411.77	11.77
19+00s	557.2	2018.73	278.27	+4.4	133.22		411.93	11.93
20+00s	557.5	2016.68	278.42	+4.6	133.08		411.96	11.96
21+00s	557.6	2015.00	278.47	+4.8	132.97		411.92	11.92
22+00s	557.7	2013.02	278.52	+5.1	132.84		411.87	11.87
23+00s	557.7	2011.51	278.52	+5.3	132.74		411.79	11.79
24+00s	557.8	2010.38	278.57	+5.5	132.64		411.78	11.78
25+00s	557.9	2008.37	278.62	+5.8	132.53		411.73	11.73
26+00s	558.3	2006.62	278.82	+6.0	132.42		411.84	11.84
27+00s	558.8	2005.37	279.06	+6.2	132.33		412.01	12.01
30+00s	559.1	2000.00	279.21	+6.9	131.98		411.88	11.88
33+00s	560.0	1996.08	279.66	+7.6	131.72		412.14	12.14
36+00s	560.3	1991.64	279.81	+8.3	131.43		412.07	12.07
39+00s	561.1	1987.30	280.21	+9.0	131.14		412.25	12.25
42+00s	562.1	1981.50	280.71	+9.7	130.76		412.44	12.44

06599

Jan = 2.2

410 out

0	139.22	412.89	2.89
1	137.24	412.78	2.78
3	135.35	412.94	2.94
6	134.97	412.68	2.68
9	134.49	412.27	2.27
12	134.09	411.81	1.81
15	133.73	411.85	1.85
18	133.34	411.77	1.77
19	133.22	411.93	1.93
20	133.08	411.96	1.96
21	132.97	411.92	1.92
22	132.84	411.87	1.87
23	132.74	411.79	1.79
24	132.66	411.78	1.78
25	132.53	411.73	1.73
26	132.42	411.84	1.84
27	132.33	412.01	2.01
30	131.98	411.88	1.88
33	131.72	412.14	2.14
36	131.43	412.07	2.07
39	131.14	412.25	2.25
42	130.76	412.44	2.44

11/21/63

Sacaton Gravity - Line "A"

Latitude corr. is 0.023 mg/100 feet (1.194 mg/mile)

Instrument calibration is 0.4994 mg/scale div.

Elev. corr. is combined free air - Bouguer corrected to sea level at 0.07019 for a density of 1.8

①	②	Readt 4994 ③	.023/100 ④	ELEV. X .07019 ⑤	⑥	⑦	⑧	⑨
Station	Reading in Scale Div. after drift corr.	Station Elevation	Stat. Read- in milligals	Latitude correction	Elevation correction	Terrain correction	Sum of 4-5-6	Sum less 400
0	548.0	2109.72	273.67	0	148.08		421.75	21.75
1+00 S	551.7	2079.66	275.52	+1.02	145.97		421.51	21.51
3+00 S	555.7	2051.05	277.52	+1.07	143.96		421.55	21.55
6+00 S	555.8	2045.25	277.57	+1.14	143.56		421.27	21.27
9+00 S	555.8	2038.11	277.57	+1.21	143.05		420.83	20.83
12+00 S	555.6	2031.99	277.47	+1.28	142.63		420.38	20.38
15+00 S	556.2	2026.47	277.77	+1.35	142.24		420.36	20.36
18+00 S	556.7	2020.58	278.02	+1.41	141.82		420.25	20.25
19+00 S	557.2	2018.73	278.27	+1.44	141.69		420.40	20.40
20+00 S	557.5	2016.68	278.42	+1.46	141.55		420.43	20.43
21+00 S	557.6	2015.00	278.47	+1.48	141.43		420.38	20.38
22+00 S	557.7	2013.02	278.52	+1.51	141.29		420.32	20.32
23+00 S	557.7	2011.51	278.52	+1.53	141.19		420.24	20.24
24+00 S	557.8	2010.38	278.57	+1.55	141.11		420.23	20.23
25+00 S	557.9	2008.37	278.62	+1.58	140.97		420.17	20.17
26+00 S	558.3	2006.62	278.82	+1.60	140.84		420.26	20.26
27+00 S	558.8	2005.37	279.06	+1.62	140.76		420.44	20.44
30+00 S	559.1	2000.00	279.21	+1.69	140.38		420.28	20.28
33+00 S	560.0	1996.08	279.66	+1.76	140.10		420.52	20.52
36+00 S	560.3	1991.64	279.81	+1.83	139.79		420.43	20.43
39+00 S	561.1	1987.30	280.21	+1.90	139.44		420.55	20.55
42+00 S	562.1	1981.50	280.71	+1.97	139.08		420.76	20.76

✓ 07019 Dur = 1.8

FLV
COL

420 out

0	144.08	421.75	1.75
1	145.97	421.51	1.51
3	143.96	421.55	1.55
6	143.56	421.27	1.27
9	143.05	420.83	0.83
12	142.63	420.38	0.38
15	142.24	420.36	0.36
18	141.92	420.25	0.25
19	141.69	420.40	0.40
20	141.55	420.43	0.43
21	141.43	420.38	0.38
22	141.29	420.32	0.32
23	141.19	420.24	0.24
24	141.11	420.23	0.23
25	140.97	420.17	0.17
26	140.84	420.26	0.26
27	140.76	420.44	0.44
30	140.38	420.28	0.28
33	140.10	420.52	0.52
36	139.79	420.43	0.43
39	139.44	420.55	0.55
42	139.09	420.76	0.76

11/21/63

Sacaton gravity - Line "A"

Lat. corr. is 0.023 mg/100 ft (1.194 mg/mile)
 Inst. calibration is 0.4994 mg/scale div.

Elev. corr. is combined free-air bouguer of 0.06088
 for a density of 2.6 corrected to sea level.

Read x .4994 .023/100 Elev. x .06088

①	②	③	④	⑤	⑥	⑦	⑧	⑨
Sta.	Read. in S.D. after Drift COR.	Sta. ELEV.	Sta. Read. in mgs.	Lat. CORR.	ELEV. COR.	TERR. CORR.	Sum of 4-5-6	Sum less 400
0	548.0	2109.72	273.67	0	128.44	402.11	402.11	2.11
1+00 S	551.7	2079.66	275.52	+ .02	126.61	402.15	402.15	2.15
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9+00 S	555.8	2038.11	277.57	+ .21	124.08	401.86	401.86	1.86
12+00 S	555.6	2031.99	277.47	+ .28	123.71	401.46	401.46	1.46
15+00 S	556.2	2026.47	277.77	+ .35	123.37		401.49	1.49
18+00 S	556.7	2020.58	278.02	+ .41	123.01		401.44	1.44
19+00 S	557.2	2018.73	278.27	+ .44	122.90		401.66	1.66
20+00 S	557.5	2016.68	278.42	+ .46	122.78		401.66	1.66
21+00 S	557.6	2015.00	278.47	+ .48	122.68		401.63	1.63
22+00 S	557.7	2013.02	278.52	+ .51	122.56		401.59	1.59
23+00 S	557.7	2011.51	278.52	+ .53	122.46		401.51	1.51
24+00 S	557.8	2010.38	278.57	+ .55	122.39		401.51	1.51
25+00 S	557.9	2008.37	278.62	+ .58	122.27		401.47	1.47
26+00 S	558.3	2006.62	278.82	+ .60	122.16		401.58	1.58
27+00 S	558.8	2005.37	279.06	+ .62	122.09		401.77	1.77
30+00 S	559.1	2000.00	279.21	+ .69	121.76		401.66	1.66
33+00 S	560.0	1996.08	279.66	+ .76	121.52		401.94	1.94
36+00 S	560.3	1991.64	279.81	+ .83	121.25		401.89	1.89
39+00 S	561.1	1987.30	280.21	+ .90	120.99		402.10	2.10
42+00 S	562.1	1981.50	280.71	+ .97	120.63		402.31	2.31

0.019
 ↓ 0.6088 Jan = 2.6

Sta.	Drift cor. Reading in S/D	Reading in mg/ls.	Lat. cor.	Elev. COR.	Sum	- 400
0	548.0	273.67	0.	128.44	402.11	2.11
1	551.7	275.52	^{.02} +.023	126.61	402.15	2.15
3	555.7	277.52	^{.07} +.069	124.87	402.46	2.46
6	555.8	277.57	^{.14} +.138	124.51	402.22	2.22
9	555.8	277.57	^{.21} +.207	124.08	401.86	1.86
12	555.6	277.47	^{.28} +.276	123.71	401.46	1.46
15	556.2	277.77	^{.35} +.345	123.37	401.49	1.49
18	556.7	278.02	^{.41} +.414	123.01	401.44	1.44
19	557.2	278.27	^{.44} +.437	122.90	401.61	1.61
20	557.5	278.42	^{.46} +.460	122.78	401.66	1.66
21	557.6	278.47	^{.48} +.483	122. 68 ⁶⁸	401.63	1.63
22	557.7	278.52	^{.51} +.506	122.52	401.59	1.59
23	557.7	278.52	^{.53} +.529	122.46	401.51	1.51
24	557.8	278.57	^{.55} +.552	122.39	401.51	1.51
25	557.9	278.62	^{.58} +.575	122.27	401.47	1.47
26	558.3	278.82	^{.60} +.598	122.16	401.58	1.58
27	558.8	279.00	^{.62} +.621	122.09	401.77	1.77
30	559.1	279.21	^{.69} +.690	121.76	401.66	1.66 ✓
33	560.0	279.66	^{.76} +.759	121.52	401.94	1.94
36	560.3	279.81	^{.83} +.828	121.25	401.89	1.89
39	561.1	280.21	^{.90} +.897	120.99	^{402.10} 403.09	2.09 2.10
42 + 10	562.1	280.71	^{.97} +.966	120.63	402.31	2.31

Gravity Sacketon Area

On November 14, 1963, Hewitt's Geos exploration Company measured the ^{Gravitational} gravity gradient in Sec 24, R5E, T5S. Two north-south profiles of 4200 feet in length were ~~run~~ conducted to determine the possible existence of structural features within the area. ~~For~~

Profile A is located in the center of Sec 24 and profile B is 1320' to the west. ^{of "A"} Station A-30+00 and B-30+00 are located on the common boundary of Section 24 and 25.

Procedure:

The elevation control was surveyed to within ± 0.02 feet and at a station interval of 100 feet. A wooden gravimeter was used with a calculated accuracy of ± 0.5 milligals. The gravity values have been computed on the basis of two density values. 1.8 gm/cc approximating the density of alluvium and 2.6 gm/cc approximating the density of the exposed igneous unit were used. The data is presented on profile plots.

Conclusions:

Two distinct ~~a~~ changes in the gravity gradient or ~~slope~~ profile slopes are noted. Profile A exhibits a rapid change in the vicinity of Stations 00+00 to 03+00 and the remainder indicative of the regional increase of the basement complex to the southwest. Profile B exhibits a minor change in the gravity gradient between stations 18+00 ^{to} 22+00. To the north and south of this zone the profile is indicative of southwest slope of the basement complex.

These gradient changes may be interpreted in two manners or conclusions. First, a possible but doubtful northeast trending structural feature. This feature would represent a normal-rotated break with the hinge position located approximately near profile B with the major displacement noted on profile A. The second and more probable interpretation is a southeast break which is not intersected by profile B and just intersected by the northern stations of profile A.

