

SECTION CORNER Book
1997 -

MINING TRANSIT BOOK
PC 00000

- L661

SECTION CORNER Book

10-30-97

REMONUMENT SEC. COR #

211

1112

T12N

R1E

FOUND OLD MONUMENT along
The SOUTH SIDE OF THE ROAD.

FOUND SEVERAL SMALL STONES IN THE
AREA COULD NOT FIND ORIGINAL
STONE. WE DID FIND A STONE 15X9X6
BUT IT HAD NO VISIBLE MARKINGS
USED HYDE PARK CITY RESERVOIR
PROPERTY TO REESTABLISH THIS
CORNER.

STANDING
OUT OF THE
GROUND

40° TA

200
(200.4)

160
(161.14) 40°+

325.15

③ • ④
TO HYDE PARK
• ①

RP1 = 18'
RP2 = 13.3'
RP3 = 23.3'
RP'S ARE 5/8"
REBAR AND CAP
WITH "T" BAR POST
AT EACH POINT

RESET

OLD CAP
IN CONC.

4X4 POST 1' ± FROM
CAP.

3

SEC. 9 & 16 T14N R1W

EVEN-K

STA HOR. ~~S~~ HOR DIST.

SEC. 16 T14N R1W

W/4 COR.

BS #1 $0^{\circ} 00' 00''$ 4811.82'

AC #10

RR.

FS #2 S16

EY4COR 324 18 26 83 82.39

#3 S16

NE COR 306 37 03 72 65.01

#4

FENCE 307 $^{\circ}$ 50' 46" 6718.03

#5 RK 285 $^{\circ}$ 16' 34" 7027.28

#6 FENCE 284 $^{\circ}$ 16' 14" 5995.11

#7 S9

NE COR 265 $^{\circ}$ 19 09 7752.90

#8 NW

COR S-9 226 $^{\circ}$ 20' 40" 3812.94

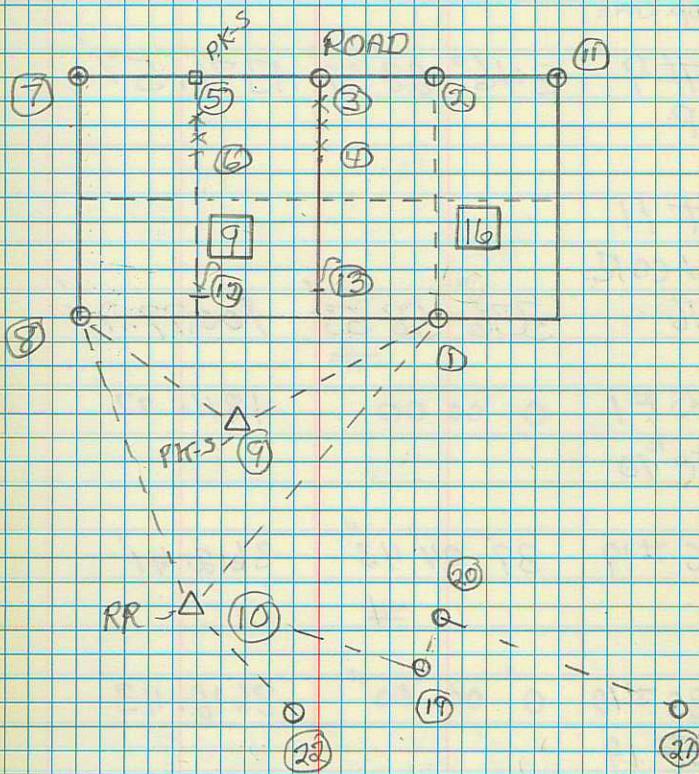
85° ±

EVEN-K

4

* JIM DAN.B. 22 JULY 1997

- SN -



STA HOR ~~T~~ HOR DIST

FS #12 $269^{\circ} 26' 03''$ 1913.41
FENCE POST

#13 $326^{\circ} 32' 48''$ 3262.59
CROP. LINE

#9 $346^{\circ} 28' 59''$ 1371.57
CP.

#11

SW COR

S-16 $336^{\circ} 58' 55''$ 10099.78
#

BS #1 0 00 00 4811.77

TC #10

FS #19 $39^{\circ} 04' 43''$ 8612.41

#

BS #10 0 00 00 8612.43

TC 19

FS #23 $187^{\circ} 24' 14''$ 1781.72

$305^{\circ} 12' 19''$ 1298.87

20 $109^{\circ} 14' 58''$ 74.73

STA HOR. ~~S~~ HOR. DIST.

BS #19 $0^{\circ} 00' 00''$ 74.72'

TC#20

FS #21 $237^{\circ} 22' 32''$ 9524.77

#

BS #1 $0^{\circ} 00' 00''$ 4811.68

TC#10

FS #22 $49^{\circ} 57' 33''$ 2123.04 1/4 COR

#

BS #21 $0^{\circ} 00' 00''$

TC#20

BS # $160^{\circ} 25' 55''$ 4008.01'
$1^{\circ} 49' 57''$ 6929.80

6-29-98

CORNER #
0211

PW, JB,
DW, JC

CP = 10

STA

6

H.D.