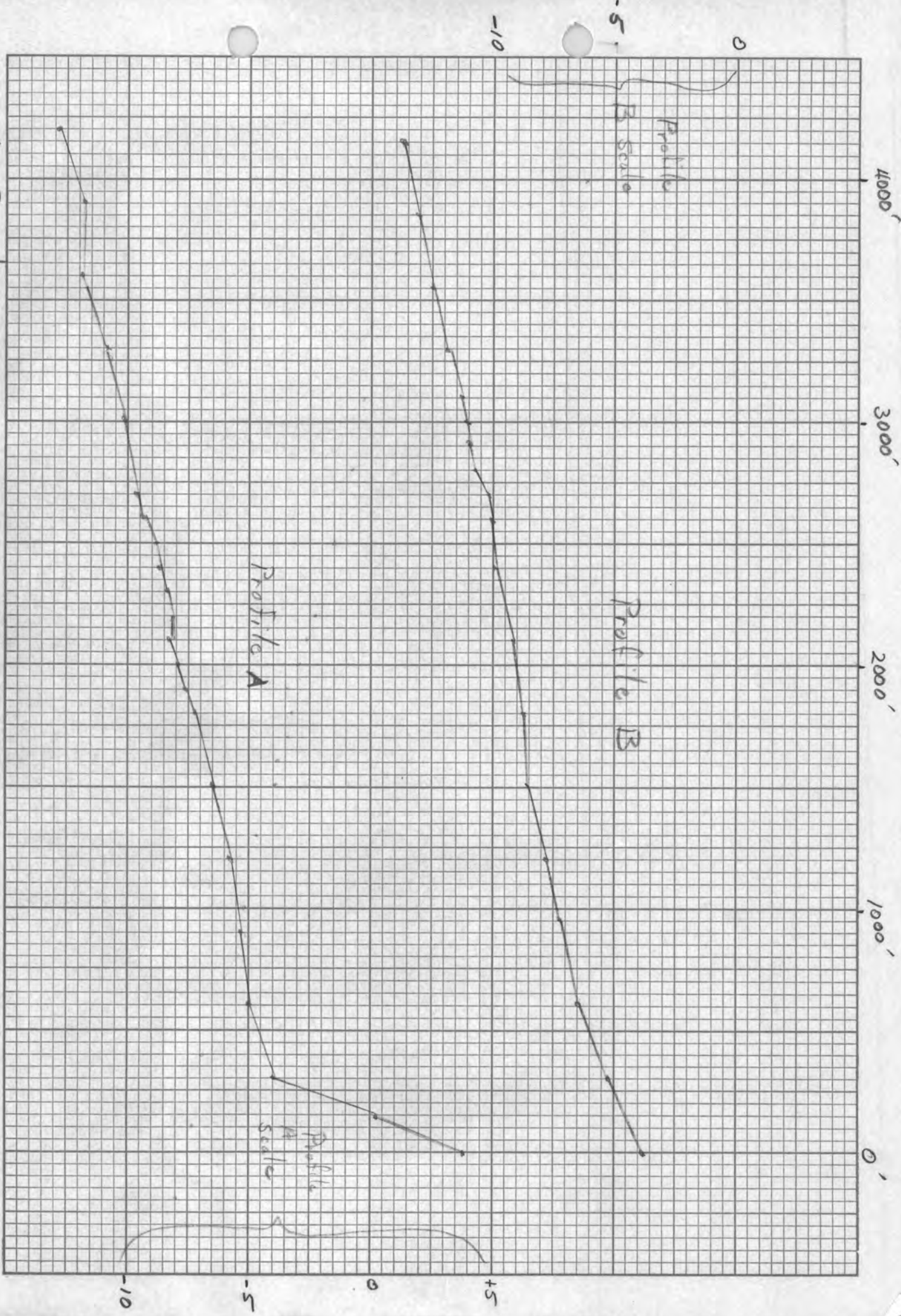
Recommendations:

A solution to the problem of stress
existence and trend of a break
would be solved by one additional
gravity profile located east of
profile A. This profile would
determine the extent and location
of any structural feature
which may act as a microobeying
control in this vicinity.

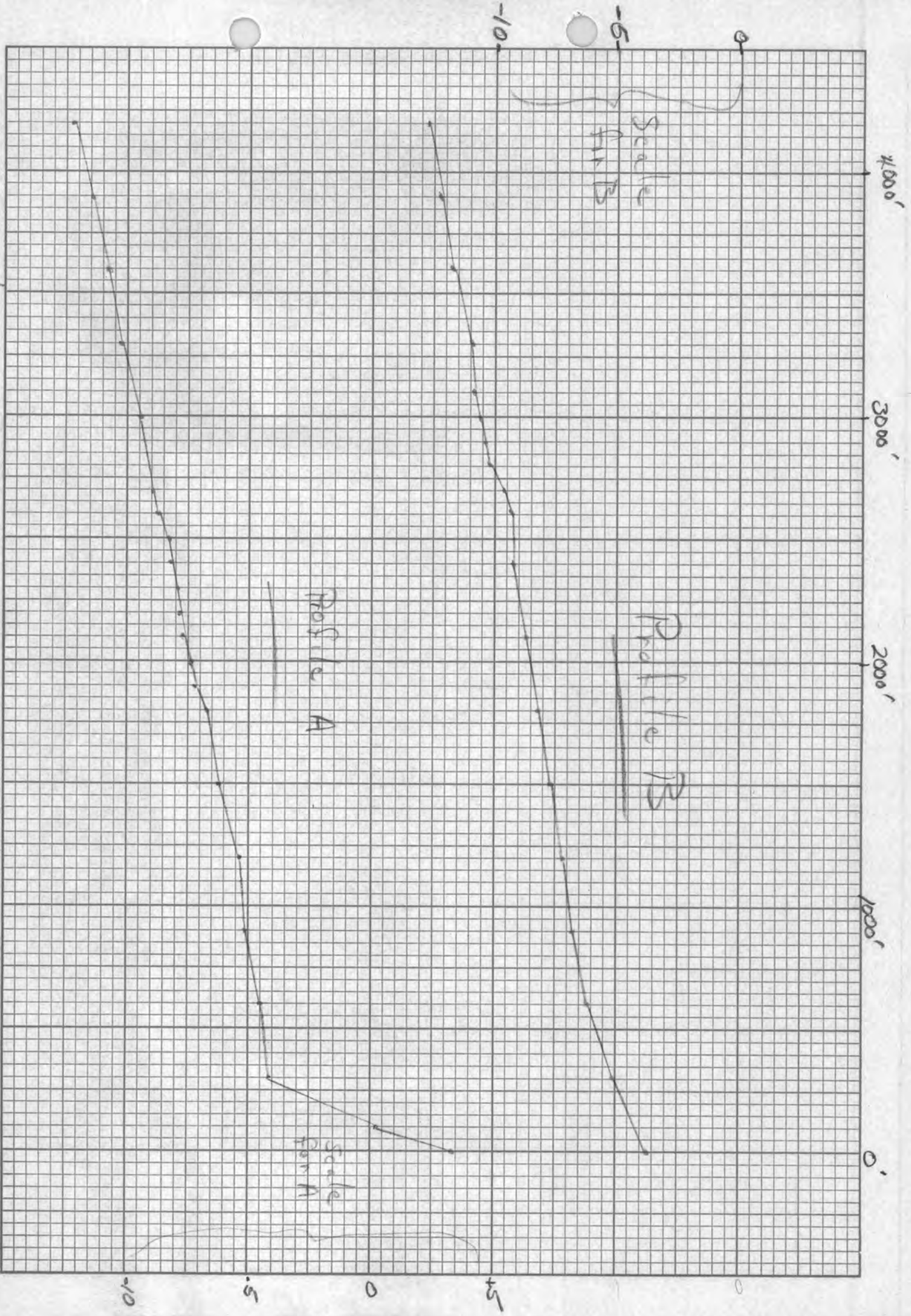
W W C

11-15-63

Gravity Sectors
 Density $(\rho) = 1.8 \text{ gm/cc}$
 Horizontal Scale $1'' = 500'$ Vertical Scale $1'' = 5 \text{ mgals}$
 Looking West



→ N



Gravity Section

Density $\rho = 2.6 \text{ gm/cc}$

Roark's West

Horiz. Scale 1" = 500'

Vert Scale 1" = 5 mgals

Sm. 11.5a

10 X 10 TO THE INCH
KEUFFEL & ESSER CO.



→ N

September 27, 1963

PRELIMINARY LOG

D. D. H. #2 Sacaton, Arizona for Minerals Exploration Co.

Location: "It" Claim No. 2. 150' west and 100' north (approx.) from south $\frac{1}{2}$ corner Sec. 24, T 5 S, R 5 E. Vertical Hole. Collared 5 1/8" rock bit. Drill Co. Metler Bros. Driller: Augie Greenwood. Truck mounted, mast, Longyear 44 drill.

0' - 50' -- Alluvium. Rock Bit.

50' - 630' -- Casa Grande conglomerate (loosely consolidated ferruginous ground mass with some schist but mainly granitic angular fragments). Rock bit.

630' - 830' -- Broken, soft, loose variable fault zone with clay, sand and altered conglomerate zones. Rock bit 630-660. Soft red clay.

Core 660 - 670. About 6 inches recovered. Very altered conglomerate.

Rock bit 660-726. Clay, sand, some conglomerate. A few minor cuttings of "exotic" copper oxides came up with cuttings about 720 - 726'

Core 726-830. Recovery poor to nil.

726-732 three inches from conglomerate.

732-737 two foot recovery altered conglomerate and limonite and hematite fragments and clay.

737-762 three inches of fragments. Rest sand.

762-787 Very altered conglomerate and much hematite. sludge running very red. 3 ft. recovery.

787-806 ~~Altered~~ ^{Soft, white, qT_3 & alt.} 2 inches recovered. _{Acid.}

806-807 Same, 2 inches recovered.

807-

807-815 Same. 3 inches recovered.

815-825 Altered conglomerate. 2 ft. recovery.

825-830 Altered conglomerate, possibly at bottom grading into rotten monzonite. 5 ft. recovery.

J. W. Marlatt

J. W. Marlatt

September 25, 1963

Mr. W. Layton Stanton
Union Oil Company of California
Union Oil Center
Los Angeles 17, California

Re: Sacaton Project, Arizona

Dear Layton:

Herewith transmitted are the original and one copy of the Metler Brothers' statement through September 21, 1963 for your attention and payment. We have examined the figures and find them correct.

The contract with Woolsey et al calls for Mexco to prepare and record affidavits for annual assessment work done. Do you wish to handle this via Union's legal department or have us do it or what? The \$2,000 minimum expenditure required for the Winnie Group is amply taken care of by the \$1,902 drill hole, site preparation costing \$56.00 and \$50 related work by GEOEX.

Drill Hole #2. Sept 24 was spent feeling for bedrock. Below 630 feet the ground changed. A core run was tried at 660-670, but little core recovered because of soft ground. The rock bit was put back on and at 720 ft. (approx.) a few specs of exotic copper were seen in the cuttings. The core barrel was put back on and used from 726-777 ft. on Sept. 24. The ground changed character frequently. Thought bedrock was reached with the return of core fragments of highly decomposed rock from the interval 732-739 but below this was 23 ft. of pure sand with no core recovery. At 752 ft. began to pick up broken rock with iron staining and at the shift end the core was a deep red hematite mud with extremely decomposed rock, again looking like the leached and altered surface of bedrock. Yesterday's interval will now be reamed today and a heavy mud circulated to keep the hole open, then probing with the core barrel will be resumed. The hole will not be cased until solid bedrock is reached.

No further sign of any copper has been seen.

Sincerely yours,

JWM: jh
Enclosures

J. W. Marlatt

September 20, 1963

M E M O

To: Mr. W. Layton Stanton
Union Oil Company of California
Union Oil Center
Los Angeles 17, California

Re: Sacaton Project
Pinal County, Arizona

1. Drill hole #2 at 2:00 p.m. September 19 was at 560 ft. Footage this week so far has averaged better than 70 ft. per day. The rock bit is still being used, there has been no apparent change in the formation which is the occasional boulder-conglomerate type. If the present rate continues, contact with bedrock can be expected about Monday, Sept. 23, based on the information supplied for the nearby ASARCO drill hole. We are keeping close track and taking advantage of ASARCO assistance.

2. Regarding third party claims in Sec. 15, T 5 S, R 5 E, a search of records in the Pinal County Courthouse, Florence Arizona indicates the following:

Santa Rosa No. 1 & No. 2 were located Nov. 27, 1961 by Larry and Iris Babcock with Fred Andrade as witness. Recorded in Docket 309, pages 278 - 279.

On 1/9/62 Fred Andrade and Woodling M. Hauser located the Santa Rosa No. 1, 2, & 3 and filed them on 3/1/62. Recorded Docket 317, pages 264 - 266.

Andrade and Hauser also located the Santa Rosa No. 4 on the same date but it is recorded in Docket 319, page 142.

On 6/8/62 Richard Andrade and Morris and Edith Flax located the Copper King. It was recorded 6/25/62, Docket 327, page 355.

No assessment affidavit for the year 1962 - 1963 has yet been filed but work was being done in September - *as you know.*

I finally was able to talk with Mr. George Freeman, Casa Grande, who had been in Nevada for several days. He mentioned only the Copper King and Santa Rosa 1 & 2 so there may be holdings prior to Woolsey, et al of only the three claims. However this was before I learned at the courthouse that there were five in

the group. Descriptions on the notices are vague as to location-- you read one of them on the ground. I went by Brunton and pace from the W $\frac{1}{2}$ cor. Sec. 15 to two locations and have prepared a sketch of approximate locations of the five claims, but the bearing along strike of the claims is an approximate guess. Freeman said he planned to have them surveyed soon and would furnish us a map when completed.

3. Sec. 16, T 5 S, R 5 E. On May 21, 1951 the State of Arizona issued Patent No. 51 to Helen B. McGowan, 3246 Savana, ElPaso, Texas for the SW $\frac{1}{4}$ and the S $\frac{1}{2}$ SE $\frac{1}{4}$ of Sec. 16, "excepting and reserving unto the United States rights of way for ditches and canals, constructed by their authority". The patent covers 240 acres. There is no mention of mineral or oil rights. Recorded in 1957 when she sold it, Docket 189, pages 155-156. Same docket, page 157, Helen McGowan sold the land to George and Maurine D. Fraser but inserted "except for $\frac{1}{2}$ of all the oil and mineral rights of said lands".

Paul Hinshaw et al located several groups of claims in August 1962. Among them are the Rosco Bob group which blankets Sec. 16. Rosco Bob 1 thru 18 located 8/13/63, recorded 8/15/63 in Docket 331, pages 279-296 and Rosco Bob 19 thru 25 located 8/16/62 recorded 8/20/62 Docket 331, pages 481 - 487. One of Hinshaw's associates is A. B. Walker. George Freeman apparently has control (option?) of this group and showed me a claim location map he is preparing and promised me a copy in a few days. Obviously the mineral rights status of Sec. 16, or where he was or both, when he located the Roscoe Bobs was not fully known to Hinshaw and may not now be known to Freeman, although this makes no real difference to us, particularly for the present.

Partly because of inadequate location, discovery and assessment evidence on the part of Hinshaw, Woolsey located the Hunch group 1 thru 22 on 8/28/63 and recorded them 9/5/63 Docket 361, pages 232 - 253.

The strike of the mineral showings in Sec. 15 -- the ones you saw -- is N 30 E and a prolongation of them from their exposures would barely enter the SE portion of Sec. 16 before entering Sec. 21. Otherwise, except for a little red staining near its center, Sec. 16 is not especially interesting or favorable at this time and therefore, we do not recommend further comprehensive and detailed checking now.

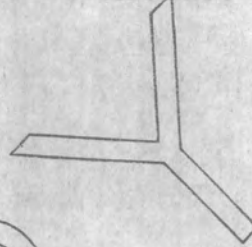
4. Woolsey reported a magnetic anomaly on the It #3 so I checked it out on Sept. 17 during a visit to the drill. A small anomaly exists, it is close to outcrop, and the anomaly reflects only a granite hill buried under less alluvium.

J. W. Marlatt.

J. W. Marlatt

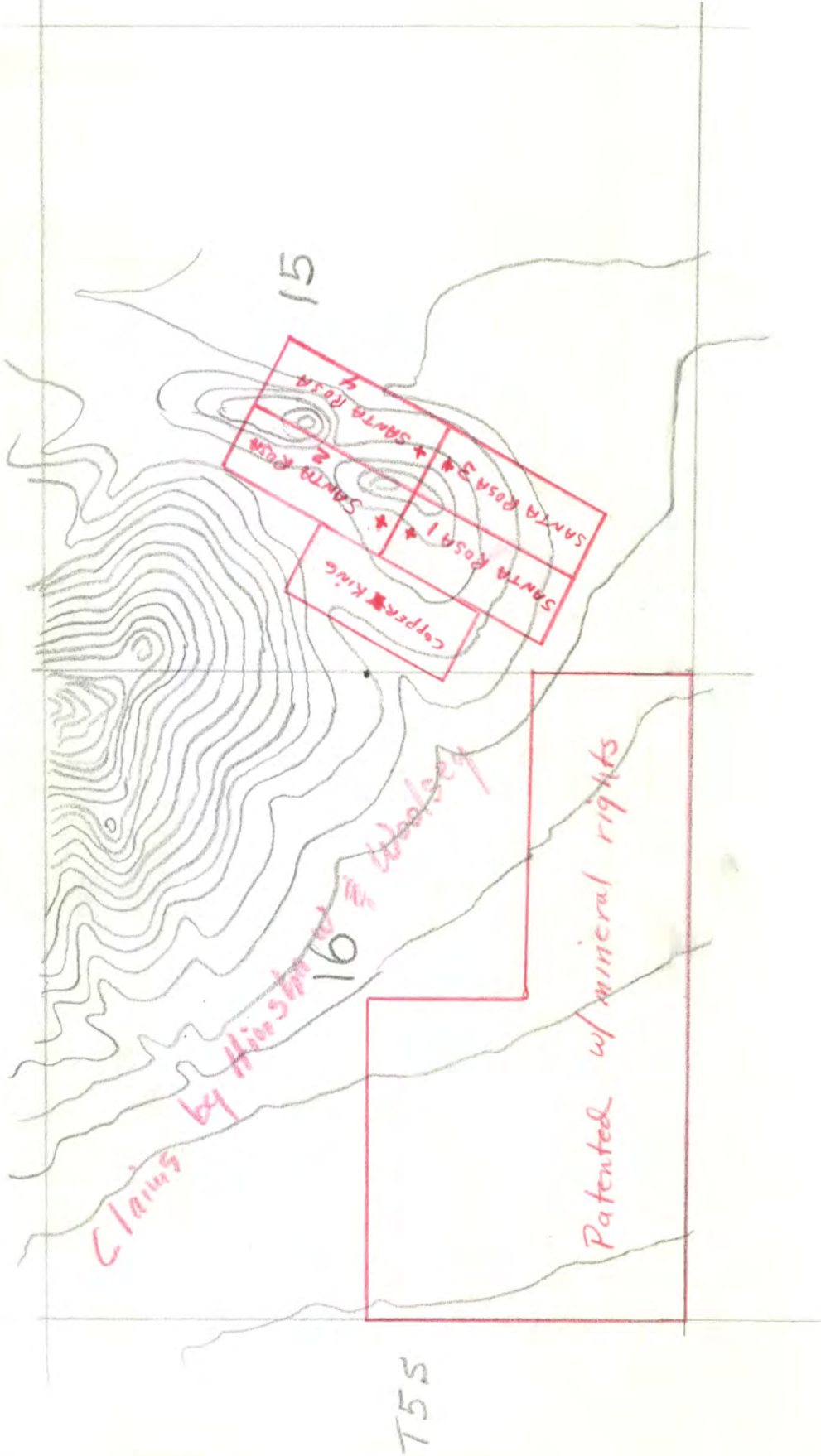
JWM: jh

cc: extra encl.



COOP

R5E

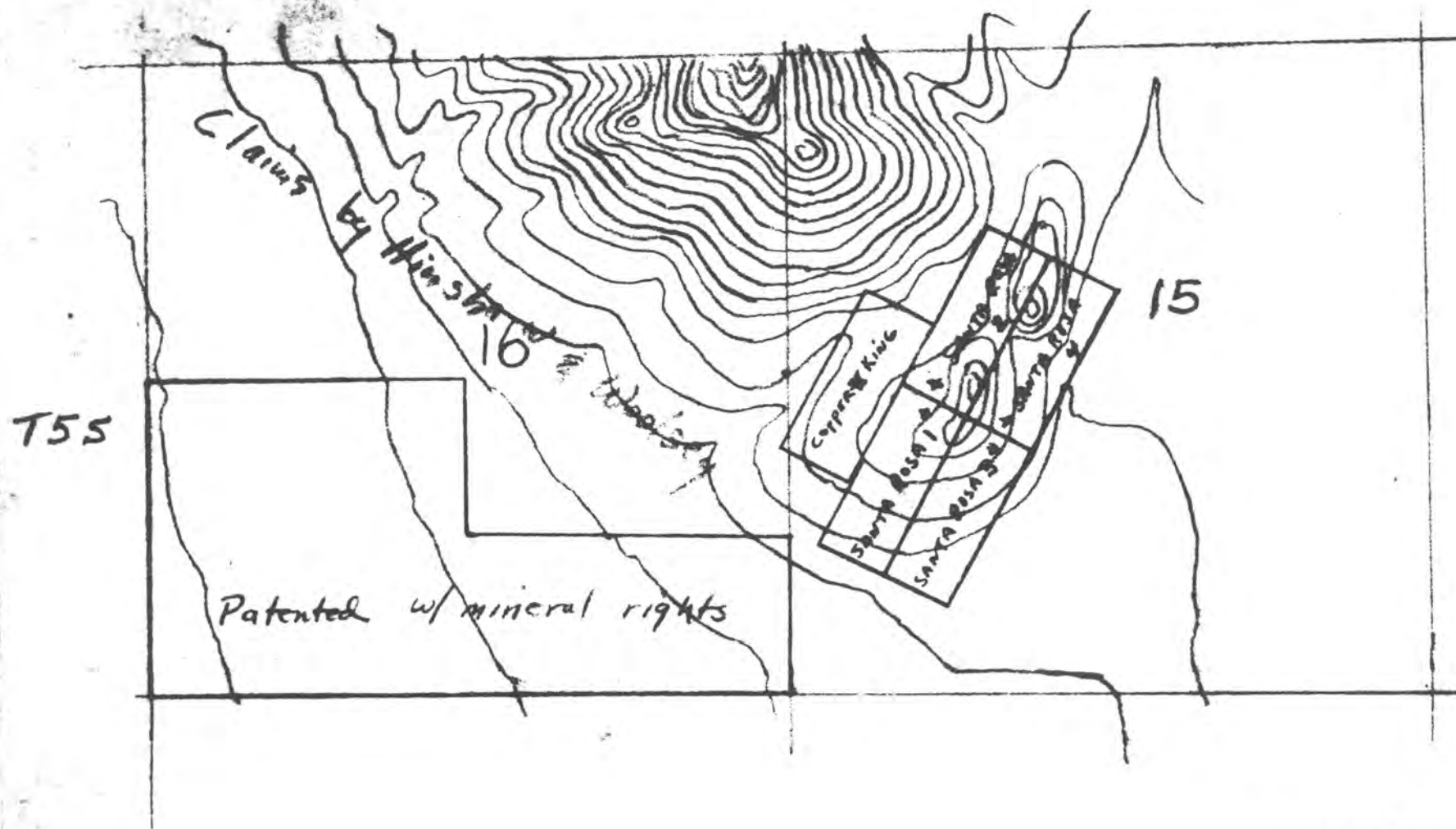


Sacaton Project

Approx. Location of
Santa Rosa Group

Scale 4" = 1 mile

R5E



Sacaton Project

Approx. Location of
Santa Rosa Group

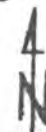
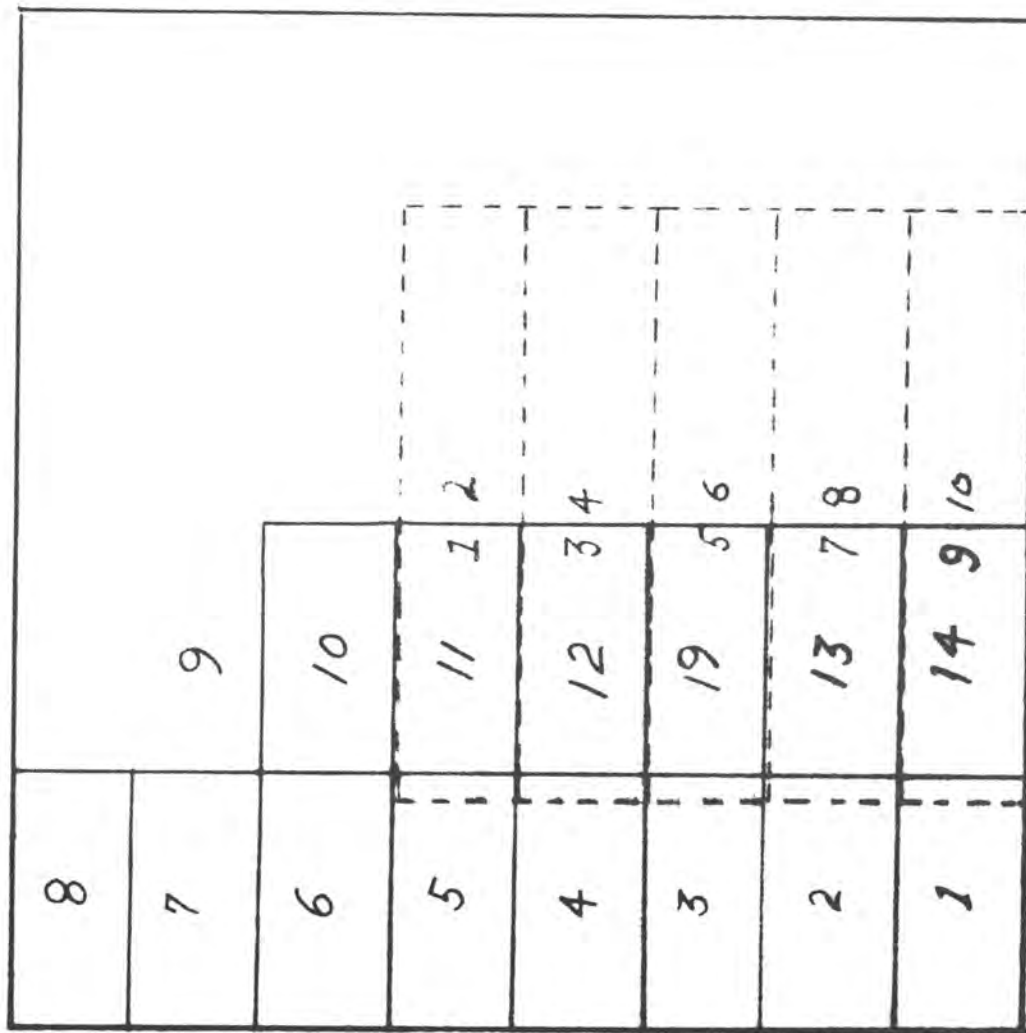
Scale 4" = 1 mile