NOTES

BS 1 0° 00' 00" 338.85' REBAR UNDER
FS 2 271° 45' 55" 561.89 TOWER
3 123° 26' 16" 295.83 REBAR BY RISER

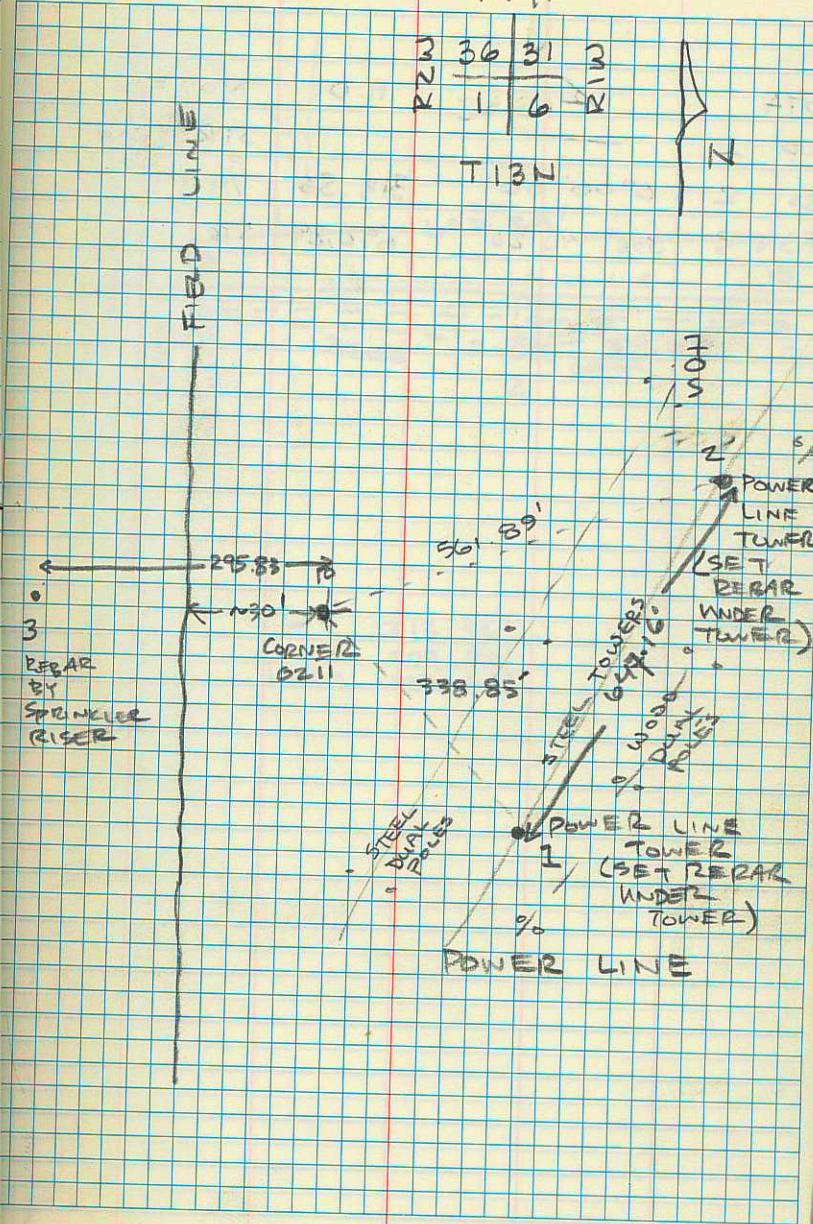
FOUND

T14N

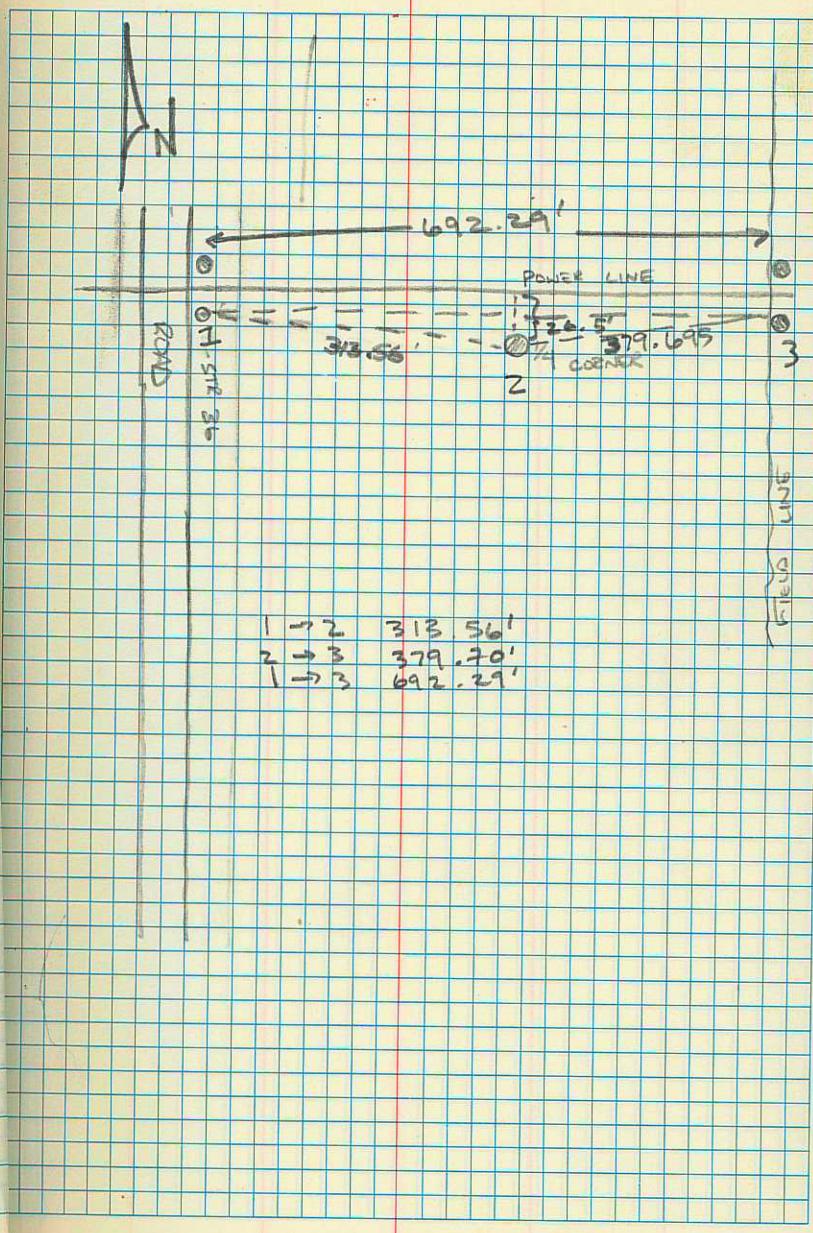
7

R2N 36 31 3
1 6 R

T13N



STA	H.D.	NOTES
CP 1	—	STR # 36
BS 2	0° 00' 00"	313.56' 1/4 CORNER
FS 3	356° 40' 20"	692.29' STR



PARADISE SECTION CORNER

5/20/99

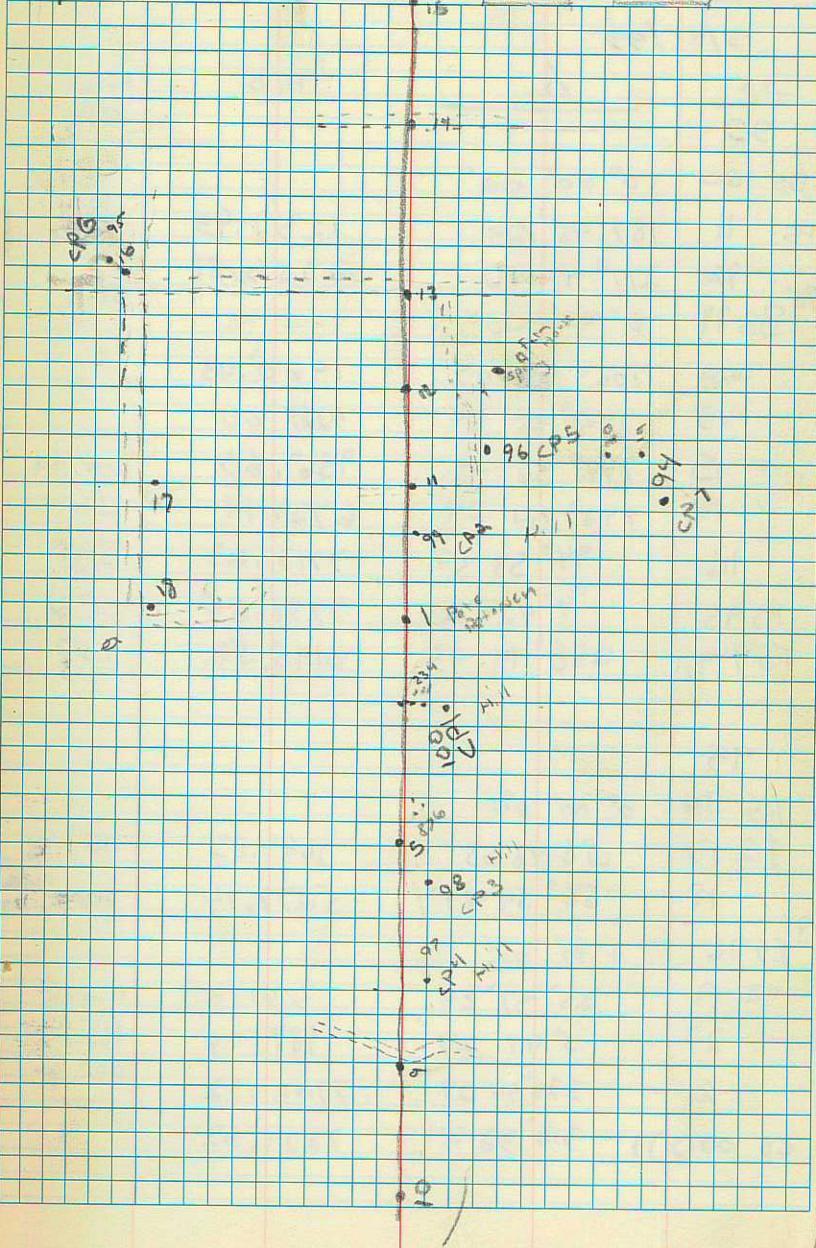
EC/DW

STA	A	H. D.	NOTES
100	—	—	CPI
BS 1	0° 00' 00"	1117.39	P. PETERSON CAP/PERM W.
»	8° 34' 56"	2975.64	CP 2
X	8° 01' 57"	2332.80	73
2	294° 07' 24	307.50	P
3	292° 55' 27	394.74	
4	293° 03' 03	383.13	
5	206° 51' 50	1548.35	+
98	193° 16' 12	2318.30	CP3
—	—	—	
98	—	—	CP3
BS 100	0° 00' 00"	—	CP,
FS 97	175° 11' 41"	1081.94	
6	351° 34' 30	2137.87	PETERSON CAP
7	351° 36' 32	2139.16	BUT BAR