MINING RECONSTRUCTION COMPANY
P. O. BOX 8671 TUCSON, ARIZONA

SEP 20 1968

Sec 16
T5S R5E

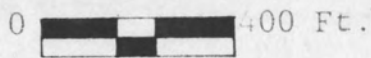
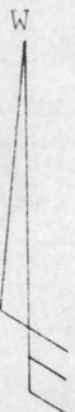
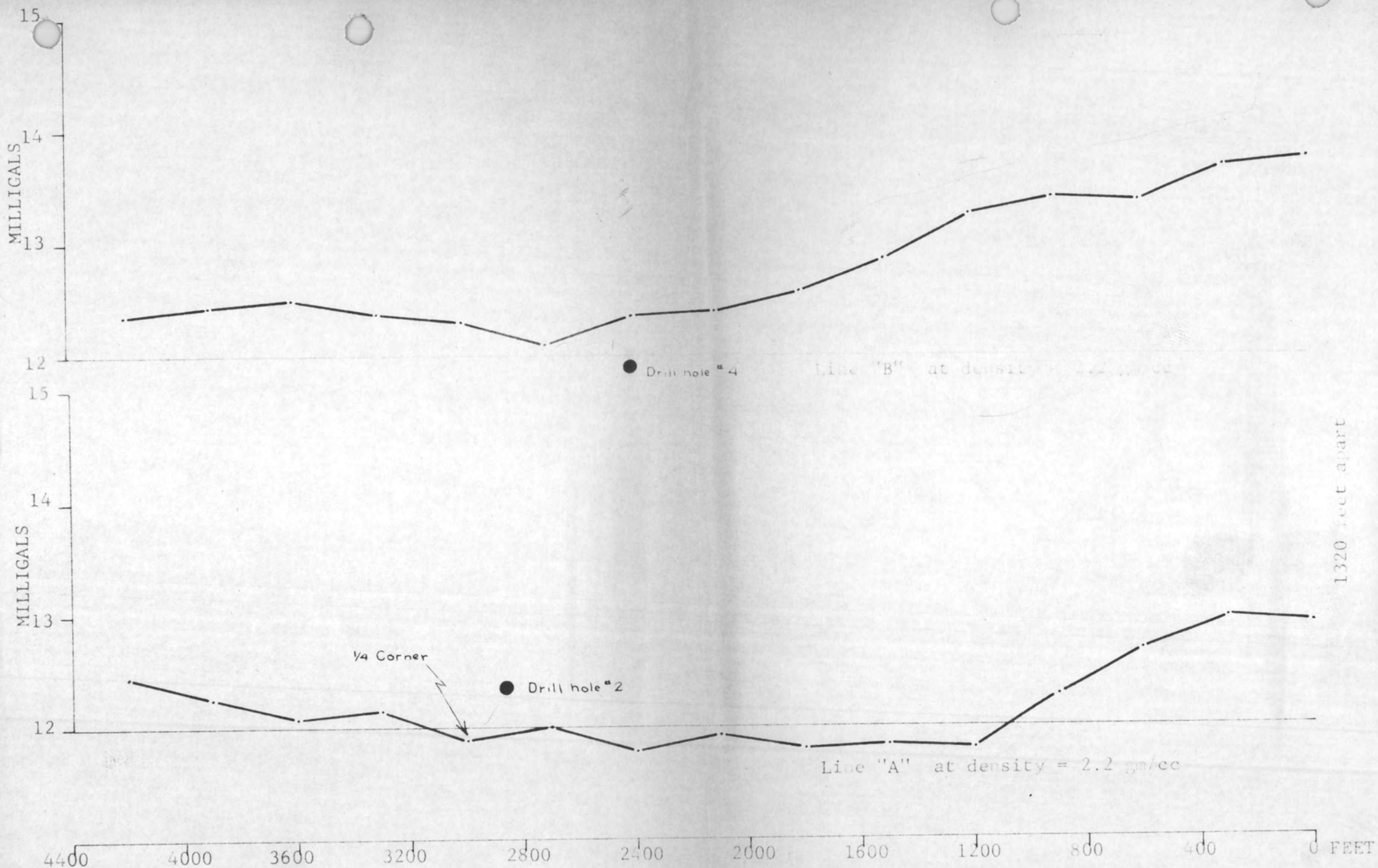
Showing
Some of The 25
Rosco Bob Claims
located by Hinshaw
Showing
Some of The 22
Hunch Claims of
Woolseys



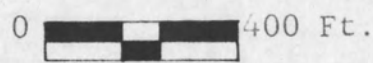
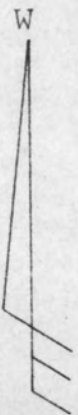
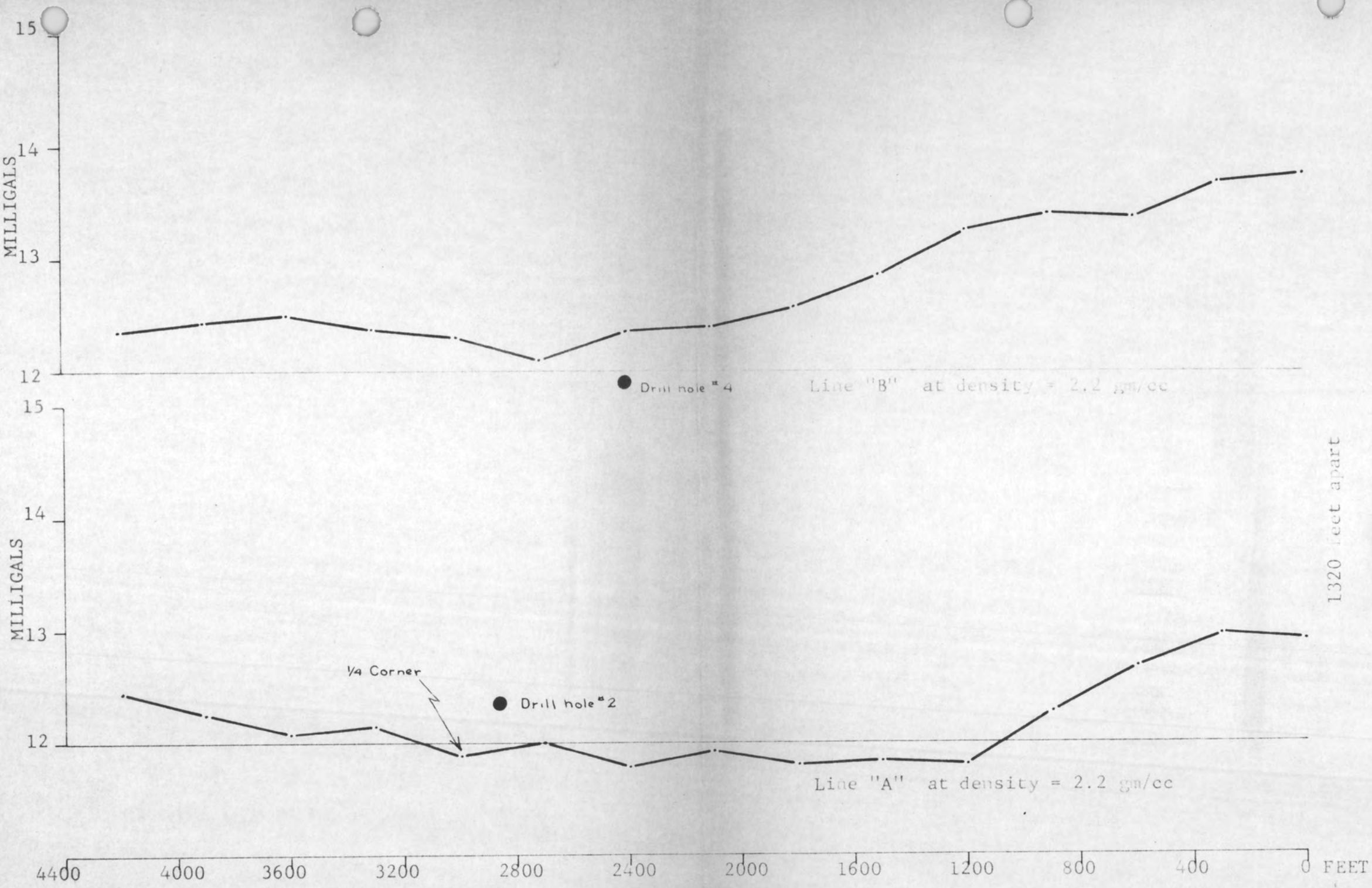
1" = 100'

WERNICKS GEOEXPLORATION COMPANY
P. O. BOX 5671 TUCSON, ARIZONA

SEP 30 1969



GRAVITY PROFILE
 SACATON PROJECT
 OF
 MINERALS EXPLORATION COMPANY
 Sec. 24, T 5 S, R 5 E
 Pinal County, Arizona
 November 1963
 HEINRICH'S GEOEXPLORATION COMPANY



GRAVITY PROFILE
 SACATON PROJECT
 for
 MINERALS EXPLORATION COMPANY
 Sec. 24, T 5 S, R 5 E
 Pinal County, Arizona
 November 1963
 HEINRICHS GEOEXPLORATION COMPANY

1" = 1 millyard



South

North

LINE "A" C density = 2.2 gm/cc

5/4 col. DDH #2

DDH #14

LINE "B" C density = 2.2

4400 4000 3000 2800 2400 2000 1600 1200 800 400 0

Scale 1" = 400 ft

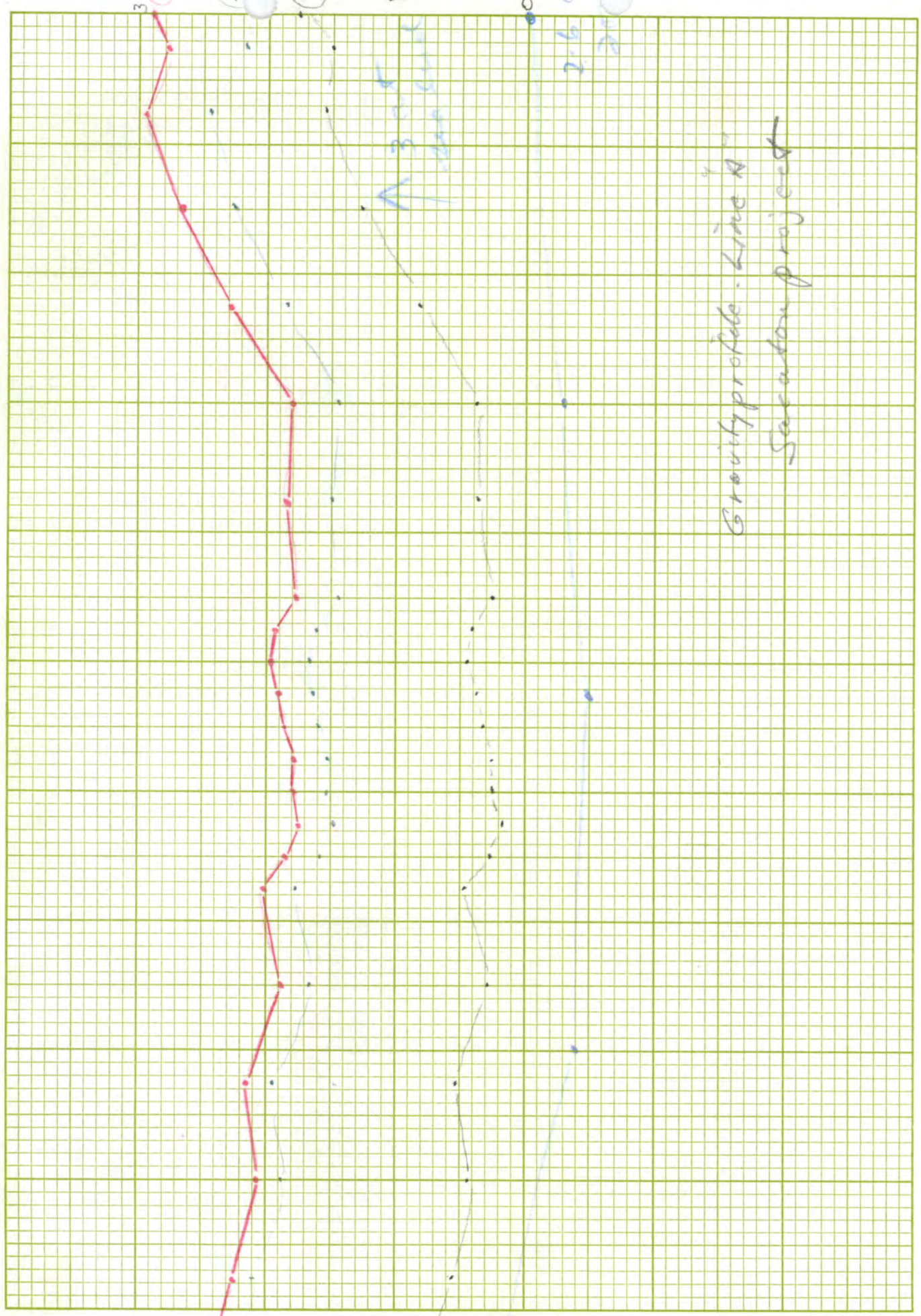
Sacaton Project
 Sec. 24
 T.S.R.F.E.
 Pinal Co., Ariz.

Gravity profiles
 for
 Mexico

by GOSSEN

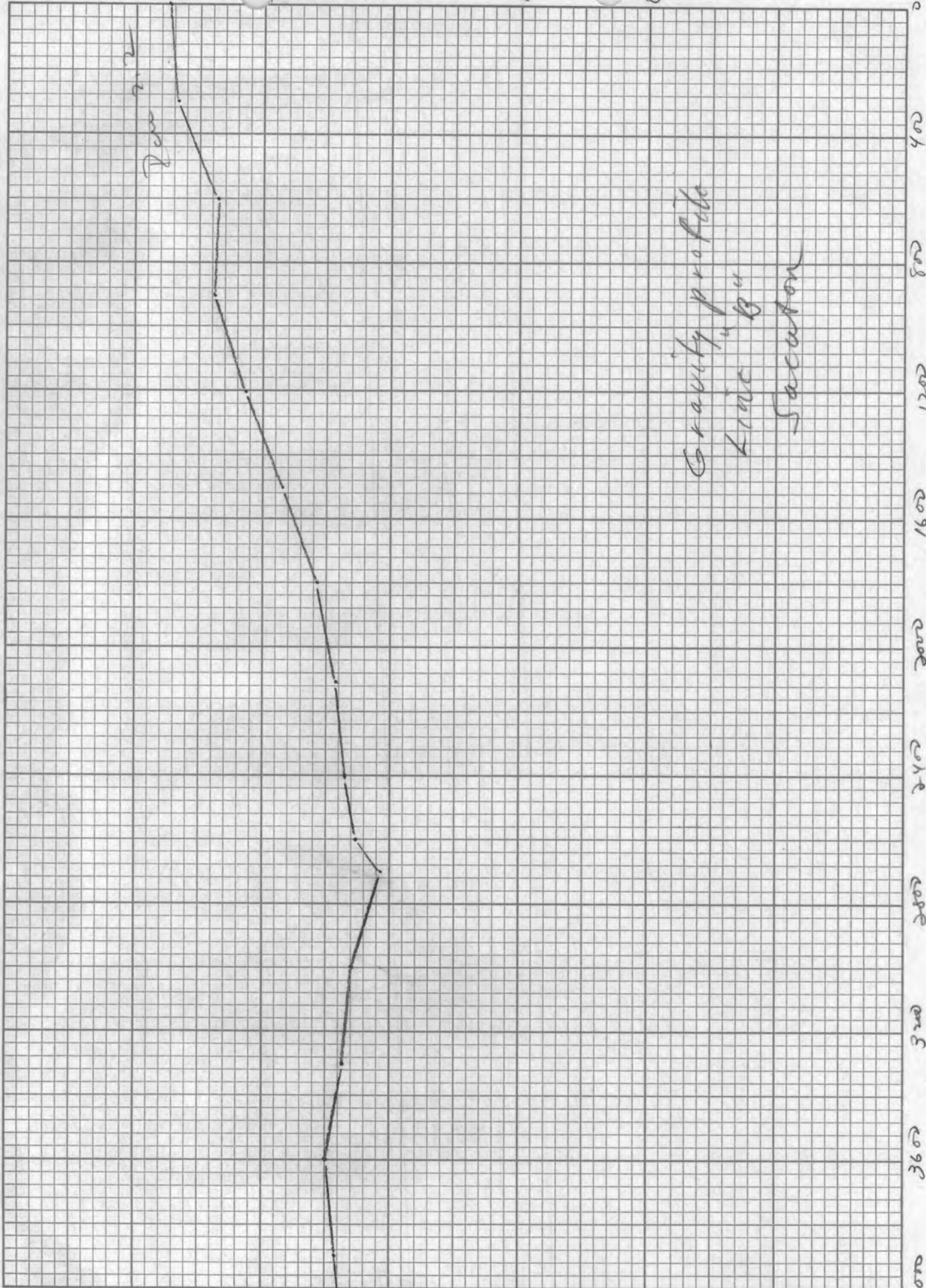
Nov. 1963

West



Gravity profile - Line A
Safarou project

4000 3600 3300 3000 2400 2000 1600 1200 800 400 0



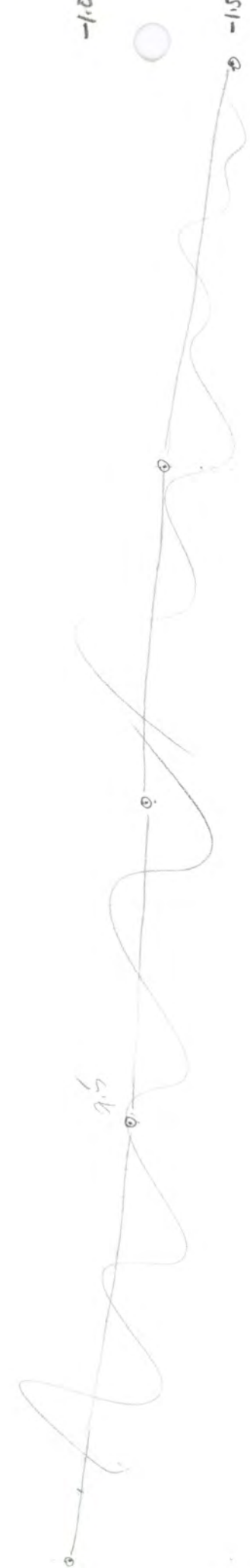
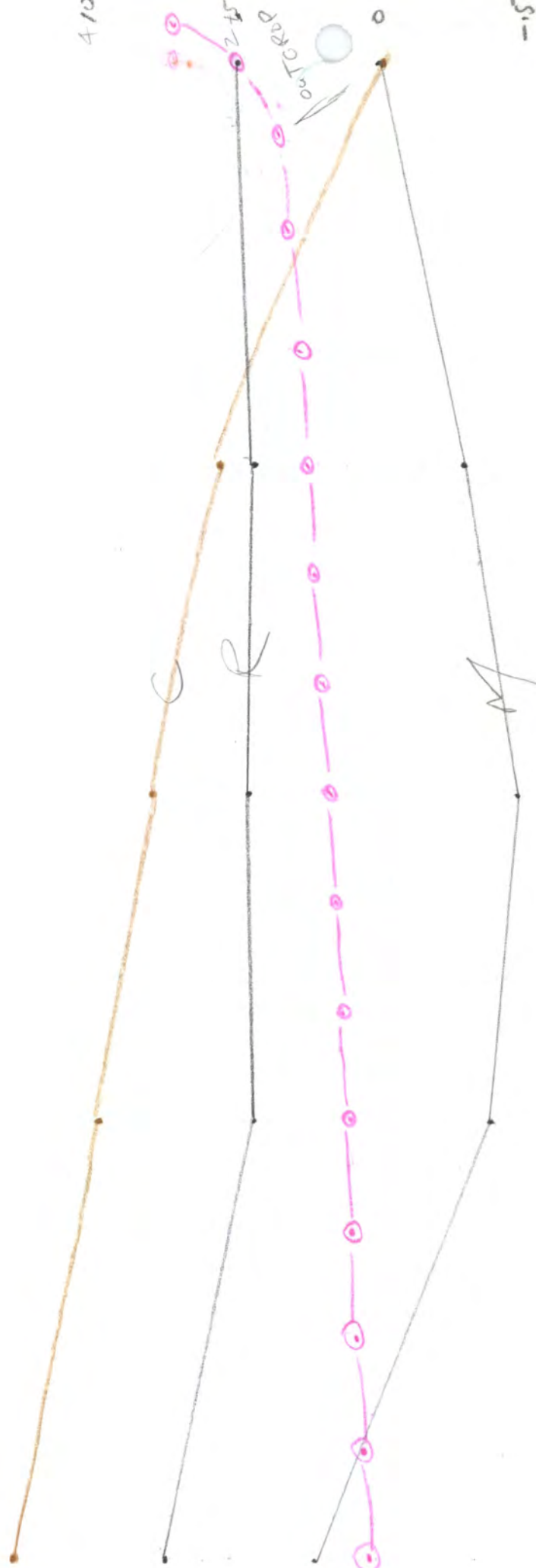
2
1
0

400 800 1200 1600 2000 2400 2800 3200 3600 4000

2.2

615

412

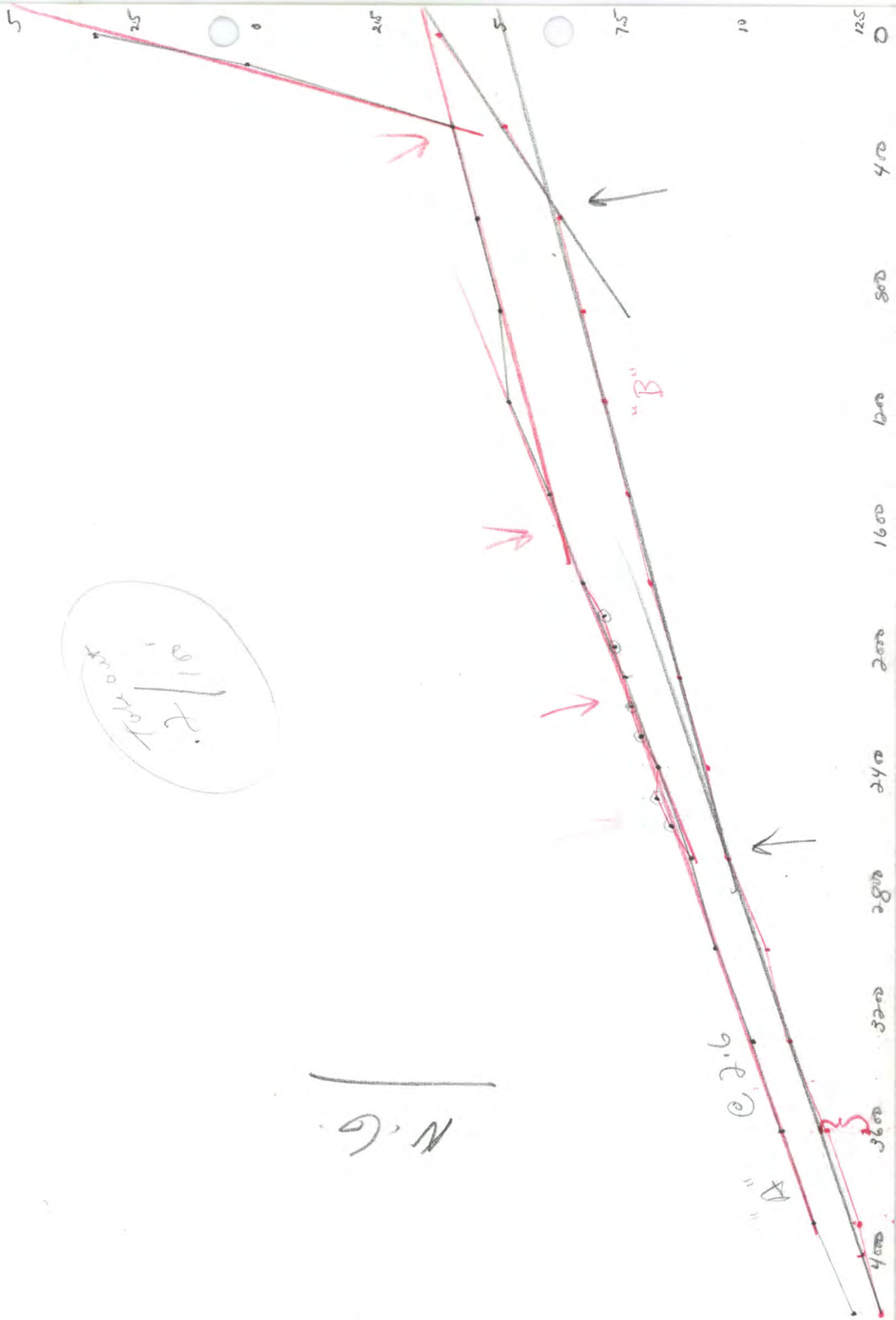


4000 3600 3200 2800 2400 2000 1600 1200 800 400 0

-2

-1.0

-5



L. J. Taylor
1911

N.G.

2.6

"B"

"A"

May 6, 1964

Mr. W. R. Moran, Manager
Minerals Exploration Company
Union Oil Center
Los Angeles 17, California

Dear Bill:

Re: Sacaton Project, Pinal County Arizona
State of Arizona Prospecting Permits
No. 565 & 684

In response to your letter to Walt of May 5, 1964, the said \$2,720.00 worth of work referred to in our statement of Sept. 12, 1963 and Bill Marlatt's letter of January 8, 1964 is contrary to the P.P. 565 extension request affidavit, in that:

1. The Services, Mobile Magnetics and I. P. surveys were conducted on federal lands only, held by unpatented mining claims.
2. None of the work touched on state lands as described in permits No. 565 and 684.
3. Therefore any affidavits that Geoex worked on lands as described in permits No. 565 and 684 are in error.