8	352° 16' 23	2157.17	HARVEY CAP
BS 98	0° 00' 00"	—	CP4
9	181° 36' 10	854.18	27 26
10	171° 48' 18	3451.19	27 26 37 35
—	—	—	

N↑

Turkey SHEDS

11



PARADISE DEP. CORON (cont.)

5/21/99

STA	<u>Δ</u>	H. D.	NOTE
99	—	—	CP ₂
BS 100	0° 00' 00"		CP ₁
FS 11	187° 45' 29	1232.93	15/14 22/23
96- 96	214° 18' 10	2956.81	CP5
BS 99	0° 00' 00"	—	
12	109° 23' 02	1960.43	
13	135° 05' 39	4225.44	
15	144° 52' 29	9369.53	Turkey shed
14	142° 04' 34	6729.14	stake
16	94° 38' 34	7713.63	Int color
FS 95	94° 42' 23	7738.50	CP6
FS 94/54	258° 19' 43	6195.52	CP7

95

BS 96	0° 00' 00"		
FS 17	58 48 33	2645.83	15) 15
18	58° 54' 41	5277.14	16/15 17AB 11/27
BS 96	0° 00' 00"		
FS 19	20° 37' 24	330.27	fences
20	3° 44' 27	487.78	fence line
21	326° 44' 27	7703.72	Pete CAP
CP 100 (22) 1	318° 32' 24	7829.52	