4. Marlatt's letter of January 8, 1964 is summarized as follows:

Winnie Claim Group (20 Fed. Claims)	\$2,002.00
145 Claim Group* (Contiguous Fed. mining Claims)	\$1,4500.00
185 Claim Group* (Contiguous Fed. mining claims, 40 additional claims work due 1964)	\$5,150.00
	<hr/>
	\$21,652.00

* See letter of Jan. 17, 1964 and Map.

May 6, 1964

You note no mention was made of any work or money spent on state lands which would be held not by claims but by Arizona State prospecting permits. The Winnie Claim Group is not contiguous with 185 other Federal claims and therefore was listed separately.

The Arizona State Prospecting Permit lands, because of being held under different laws, would have been listed separately.

I think the mistake was made because of confusion in the difference between Federal Mining Claims and the assessment work required to hold them and State Prospecting Permits of which there was no mention in any of our statements or correspondence.

I hope this explains what I think happened. What to do about it if anything, is something else again. Of course, Sullivan knows that they received no results of any work done on any state lands and that we have stated that they have all data we know anything about. Therefore, they assume no such work was done, and if so, that this constitutes a "discrepancy" as they call it. Technically, this might have been construed as an agreement violation at the time. However, the agreement was settled and signed off. I doubt if the State Land Department cares one way or the other except technically, an affidavit in lieu of actual work performed might be considered as "injury" to the State, even though unintentional, it was not fraudulent and was accepted by the state, etc., that is why we recommended Verity.

Anyway, we note your instructions and will act accordingly.

You already have our statements regarding delivery of all material to Sullivan, et al, in a copy of our letter to them of 18 February 1964 and our letter to you of 19 February 1964. However, this is to reiterate that all maps, reports, documents, samples, etc. as required by agreement have been delivered to same.

Sincerely,
HEINRICHS GEOEXPLORATION COMPANY

EGH: jh
cc: (Enclosed)
H. S. Harry
K. J. Robertson
R. T. Anderson
Sam Snyder

E. Grover Heinrichs
Vice President

May 6, 1964

Mr. W. R. Moran, Manager
Minerals Exploration Company
Union Oil Center
Los Angeles 17, California

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E. Grover Heinrichs
Vice President

EGH:jh
cc: (Enclosed)
H. S. Harry
K. J. Robertson
R. T. Anderson
Sam Snyder

LONG DISTANCE PHONE CALL REPORT

Request of Mr. W.

Date 5/2/64

Number Called HL 2-7000 638

Time Requested _____ A.M.
P.M.

Exchange

Number

Individual Bill Moran

KIND OF SERVICE DESIRED

Station to Station

Person to Person

Firm W. H. ...

Time Called 7:46 A.M.
P.M.

Street Address _____

Time Connected 9:48 A.M.
P.M.

City Los Angeles State Cal

Time Off 10:07 A.M.
P.M.

Remarks: _____

Minutes Elapsed Time 20

They will look into it at L.A.

CHARGES: \$ 8.00

by what us know. re Sullivan -

Phone Company Verification of Charge Given by _____

Sacaton.

Switchboard Operator's Notations

Company Business

Personal Call

Charge to Sacaton A/C No. _____

Signed W.

Switchboard Operator

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES**



RETAIN A COPY FOR YOUR FILES

**INJURIES AND EMPLOYMENT
IN METALLIC ORE MINES AND MILLS—1963**

4/28/64

**INDIVIDUAL COMPANY DATA—
CONFIDENTIAL**

If permission to disclose is withheld by checking the box marked NO in question immediately preceding the signature, the data furnished in this report will be treated in confidence by the Department of the Interior, except that they may be disclosed to defense agencies.

MINERALEXPLORATION CO.

ARIZ.
02 461 South Boylston
011 Los Angeles 17 1/2 Calif.
10420 Casa Grande property - Pinal

(Please indicate any change necessary for correct name and address)

Name and location of mine:	
Name	
State	County
Name and location of mill:	
Name	
State	County

Please reply to the following questions and return the schedule as promptly as possible in the enclosed envelope which requires no postage. PLEASE COMPLETE THE FRONT PAGE OF THIS FORM EVEN THOUGH YOU HAD NO DISABLING WORK INJURIES TO REPORT FOR THE YEAR. A separate report should be prepared for each mine including associated ore-dressing plant that you operated during the year. If ore-dressing plant is not directly associated with mine prepare a separate report for the plant.

I. EMPLOYMENT AND INJURIES

1. EMPLOYMENT. Report data for all men engaged in production, exploration, development, overburden removal, stockpile, construction, maintenance, and repair work—including supervisory and technical personnel at the operation. Include proprietors and firm members (owners, partners, or operators) performing manual labor or supervisory duties. Report separate data on all offworkers at the operation.

DEPARTMENT	(a) Average Number of Men Working	(b) Days Active	(c) Total Man-Shifts Worked During Year (column e + d)	(d) Length of Shift (Hours)	(e) Total Man-Hours Worked During Year	(f) Summary of Work Injuries (As listed on reverse side of form)	
						Fatal	Nonfatal
AT UNDERGROUND MINE							
(01) Underground							
(02) Surface shops, yards, etc., at under- ground mines only							
AT OPEN PIT MINE							
(03) Open-pit (including associated shops and yards)							
AT MILL							
(04) Ore-dressing plants (including asso- ciated shops and yards)							
AT OFFICE							
(00) Offworkers (at mine and/or mill)							

How many mines _____ (number) and/or mills _____ (number) are included in the employment data? If more than one mine or mill, list names: _____

2. INJURIES. If you had NO DISABLING WORK INJURIES* during the year, check block ; otherwise, please complete column f, Summary of Work Injuries, above; also, list them on the reverse side of this page.

*A DISABLING WORK INJURY is one which occurs in the course of and arises out of employment, irrespective of whether the injury is compensable and whether or not your establishment was operating on the days following the date of injury. The term "injury" includes occupational diseases. A disabling work injury is one which results in death or permanent impairment or which temporarily disables the worker for one full day or more after the day of injury (ASA Z16.1).

II. GENERAL

1. If any new or reopened mines or mills were operated in your vicinity during the past year, give names and addresses of owners or operators _____

2. Have you sub-contracted any of your operations during the reporting year? Yes No

(a) If yes, is sub-contractor's data included in this report? Yes No

(b) If you sub-contracted any of your operations, please furnish the following information: Name and business address of the sub-contractor(s)

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

(c) Effective date of sub-contract(s) 1963 (d) Name and exact location of the operations sub-contracted Sacaton

prospect, T4, 5 & 6S, R 4, 5, 6E, Pinal County, Arizona 5 mi. NW
Casa Grande, Arizona

3. MAY THE BUREAU OF MINES DISCLOSE YOUR INDIVIDUAL DATA? YES NO. The signature on this report constitutes a consent to the publication of the INDIVIDUAL COMPANY DATA in this report unless the blank designated NO in the preceding sentence has been checked.

Signature *W. B. Heinrichs, Pres.*

Official position
**Heinrichs Geoex. Co. Agents for
Minerals Exploration Co.**

(OVER)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

INDIVIDUAL COMPANY
DATA—CONFIDENTIAL

If permission to disclose is withheld by checking the box marked NO in question immediately preceding the signature, the data furnished in this report will be treated in confidence by the Department of the Interior, except that they may be disclosed to defense agencies.

MINE AND QUARRY INFORMATION
SUPPLEMENT FOR YEAR 1963

Covering Exploration



MINERALS EXPLORATION CO.

ARIZ.
661 South Boylston
Los Angeles 17, Calif.
Casa Grande property - Pinal

OFFICIAL USE ONLY			
Com. Code	QU	Q	V

When used in this report the word "Mine" includes quarry, placer, pumping and brine operation. If no man-hours were spent on the property during the year, check question II. 1, sign report and return to the Bureau of Mines. If the mine was inactive during the year but there were shipments from stockpile, assessment work, maintenance work, and/or exploration and development, this form should be completed.

I. MINE OR QUARRY COVERED BY THIS REPORT

1. Name of mine or quarry Sacaton Prospect
 2. Nearest town Casa Grande, Arizona
 3. County Pinal State Arizona Mining district _____
 4. Section _____ Township T 5 & 6 S Range 4, 5 & 6 E
 5. Distance and direction from nearest town or nearest intersection of State or U.S. numbered highways, or from fork of nearest creeks, or other prominent geographic feature; indicate whether land miles or air miles 5 mi. NW Casa Grande

II. ACTIVITY STATUS OF MINE AS OPERATED BY YOU DURING YEAR (Check the ONE most applicable)¹

1. Inactive, idle, or abandoned entire year
 2. Producing entire year
 3. Producing part of year (give dates)
 A. From _____ to _____
4. Shipping from stockpiles as only activity
 5. Exploration and/or development work only
 6. Assessment work only
 7. Maintenance only

Give name and address of operator if operated by someone else part of year _____

¹ If shipping from stockpiles but also producing, check box for producing all or part of year.

III. NATURE OF PRODUCTION WORK OR OTHER ACTIVITY DURING YEAR (Check ALL applicable)

1. Underground mining
 2. Open-pit or strip mining
 3. Open quarrying (stone)
 4. Shipping from stockpiles
 5. Well or pumping operation
 6. Treating materials from dumps or tailings
 7. Leaching material from dumps or tailings
 8. Dredging
 9. Other (Specify) Contracted Geology & Geophysics & drilling only

IV. EXPLORATION AND DEVELOPMENT (INCLUDING STRIPPING) FOR MINERALS DURING YEAR. Include contract work done for you by contracting firms and work done by other units or subsidiaries of your company. IF NONE WAS DONE ON ANY BASIS BY YOU OR FOR YOU, CHECK HERE .

A. Identify the Major commodity and Minor commodity for which exploration and/or development work was done during the year.
 1. Major commodity Copper
 2. Minor commodity Moly

B. Exploration and Development Activities by type of activity, footage and quantity of material produced during the year:

ACTIVITIES PRODUCING ORE AND/OR WASTE				ACTIVITIES NOT PRODUCING MATERIAL	
Type	Feet	Quantity of Material (Check Unit) Short Tons <input type="checkbox"/> Cubic Yds. <input type="checkbox"/>	If Quantity of Material Not Available Give Average Cross Section Dimensions of Opening	Type	Feet
1. Shaft sinking				7. Diamond drilling	<u>Contracted 3,000 ft.</u>
2. Raising				8. Churn drilling	
3. Winzling				9. Rotary drilling	
4. Tunneling				10. Long hole drilling	
5. Drifting				12. Percussion drilling	
6. Crosscutting				13. Other (Specify) <u>Geology & Geophysics contracted 25 sq.mi.</u>	
11. Trenching					
14. Stripping	<u>XXXXXXXXXX</u>		<u>XXXXXXXXXXXXXX</u>		
15. Other (Specify)					

V. (A) Did you modernize or improve your mine or plant by installing or changing equipment? Yes _____ No X
 If yes, give brief statement _____

(B) Were your operations affected by any important events or outside economic conditions? Yes _____ No X
 If yes, give brief statement _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

INDIVIDUAL COMPANY
DATA—CONFIDENTIAL

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SUPPLEMENT FOR YEAR 1963

Covering Exploration

MINERALS EXPLORATION CO.
ARIZ.
02 461 South Boylston
011 Los Angeles 17, Calif.
10420 Casa Grande property - Pinal

OFFICIAL USE ONLY			
Com. Code	QU	Q	V

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 2. Nearest town Casa Grande, Arizona
 3. County Pinal State Arizona Mining district _____
 4. Section _____ Township T 5 & 6 S Range 4, 5 & 6 E
 5. Distance and direction from nearest town or nearest intersection of State or U.S. numbered highways, or from fork of nearest creeks, or other prominent geographic feature; indicate whether land miles or air miles 5 mi. NW Casa Grande

II. ACTIVITY STATUS OF MINE AS OPERATED BY YOU DURING YEAR (Check the ONE most applicable)

1. Inactive, idle, or abandoned entire year
 2. Producing entire year
 3. Producing part of year (give dates)
 A. From _____ to _____
 Give name and address of operator if operated by someone else part of year _____
 4. Shipping from stockpiles as only activity
 5. Exploration and/or development work only
 6. Assessment work only
 7. Maintenance only

* If shipping from stockpiles but also producing, check box for producing all or part of year.