Paradise Sec. corner

STA	X	H.D.	Notes
100			(CP)
1	153 06 05 341 16 22	1117.37	
2	87 13 26	306 4A	
3	86 05 18 86 06 47	294-65 283.13	

13

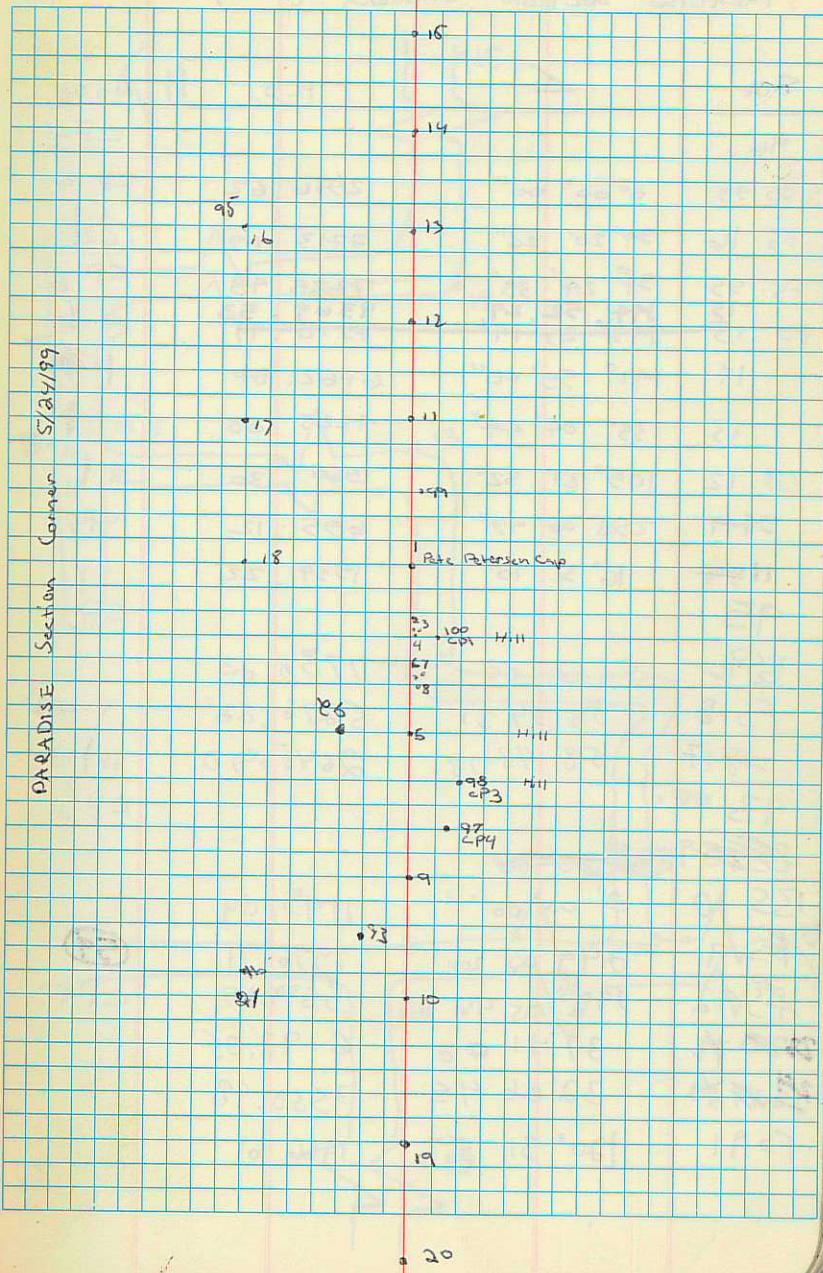
Paradise sec corner (cont.)

5/24/99

STA		H.D.	dates
100	<u>A</u>	—	CP1
BS1	0° 00' 00"	1117.39	Pete Peterson
2	292 54' 17"	282.68	
3	292 56' 34"	294.67	
4	294 07' 12"	307.14	
5	206 51' 25"	1548.42	
—			
FS98	192 16' 10"	2318 23	CP3
FS94	79 26 23	7829 31	CP7
FS99	8 33 38	2475.67	CP2
98	—	—	
BS100	0° 00' 00"	2318 23	
FS97	195 11 45	1081.99	CP4
6	351 32 03	2137.85	Pete
7	351 34 12	2139.05	Bott
8	352 14 05	2157.08	Hansen
9	181 35 49	859.21	
10	183 17 48	3481.75	
97	—	—	
BS98	0° 00' 00"		
9	181 35 49	854.21	27 f 26
10	188 17 48	3451.15	<u>27 f 26</u> <u>34 35</u>