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 5. Well or pumping operation
 6. Treating materials from dumps or tailings
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ACTIVITIES PRODUCING ORE AND/OR WASTE				ACTIVITIES NOT PRODUCING MATERIAL	
Type	Feet	Quantity of Material (Check Unit) Short Tons <input type="checkbox"/> Cubic Yds. <input type="checkbox"/>	If Quantity of Material Not Available Give Average Cross Section Dimensions of Opening	Type	Feet
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2. Raising				8. Churn drilling	
3. Winzing				9. Rotary drilling	
4. Tunneling				10. Long hole drilling	
5. Drifting				12. Percussion drilling	
6. Crosscutting				13. Other (Specify) <u>Geology & Geophysics contracted 25 sq.mi.</u>	
11. Trenching					
14. Stripping	<u>XXXXXXXX</u>		<u>XXXXXXXXXXXX</u>		
15. Other (Specify)					

V. (A) Did you modernize or improve your mine or plant by installing or changing equipment? Yes _____ No X
 If yes, give brief statement _____
 (B) Were your operations affected by any important events or outside economic conditions? Yes _____ No X
 If yes, give brief statement _____

PROJECT: SACATON
AREA : CASA GRANDE
DATE : 11-13 & 14-63

LEVEL CREW:

ANDERSON

MARLATT

HANLEY

GRAVITY: CAREY

CASA GRANDE

11-13-63

TR. MK. REG. U.S. PAT. OFF.

ORIGINAL COPY, 1918 BY J. G. PARKER

STA	+	HI	-	Elev
"A"				
30+00				2000.00
29+00	8.22	08.22	6.29	01.93
28+00			4.83	03.39
27+00			\$2.85	05.37
26+00	7.91	13.28	6.66	06.62
25+00			4.91	08.37
24+00			\$2.90	10.38
23+00	8.10	18.48	6.97	11.51
22+00			5.46	13.02
21+00			\$3.48	15.00
20+00	8.43	23.43	6.75	16.68
19+00			4.70	18.73
18+00			\$2.85	20.58
17+00	8.71	29.29	7.02	22.27
16+00			4.91	24.38
15+00			\$2.82	26.47
14+00	8.31	34.78	6.45	28.33
13+00			4.45	30.33
12+00			\$2.79	31.99
11+00	8.15	40.14	6.28	33.86
10+00			3.99	36.15
9+00			\$2.03	38.11
8+00	9.18	47.29	7.17	40.12
7+00			4.43	42.86
6+00			\$2.04	45.25
5+00	9.15	54.40	6.65	47.75
4+00			4.67	49.73
3+00			\$3.35	51.05
2+00	11.86	62.91	3.07	59.84

Checked
 DA

LEFAXJ PHILADELPHIA 7, PA., MADE IN U.S.A.

SACATON

11-14-63

2

TM. MK. REG. U.S. PAT. OFF.

STA	+	HI	-	Elev
LINE "A"				2059.84
	12.26	72.10	1.23	70.87
1+00	12.26	83.13	3.47	79.66
			50.61	82.52
	11.31	93.83	1.15	92.68
	12.86	05.54	1.60	03.94
0+00	8.95	12.89	3.17	09.72
30+00				2000.00
31+00	3.16	03.16	4.84	98.32
32+00			5.78	97.38
33+00			57.08	96.08
34+00	2.84	98.92	4.45	94.47
35+00			6.20	92.72
36+00			57.28	91.64
37+00	3.27	94.91	4.51	90.40
38+00			6.02	88.89
39+00			57.61	87.30
40+00	2.91	90.21	4.68	85.53
41+00			6.39	83.82
42+00			8.71	81.50
42+00				1981.50
39+00	8.71	90.21	2.91	87.30
	10.03	97.33	1.19	96.12
	7.42	03.54	3.55	99.99

↑
CheckedD
D
↓

SACATON

11463

3

TR. MK. REG. U.S. PAT. OFF.

STA + HI - Elev

A 30+00 2000.⁰⁰

4.74 04.74 7.11 97.63

B 4.24 01.87 5.89 95.98

30+00 3.29 99.27 4.21 95.06 ✓

B 31+00 5.91 93.36

32+00 6.84 92.43

33+00 8.76 90.51

34+00 59.82 89.45

35+00 1.46 90.91 3.27 87.64

36+00 4.90 86.01

37+00 6.10 84.81

38+00 7.79 83.12

39+00 9.35 81.56

40+00 510.85 80.06

41+00 4.82 84.88 6.38 78.50

42+00 7.66 77.22

B 30+00 1995.06

29+00 11.56 06.62 9.81 96.81

28+00 7.89 98.73

27+00 6.33 00.29

26+00 4.54 02.08

25+00 2.87 03.80

24+00 51.20 06.42

23+00 12.14 17.56 10.74 06.82

22+00 8.83 08.73

21+00 7.12 10.44

20+00 5.04 12.52

19+00 3.15 14.41

18+00 1.25 16.31

↑
CheckedD
Δ

↓

SAGATON

11-19-63

4

TRI MK. REG. U.S. PAT. OFF.

STA LINE "B"	+	HI	-	Elev
				216.31
17+00	12.14	28.45	10.48	17.97
16+00			8.65	19.80
15+00			6.46	21.99
14+00			4.10	24.35
13+00			52.11	26.34
12+00	11.35	37.69	9.51	28.18
11+00			8.12	29.57
10+00			6.07	31.62
9+00			3.81	33.88
8+00			52.18	35.51
7+00	12.04	47.55	11.12	36.43
6+00			10.13	37.42
5+00			8.82	38.73
4+00			3.45	44.10
3+00	13.01	57.11	7.91	49.20
			50.28	56.83
2+00	11.93	68.76	8.96	59.80
1+00			53.36	65.40
0+00	3.92	69.32	8.87	60.45
END LINE "B"				
600				37.42
			10.91	48.33
			1.39	46.94
			10.88	57.82
			4.86	52.96
A 4+00	5.58	58.54	8.71	49.83
				9.73
				+ .10

↑
CheckedD
↓

SACATON

11-4-63

TM. REG. U.S. PAT. OFF.

ORIGINAL COPR. 1919 BY J. O. PARKER

STA + HI - Elev

B 30+00

1995.06

3.82 98.88 7.37 91.51

C 30+00

3.76 95.27 6.38 88.89

Checked

DD

LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Suction Gravity

Line A - North - South

Wondor Gravity Meter

Dial Constant = .4994 $\frac{mg/g}{Div}$

Stab. #1 = Northern Most Setup

Assumed Elevation #1 = 2000 feet

Stations located 100' apart

IN Section 24

Nov 14 1963

ORIGINAL COPR. 1910 BY J. C. PARKER

① Line A

Sacaton
 WAG
 Wender
 11-19-63
 TR. MK. REG. U.S. PAT. OFF.
 BIF
 Boys
 Anon.

Stat Time Read

Value x
Factor

Latitude

Corr.

BIF

Remarks

30400 11:15 559.1

27400 11:21 557.8
 - 2
 557.6

12400 11:26 556.6
 - 3
 556.3

1400 11:34 552.1
 - 5
 551.6

✓ most crops.

30400 11:45 559.9
 - 7
 559.2

LEFAXI PHILADELPHIA 7, PA., MADE IN U.S.A.

②

Saveson
W. W. G.
Warden
71-14-63
TR. MK. REG. U.S. PAT. OFF.
B.H.F.
Corr
Davyne
Anal'n

Stat	Time	Read	Valve x	Meter K	Latit	Corr
------	------	------	---------	---------	-------	------

30+00	11:50	559.8				
		-3.7				

27+00	11:54	559.5				
		-7.7				
		7.0				

24+00	11:59	558.5				
		-1.7				
		2.2				

21+00	12:04	558.7				
		-1.3				
		-1.4				

18+00	12:06	557.8				
		-1.7				
		-1.4				

15+00	12:09	557.3				
		-1.7				
		-1.4				

12+00	12:13	556.7				
		-1.7				
		-1.4				

9+00	12:17	556.9				
		-1.7				
		-1.4				

6+00	12:20	556.9				
		-1.7				
		-1.4				

3+00	12:24	556.8				
		-1.7				
		-1.4				

W.C.
Jordan
11-11-63
TR. MK. REG. U.S. PAT. OFF.

(3)

stat	Time	Read	Value X	Meter K	height	corr	Remarks	B.H.	corr	Boys	Value
1+00	12:26	552.9	-1.7				outcrop				
			-1.5								
0+00	12:30	549.2					outcrop				
			-1.2								

Possibly

19, 20, 22, 23, 25, 26

South line A

30+00	13:46	561.1									
			-1.9								
33+00	13:49	561.9									
			-1.9								
36+00	13:53	562.2									
			-1.9								
39+00	13:56	563.3									
			-1.9								
42+00	13:58	564.2									
			-1.9								
			-2								
30+00	14:00	561.4									
			-2.2								

BDH West 100'

Seaton
W. W. C.
Vander-
11-14-63
TR. MK. REG. U.S. PAT. OFF.

(4)

Stat Time Read Valve X Meter K Lat Corr B/F Corr Reys. Valve

LINE B (E. 2116)

30+00 14.08 562.5
-1.8

33+00 14.10 563.1
-1.8

36+00 14.14 563.8
-1.8

39+00 14.16 564.1
-1.9

42+00 14.19 564.5
-.1
-1.9

30+00 14.23 562.8
-1.3
-1.9

27+00 14.25 561.3
-1.7

24+00 14.30 561.3 (D.D.H) N.S.
-1.7

21+00 14.34 560.9
-1.7

⑤

Stat Time Read

Value x
Meter k

Lack

Corr

B+F

Corr

B+F

Value

3200 Ton
W. O. C.
Worder
11-14-63
TR. MK. REG. U.S. PAT. OFF.

10+00 14.37 560.6
-1.7

15+00 14.39 560.5
-1.7

20+00 14.44 562.3
-1.7

15+00 14.47 560.8
-2.0

12+00 14.52 560.9
-2.0

9+00 14.54 560.6
-2.0

6+00 14.57 560.2
-2.0

3+00 15.00 559.4 (on out-crops).
-2.0

0+00 15.04 558.2 (on out-crops).
-2.0

15+00 15.10 560.7
-2.0

Seco
 WWS
 Vol 1
 11-14-63
 TR. MK. REG. U.S. PAT. OFF.
 B/F
 Corr
 Change
 Value

⑥

Stat Time Read

Value x
 Meter K
 habit
 corr

LINE B

29, 28, 31, 26, 25

LINE A

19, 20, 22, 23, 25, 26

LINE B

30+00	15:28	562.4	
		-1.8	
31+00	15:30	562.5	
		-1.8	
29+00	15:33	562.3	
		-1.8	
28+00	15:35	562.1	
		-1.8	
26+00	15:36	561.8	
25+00	15:38	561.5	
30+00			-1.7
	15:40	561.8	
		562.2	-1.6
Line C			
30+00	15:45	563.5	-1.6

⑦

Stat Time Read

Valve X
Meter XLeads
Carr

W. A. T.
W. J.
W. J.
11-14-63
TR. MNL. RES. U.S. PAT. OFF.
B.F.
Carr
Long
M. A. C.

LINE A

30+00 15:50 561.3
-2.126+00 15:52 560.4
-2.125+00 15:54 560.0
-2.123+00 15:56 559.8
-2.122+00 15:58 559.7
-2.020+00 16:00 559.4
-1.919+00 16:02 558.9
-1.730+00 16:05 560.6
-1.4

shown on map as 1376

JR. MK. REG. U.S. PAT. OFF.