DAG 10 2604.68

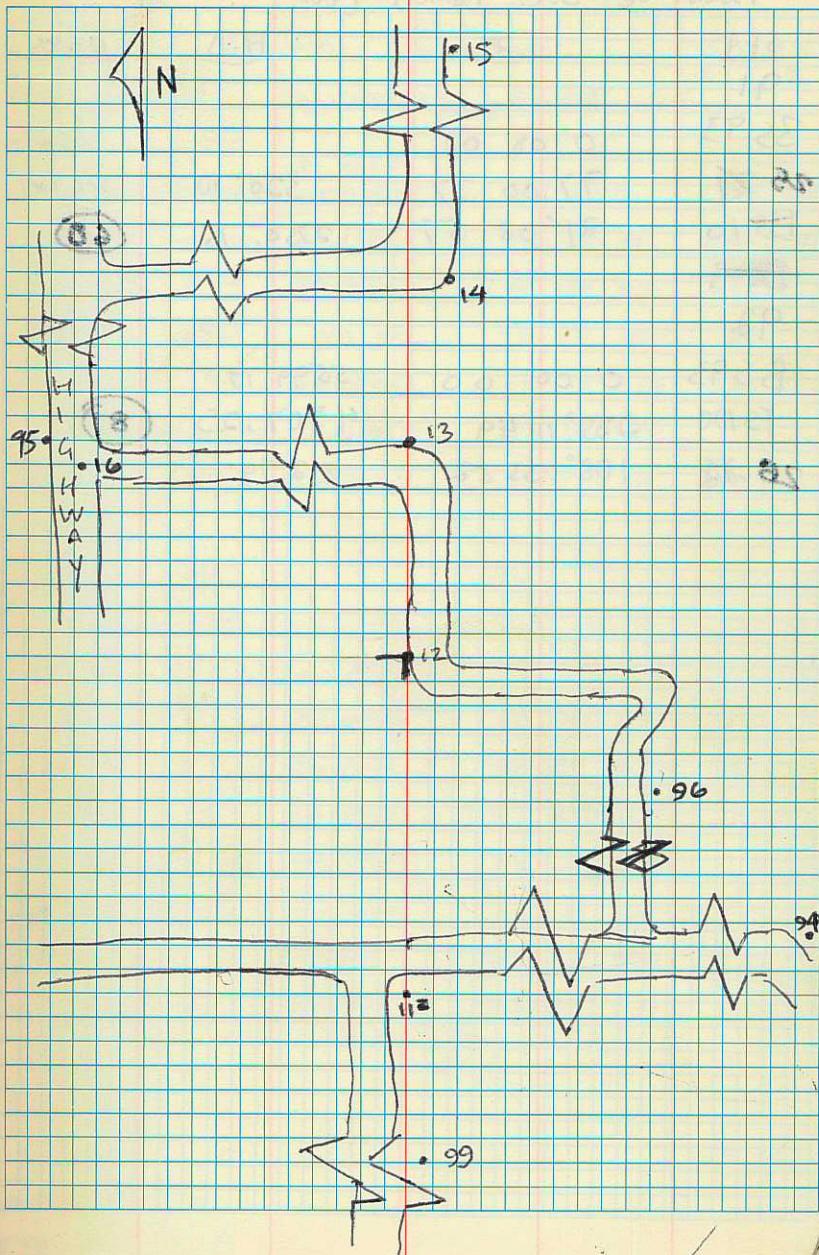
14



PARADISE SECTION Boundary (CONT.)

STA	L	H.D.	NOTS
96			CP5
BS 99	0° 00' 00"	2956.62	CP 2
FS 16	94° 20' 26"	7713.69	+
FS 95	94° 24' 38"	7738.48	CP 6
15	94° 52' 29"	9369.53	+
FS 15	93° 25' 14"	7918.11	
14	141° 59' 08"	6762.84	1#
13	135° 04' 44"	4225.08	+
12	109° 27' 32"	1960.30	1
94+1	258° 08' 49"	6195.12	CP7
119+	16° 32' 10"	1934.22	
95			CP6
BS 96	0 00 00	7738.38	
FS 18	58 54 31	5276.82	T-BAR
18+7	58 48 18	2645.90	16+15
93			CP6
BS 89	0 00 00		
BS 10	0° 00' 00"	1143.09	
BS 9	249 02 30	1976.71	(59)
FS 92	192° 05 46	5599.17	CP4
2320+	37° 41' 06	6198.05	
3206+	32 06 45	3550.98	
FS 91	120° 31' 57	1966.61	

15



PACAPISE Sec. Comers (cont)

<u>STA</u>	<u>Z</u>	<u>H.D.</u>	<u>Notes</u>
91			
BS 93	0 00 00		
25 24	97 00 37	320.10	sec cor
BS 10	21° 08' 57"	2730.16	(60)
BS 9			
92			
BS 93	0 00 00	5599.17	
FS 100	285° 11' 49"	4307.25	(81)
26 23	105° 33' 52"	832.74	