Marker: Elev. 1378.42

Ang. Hwy. Marker
1961 survey

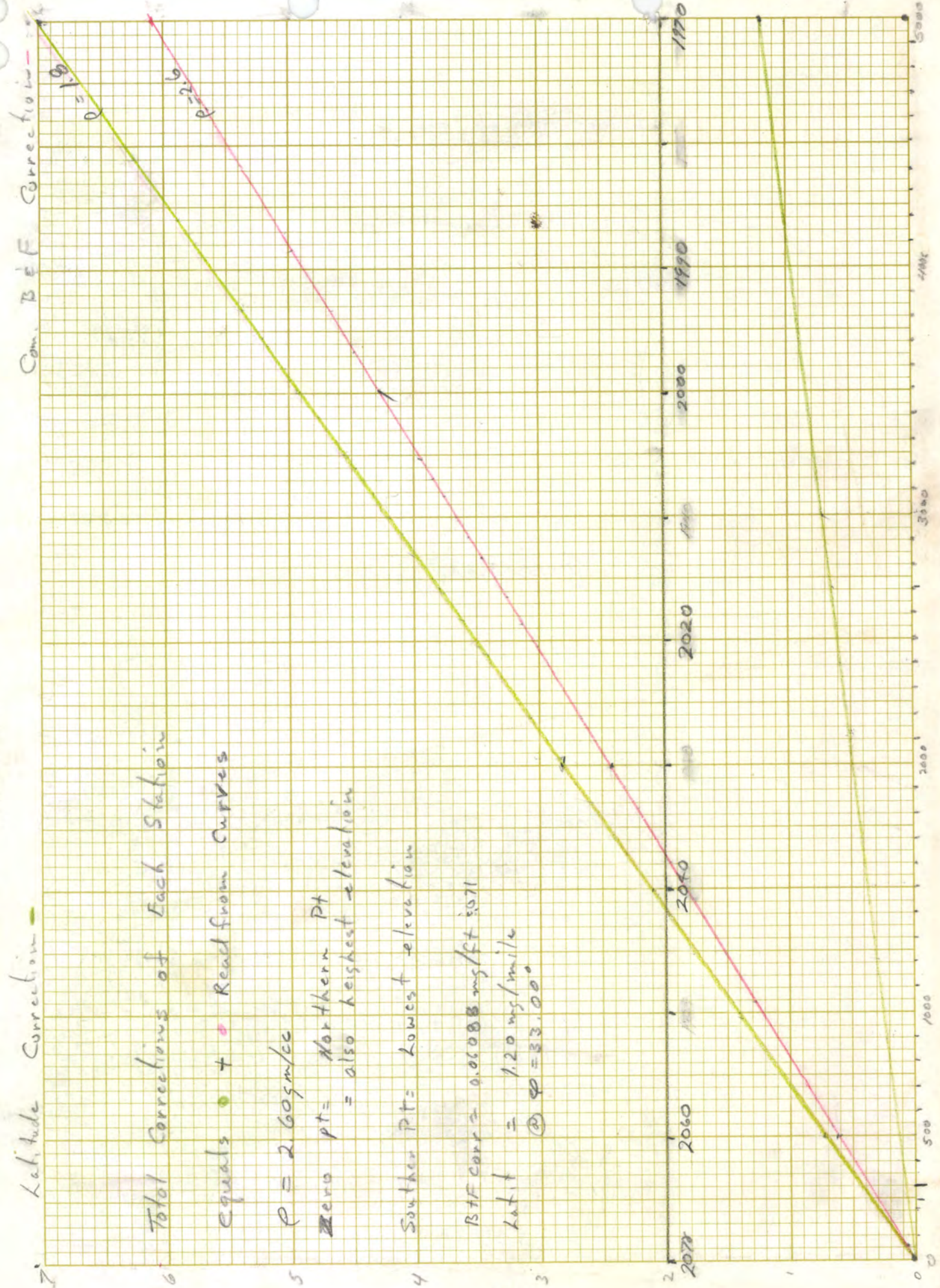
Sta. # 2982 + 22

Set in a concrete
bridge wall on south
side of ~~the~~ Bend Hwy

at sec. cor. $\frac{23}{24}$
 $\frac{26}{25}$

R 5 E, T 6 S

<u>Time</u>	<u>Read</u>
1645	478.6
1646	478.8
1647	478.9
1648	478.6
1649	478.8
1650	478.6
1651	478.5
1652	478.8
1653	478.7



N(500)

SANTON - CASA GRANDE

STA	ELEVATION	STA	ELEVATION
Δ 0+00	2109.72	Δ 30+00	2000.00
Δ 1+00	2079.66	Δ 31+00	1998.32
Δ 2+00	2059.84	Δ 32+00	1997.38
Δ 3+00	2051.05	Δ 33+00	1996.08
Δ 4+00	2049.73	Δ 34+00	1994.47
Δ 5+00	2047.75	Δ 35+00	1992.72
Δ 6+00	2045.25	Δ 36+00	1991.64
Δ 7+00	2042.86	Δ 37+00	1990.40
Δ 8+00	2040.12	Δ 38+00	1988.89
Δ 9+00	2038.11	Δ 39+00	1987.30
Δ 10+00	2036.15	Δ 40+00	1985.53
Δ 11+00	2033.86	Δ 41+00	1983.82
Δ 12+00	2031.99	Δ 42+00	1981.50
Δ 13+00	2030.33		
Δ 14+00	2028.33		
Δ 15+00	2026.47		
Δ 16+00	2024.38		
Δ 17+00	2022.27		
Δ 18+00	2020.58		
Δ 19+00	2018.73		
Δ 20+00	2016.68		
Δ 21+00	2015.00		
Δ 22+00	2013.02		
Δ 23+00	2011.51		
Δ 24+00	2010.38		
Δ 25+00	2008.37		
Δ 26+00	2006.62		
Δ 27+00	2005.37		
Δ 28+00	2003.39		
Δ 29+00	2001.93		
Δ 30+00	2000.00		

LINE 'A'

SACABON - CASA GRANDE	
Station	Elevation
B 0+00	2060.45
B 1+00	2065.40
B 2+00	2059.80
B 3+00	2049.20
B 4+00	2044.10
B 5+00	2038.73
B 6+00	2037.42
B 7+00	2036.43
B 8+00	2035.51
B 9+00	2033.88
B 10+00	2031.62
B 11+00	2029.57
B 12+00	2028.18
B 13+00	2026.34
B 14+00	2024.35
B 15+00	2021.99
B 16+00	2019.80
B 17+00	2017.97
B 18+00	2016.31
B 19+00	2014.41
B 20+00	2012.52
B 21+00	2010.44
B 22+00	2008.73
B 23+00	2006.82
B 24+00	2005.42
B 25+00	2003.80
B 26+00	2002.08
B 27+00	2000.29
B 28+00	1998.73
B 29+00	1996.81
B 30+00	1995.06
B 30+00	1995.06
B 31+00	1993.36
B 32+00	1992.43
B 33+00	1990.51
B 34+00	1989.45
B 35+00	1987.63
B 36+00	1986.01
B 37+00	1984.81
B 38+00	1983.12
B 39+00	1981.56
B 40+00	1980.06
B 41+00	1978.50
B 42+00	1977.22
	LINE B"
<u>C 30+00</u>	<u>1988.89</u>

$K = \frac{4.994 \text{ mg}}{\text{Div}} = .5 = 2.6 \text{ g/ml cc}$

Sacaton Gravity Calculations

Stat	Read	Readings	Latit Corr	B+F	B. Anomaly
LINE A.	6 ^u	8.4	mg		
30400 ✓	509.1	4.5	.7	4.3	9.5
27 ✓	508.8	4.4	.65	3.95	9.0
24 ✓	507.8	3.9	.6	3.65	9.15
21 ✓	507.6	3.8	.5	3.33	7.63
18 ✓	506.7	3.3	.45	3.0	6.75
15 ✓	506.2	3.1	.37	2.68	6.15
12 ✓	505.6	2.8	.3	2.3	5.40
9 ✓	505.8	2.9	.21	1.95	5.06
6 ✓	505.8	2.9	.15	1.5	4.55
3 ✓	505.7	2.8	.10	1.15	4.05
1 ✓	501.7	.8	0	-.6	-.2
0 ✓ 5020	2.0	-1.0	0.00	-2.3	-3.3
33	510.0	5.0	.8	4.48	10.28
36	510.3	5.1	.9	4.8	10.8
39	511.1	5.5	.95	5.05	11.5
42	512.1	6.0	1.0	5.38	12.38
26	508.3	4.1	.6	3.9	8.6
25	507.9	3.9	.6	3.75	8.25
23	507.7	3.8	.55	3.55	7.9
22	507.7	3.8	.5	3.46	7.76
20	507.5	3.7	.5	3.24	7.44
19	507.2	3.6	.48	3.12	7.20

$$f = 2. \text{ Secum/co}$$

Line B	Read	Mgals	Latit	B+F	BA anomaly
30 ✓	\$10.6	5.3	.7	4.56	10.56
33 ✓	\$11.2	5.6	.8	4.85	10.98
36 ✓	\$11.9	5.8	.9	5.1	11.8
39 ✓	\$12.2	6.1	.95	5.40	12.45
42 ✓	\$12.5	6.25	1.0	5.66	12.91
27 ✓	\$09.6	4.8	.65	4.28	9.73
24 ✓	\$09.6	4.8	.6	3.96	9.36
21 ✓	\$09.2	4.6	.5	3.64	9.74
18 ✓	\$08.9	4.45	.45	3.29	8.19
15 ✓	\$08.8	4.4	.37	2.92	7.69
12 ✓	\$08.7	4.35	.3	2.54	7.19
9 ✓	\$08.6	4.3	.21	2.20	6.71
6 ✓	\$08.2	4.1	.15	1.98	6.23
3 ✓	\$07.4	3.7	.1	1.28	5.08
0 ✓	\$06.2	3.1	0	0.65	3.70
31 ✓	\$10.7	5.3	.75	4.62	10.67
29 ✓	\$10.5	5.25	.7	4.48	10.43
28 ✓	\$10.3	5.12	.7	4.34	10.24
26 ✓	\$09.8	4.9	.6	3.80	9.3

Line C

30	561.9	5.9	.7	4.95	11.55
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Line #	Mgols	Latex cor.	$\rho = 1.8 \text{ gm/cc}$ B & F	Barometry
30	4.5	.7	4.9	10.10
27	4.4	.65	4.54	9.59
24	3.9	.6	4.18	8.68
21	3.8	.5	3.85	8.5
18	3.3	.45	3.46	7.21
15	3.1	.37	3.08	6.55
12	2.8	.3	2.72	5.82
9	2.9	.21	2.22	5.33
6	2.9	.15	1.76	4.91
3	2.8	.10	1.39	4.29
1	.8	0	-0.7	-1.5
0	-1.0	0.00	-2.75	-3.75
33	5.0	.8	5.18	10.98
36	5.1	.9	6.21	12.21
39	5.5	.95	5.80	12.25
42	6.0	1.0	6.20	13.20
26	4.1	.6	4.48	9.18
25	3.9	.6	4.31	8.91
23	3.8	.55	4.08	9.43
22	3.8	.5	4.00	8.30
20	3.7	.5	3.76	7.96
19	3.6	.48	3.60	7.68

$\rho = 1.8 \text{ gm/cc}$

Line B Mgols Latit P+F B anomaly

30	5.3	.7	5.24	11.24
33	5.6	.8	5.60	12.0
36	5.8	.9	5.89	12.59
39	6.1	.95	6.21	13.26
42	6.25	1.0	6.50	13.75
27	4.8	.65	4.90	10.35
24	4.8	.6	4.54	9.94
21	4.6	.5	4.20	9.30
18	4.45	.45	3.76	8.66
15	4.4	.37	3.41	9.18
12	4.35	.3	2.92	7.57
9	4.3	.21	2.58	7.09
6	4.1	.15	2.30	6.55
3	3.7	.1	1.48	5.28
0	3.1	0	0.71	3.81
31	5.3	.75	5.38	11.43
29	5.25	.7	5.16	11.11
28	5.12	.7	5.00	10.92
26	4.9	.6	4.75	10.25

Line C

30	5.9	.7	5.76	12.30
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Sacaton
Notes Mexico

7/15/63

TM. MK. REG. U.S. PAT. OFF.

MP-B

1 BT68 Claim CORNER?
WINNIE GROUP

2. Loc. Winnie 20 filled in
& only 4' deep

3. Winnie 4 notice missing

4. Winnie 11 filled in
6' deep

~~5. Winnie 3 filled in~~

6. Winnie 1 filled in

7. Winnie Claim Group
W side is approx.
150' EAST of Section
line

IT GROUP

8. 1 & 2 filled in by
dozer recently
last week maybe

3 & 4 filled in by dozer

5 & 6 filled in by dozer

7 & 8 " " " "

ORBIT GROUP

2 filled in by dozer

3 " " " "

4 " " " "

5

ORIGINAL COPR. 1910 BY J. C. PARKER

LEFAX, PHILADELPHIA 7, PA., MADE IN U.S.A.

Sacaton
Pros.

7/15/63
TM. MK. REG. U.S. PAT. OFF.

Smile you're on etc.
Loc. pit washed in
its 4' deep

N.E. S-28 ASR
at same corner
as Smile etc. NW cor.

J.R. 6 Located as
shown in red on
map & in line E-W
with Agnes Claims

Agnes Group

- #36 4X6X10 Loc. pit
Not deep enough,
in granite out crop.
- #35 OKAY in granite
- #34 4X6X1 in granite
Not deep enough
- #33 4X6X3 in granite
Not deep enough
- #32 Okay in granite
- #31 WASHED IN
was OKAY originally
- #30 OKAY IN GRANITE
- 29 " " "

Sacaton Proj:

7/15/63

Agnes Group

TM. MK. REG. U.S. PAT. OFF.

- #28 4x6x4 Alluv. stop
digging at bedrock
- #27 4x6x4 Alluv.
stop digging at bedrock
- #26 4x6x3 Alluv.
- #25 WASHED IN was OKAY
- #24 OKAY Alluv.
- #23 OKAY Alluv.
- #22 OKAY Alluv.
- #21 " "
- #20 OKAY Alluv.
- #19 " "

F10 Group

- #2 4x6x6 Alluv. Not deep
- #1 4x6x5 " enough
- #3 } ALLUV.
ONE LONG PIT for
- #4 } both claims legal depth
- #5 " " " "
- #6 " " " "
- #7 " " " "
- #8 " " " "
- #9 " " " "
- #10 " " " "