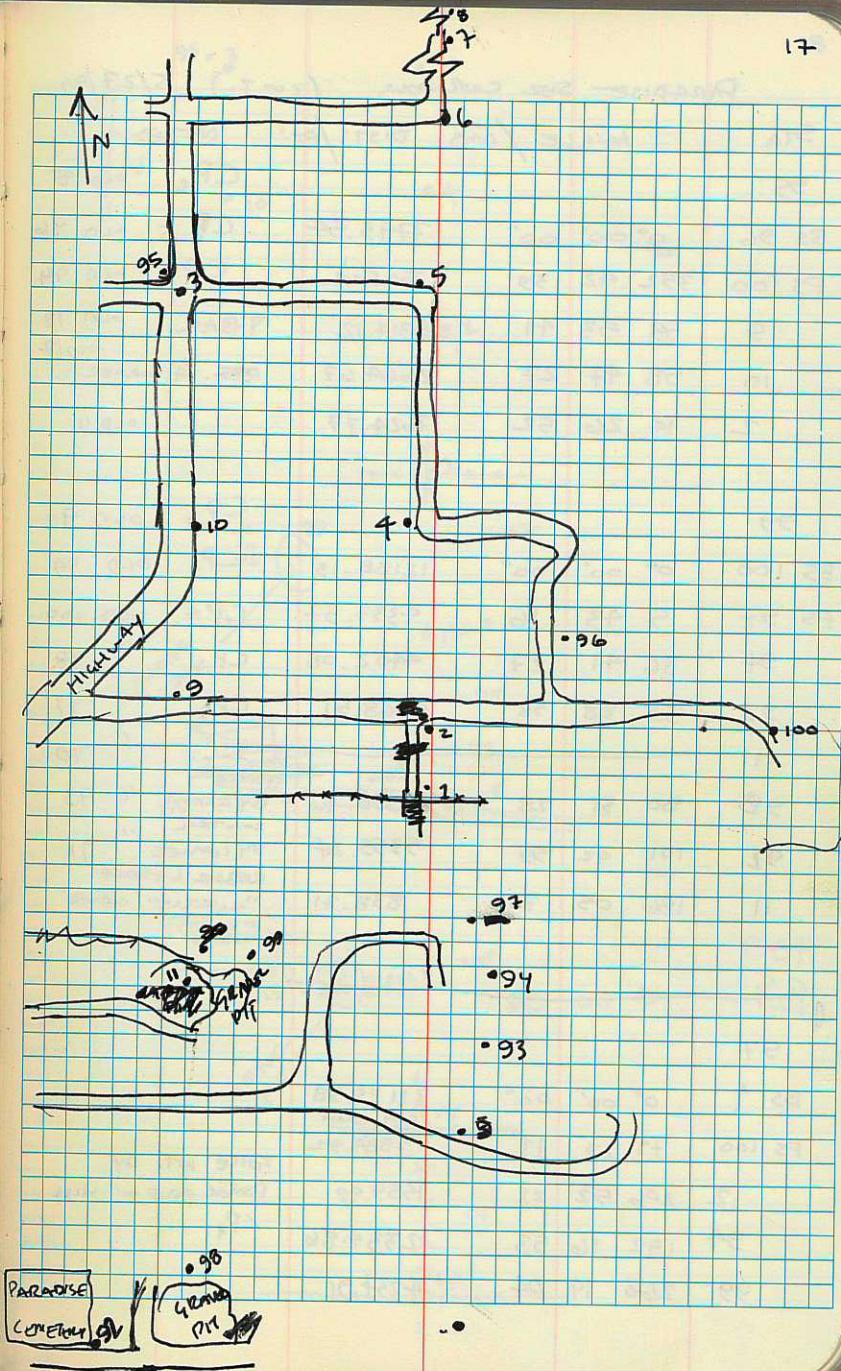
5/27/99 SECTION CORNERS N OF

EC / DW
↑

PARADISE TION RIE

		<u>ANGLE / DMS</u>	<u>DIST. / FT.</u>	<u>NOTES</u>
	100			CP 1 0LD 94
BS 1	0° 00' 00"	7758.19		PETERSON CAP 0LD 1
FS 2	19° 49' 25"	7704.0		ESTIMATE OF SEC COR
99	354 56 34	12189.48	CP ₂	0LD 92
98	328 39 37	Too FAR	CP ₃	0LD 93
97	351 47 47	7884.92	CP ₄	0LD 100
3	42 18 13	Too FAR	INTE. IN ROAD	0LD 16
96	33 14 29	6239.04	CP ₅	0LD 96
			CP ₅	0LD 96
BS 100	0° 00' 00"		CP ₁	0LD 94
FS 4	211 29 13	1975.60		0LD 12
5	237 04 53	4256.55		0LD 13
3	196 19 36	7769.05		0LD 16
95	196 23 35	7799.03	CP ₆	0LD 95
26	244 00 57	6809.62		0LD 14
7	246 51 03	9436.90		0LD 15
8	248 35 30	11924.85		
2	118 33 24	1947.10		0LD 11
95				
BS 96				

17



PARADISE SITE SURVEYING (cont.)

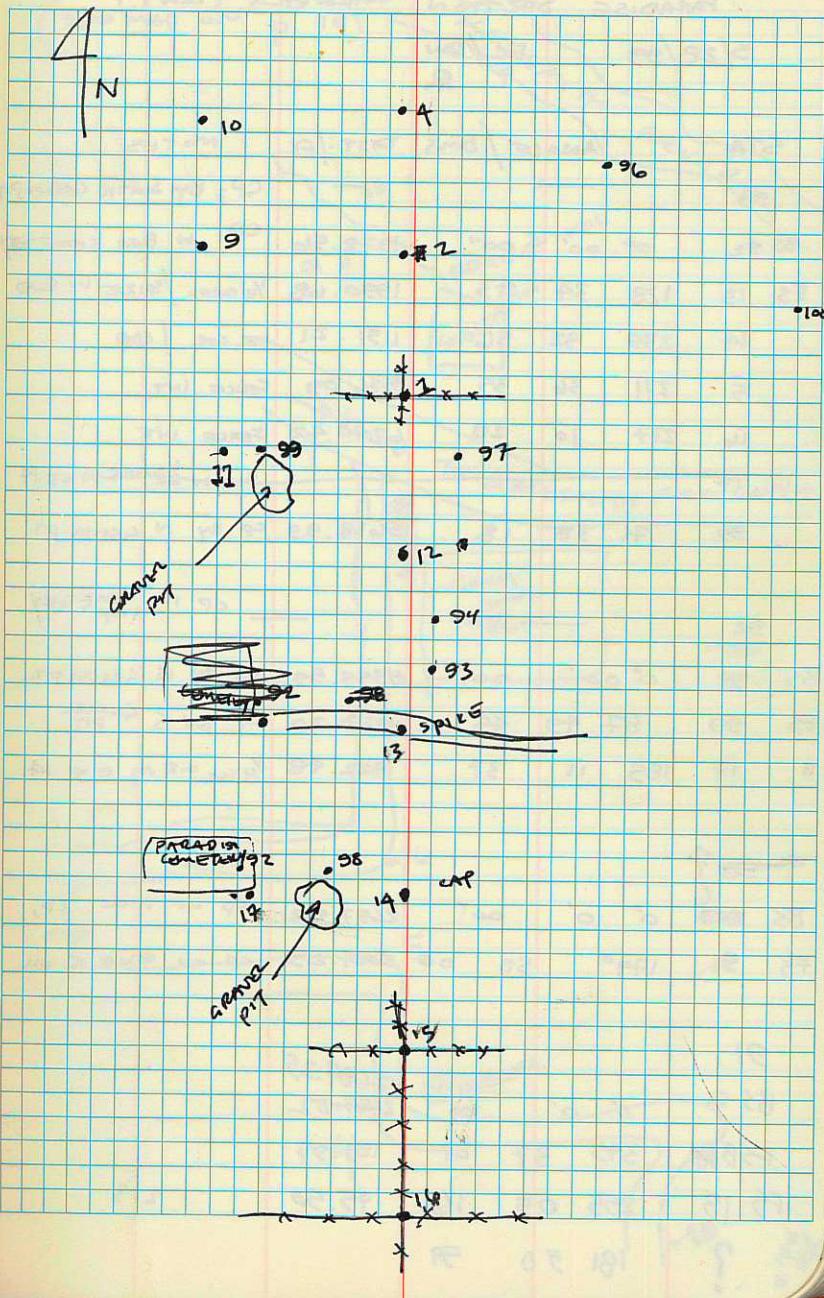
5/27/99

STA	ANGLE / DMS	DIST. / FT	NOTES
95			CP ₁ OLD 95
BS 96	0° 00' 00"	7793.54	CP ₅ OLD 96
FS 100	352 42 39	Too Far	CP ₁ OLD 94
9	58 53 41	5314.12	T-BAR OLD 18 OLD 17
10	58 47 27	2664.67	1/4 CORNER
2	14 26 52	7624.77	OLD 11
99			CP ₂ OLD 92
BS 100	0° 00' 00"	12188.15	CP ₁ OLD 94
FS 97	5 43 16	4337.57	CP ₄ OLD 100
94	36 41 27	4402.08	CP ₂ , " 98
93	50 28 58	4568.51	CP ₃ " 97
11			S.C. 10 CONTROL BY LAYOUT POINT " 93 CONTROL " 91 BY CORNER REBAR LABELED " SECTION CENTER "
98	80 31 28	5638.76	BY LAYOUT POINT " 93
92	101 02 59	5355.24	BY CORNER " 91 REBAR LABELED
11	186 05 30	838.71	" SECTION CENTER "
100			
BS 1	0° 00' 00"	1125.38	
FS 100	79° 27' 11"	DIST. FROM BEFORE = 7884.92	
12	206 52 21	1559.47	FENCE INT. BY POWER POLE ON HILL
94	192 16 53	2334.86	CP ₁
99	268 19 04	4337.91	

95.3

5

18



PARADISE SECTION

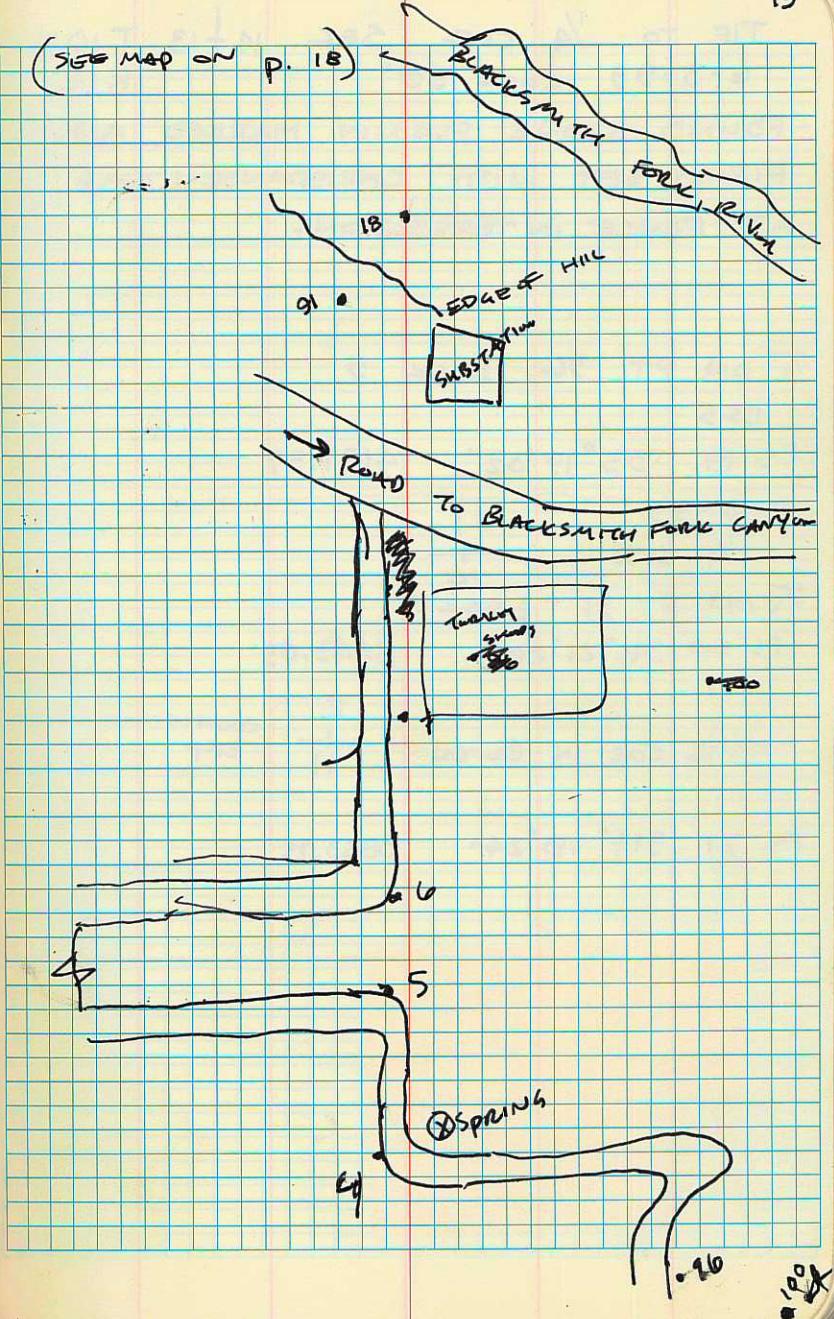
CONTURS (CONT.)

5/28/99 EC/DW
♀ ♂

STA	ANGLE / DMS	DIST. / FT.	NOTES
98	—	—	CP, BY SOUTH GRAVEL PIT
BS 92	0° 00' 00"	1978.56	CP IN PARA. CEMETERY
FS 13	128 34 43	1990.68	1/4 MILE N. / SPIKE IN ROAD
14	239 32 56	1151.21	SEC. CEM. / CAP
15	271 36 35	3576.09	FENCE INT.
16	277 10 28	6240.43	FENCE INT.
17	—	—	1/4 MILE S. OF 14
99	71 38 18	5638.99	CP BY N GRAVEL PIT
92	—	—	CP IN CEMETERY
BS 98	0° 00' 00"	5355.59	CP BY N GRAVEL PIT.
FS 99	87 49 45	1978.39	CP BY S GRAVEL PIT.
17	185 11 37	322.48	1/4 MILE, 0.5 M E of 14
BS 7	0° 0' 00"	2657.82	CP ON HILL (CP,
FS 91	179° 50 00	2684.25	CP ON EDGE OF HILL
91	—	—	2684.25
BS 7	0° 0' 00"	2657.82	
FS 8	345 37 27	181.97	
FS 18	255 05 16	45.50	2/3
?	181 50 59		

19

(SEE MAP ON P. 18)



TIE TO $\frac{1}{4}$ COR SEC 14 + 13 TION
6-3-99 COOL 50° RIE

FOUND STONE PLAINLY MARKED AND
FIRMLY SET WITH CHRISTIANSEN CAP
AT FENCE IN TSECTION.

T ON PT 96 BACK 5

BSS

FS 19 $83^{\circ} 19' 02''$ 4137.57

6-4-99

$\frac{1}{4}$ COR $\frac{11}{14}$

T ON PT 91 BACK 5

FS 20 $341^{\circ} 21' 28''$ 8443.05

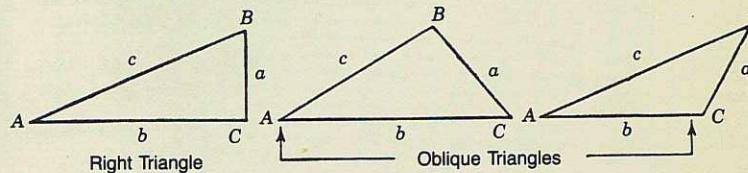
~~$\frac{1}{4}$~~ COR IN CANYON $\frac{2}{11}$ COAST CAP

FS 21 $314^{\circ} 18' 24''$ 3853.73

6	5	4	3	2	1
7	3	9	10	11	12
	15	14	13		



TRIGONOMETRIC FORMULÆ



Solution of Right Triangles

For Angle A. $\sin = \frac{a}{c}$, $\cos = \frac{b}{c}$, $\tan = \frac{a}{b}$, $\cot = \frac{b}{a}$, $\sec = \frac{c}{b}$, $\cosec = \frac{c}{a}$

Given a, b	Required A, B, c	$\tan A = \frac{a}{b} = \cot B, c = \sqrt{a^2 + b^2} = a \sqrt{1 + \frac{b^2}{a^2}}$
a, c	A, B, b	$\sin A = \frac{a}{c} = \cos B, b = \sqrt{(c+a)(c-a)} = c \sqrt{1 - \frac{a^2}{c^2}}$
A, a	B, b, c	$B = 90^\circ - A, b = a \cot A, c = \frac{a}{\sin A}$
A, b	B, a, c	$B = 90^\circ - A, a = b \tan A, c = \frac{b}{\cos A}$
A, c	B, a, b	$B = 90^\circ - A, a = c \sin A, b = c \cos A,$

Solution of Oblique Triangles

Given A, B, a	Required b, c, C	$b = \frac{a \sin B}{\sin A}, C = 180^\circ - (A+B), c = \frac{a \sin C}{\sin A}$
A, a, b	B, c, C	$\sin B = \frac{b \sin A}{a}, C = 180^\circ - (A+B), c = \frac{a \sin C}{\sin A}$
a, b, C	A, B, c	$A+B = 180^\circ - C, \tan \frac{1}{2}(A-B) = \frac{(a-b) \tan \frac{1}{2}(A+B)}{a+b},$ $c = \frac{a \sin C}{\sin A}$
a, b, c	A, B, C	$s = \frac{a+b+c}{2}, \sin \frac{1}{2}A = \sqrt{\frac{(s-b)(s-c)}{bc}},$ $\sin \frac{1}{2}B = \sqrt{\frac{(s-a)(s-c)}{ac}}, C = 180^\circ - (A+B)$
a, b, c	Area	$s = \frac{a+b+c}{2}, \text{area} = \sqrt{s(s-a)(s-b)(s-c)}$
A, b, c	Area	$\text{area} = \frac{b c \sin A}{2}$
A, B, C, a	Area	$\text{area} = \frac{a^2 \sin B \sin C}{2 \sin A}$

REDUCTION TO HORIZONTAL

Horizontal distance = Slope distance multiplied by the cosine of the vertical angle. Thus: slope distance = 319.4 ft. Vert. angle = $5^\circ 10'$. From Table, Page IX. $\cos 5^\circ 10' = .9959$. Horizontal distance = $319.4 \times .9959 = 318.09$ ft.

Horizontal distance also = Slope distance minus slope distance times $(1 - \cosine \text{ of vertical angle})$. With the same figures as in the preceding example, the following result is obtained. Cosine $5^\circ 10' = .9959$. $1 - .9959 = .0041$. $319.4 \times .0041 = 1.31$. $319.4 - 1.31 = 318.09$ ft.

When the rise is known, the horizontal distance is approximately: — the slope distance less the square of the rise divided by twice the slope distance. Thus: rise = 14 ft., slope distance = 302.6 ft. Horizontal distance = $302.6 - \frac{14 \times 14}{2 \times 302.6} = 302.6 - 0.32 = 302.28$ ft.