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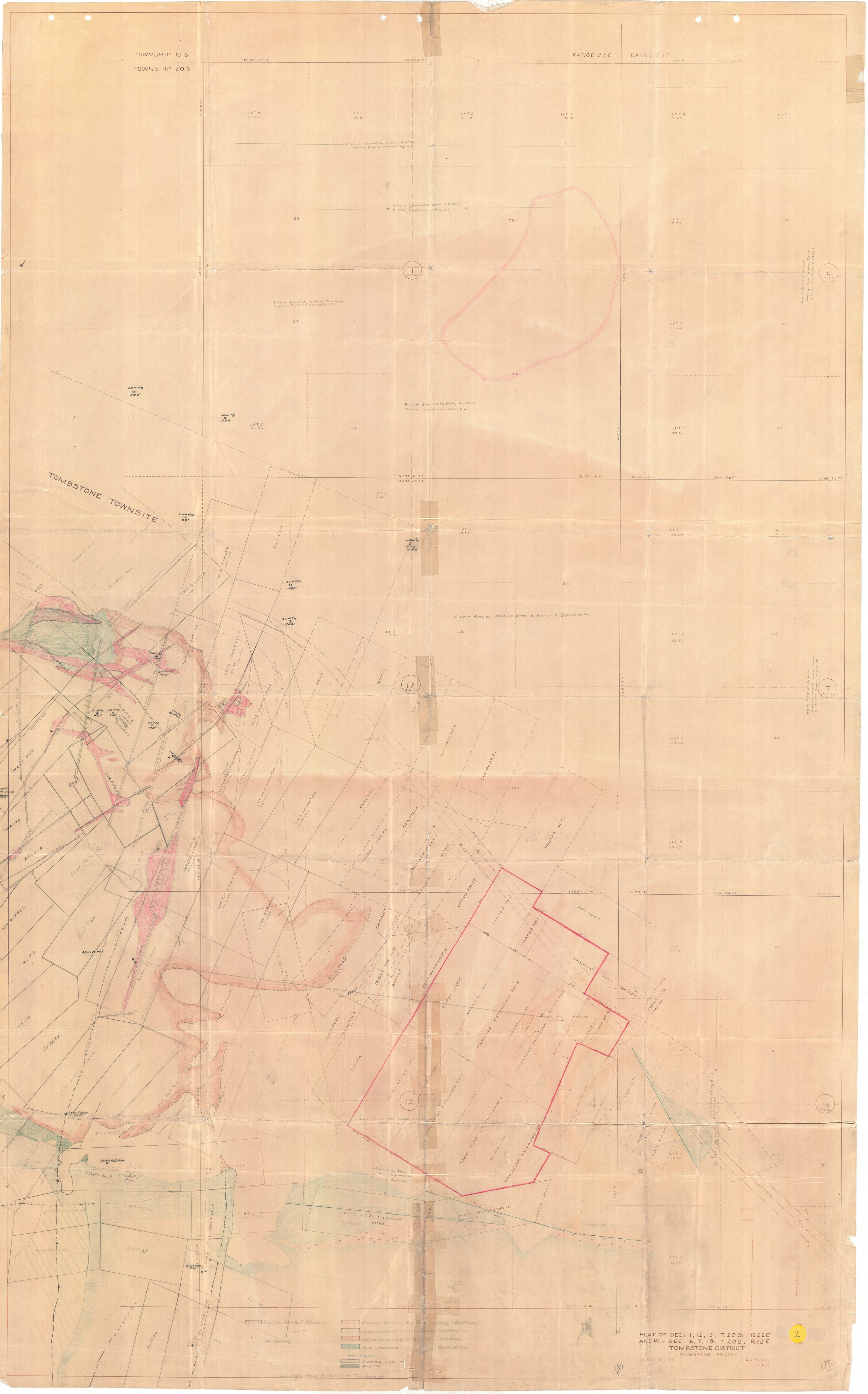
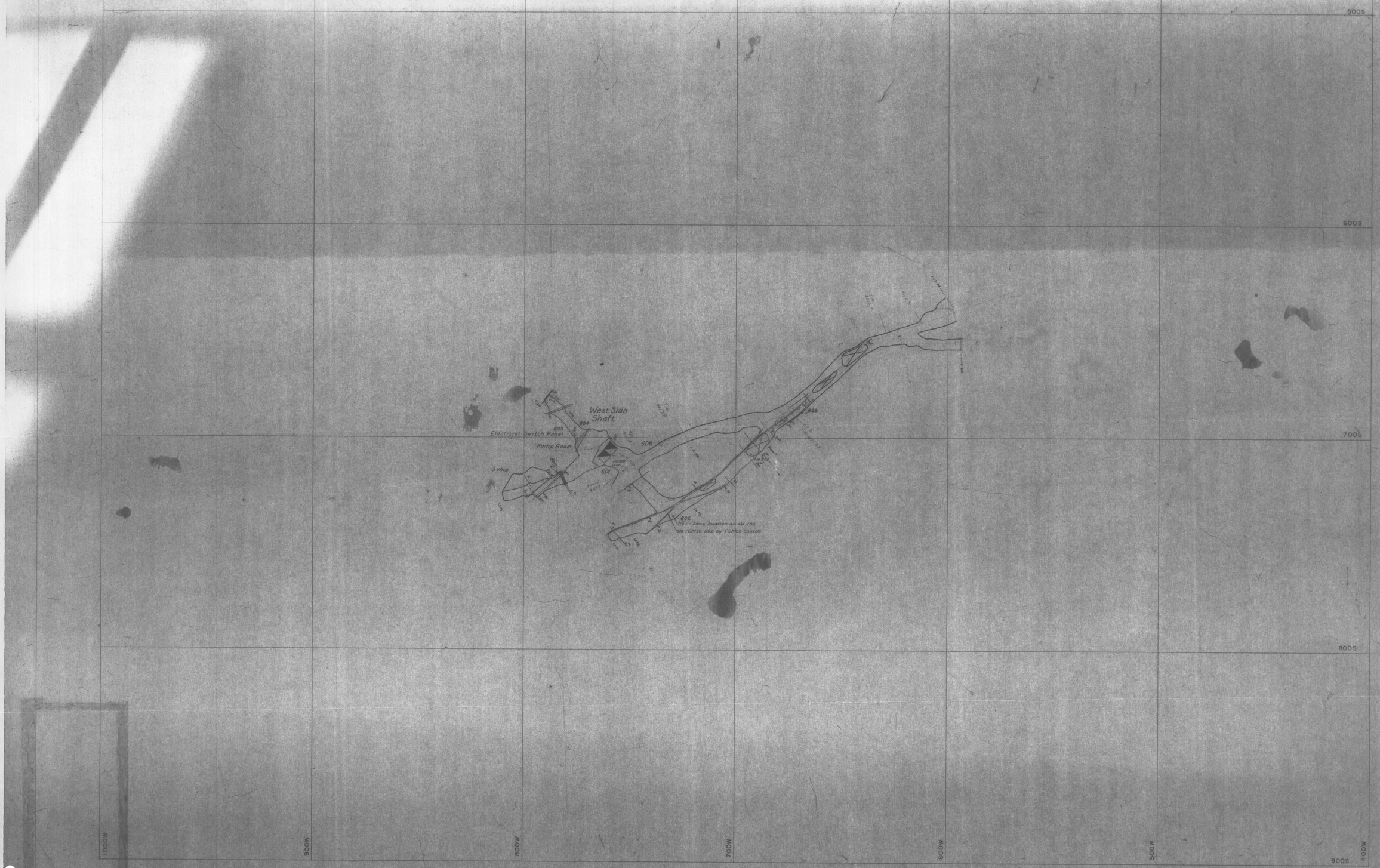

TOWNSHIP 19 S.
TOWNSHIP 20 S.
RANGE 22 E
RANGE 23 E
TOMBSTONE TOWNSITE
Patent Granted to Harry C. Hughes Mineral Rights Reserved by U.S.
10 year Grazing Lease to Ernest B. Escapule (Approved 11/15/44)
Rhyolite Per-Post Paleozoic
Volcanics-Andesite
Conglomerate-Cem. Gravel
Bisbee Group-Sedimentary Beds
Naco Limestone
Faults
Escabrosa Limestone
Neiscuite
Unconformity
Cretaceous
Carboniferous
Geology From Bulletin on Tombstone
PLAT OF SEC.'s 1, 12, 13, T. 20 S., R. 22 E.
AND W. ½ SEC.'s 6, 7, 18, T. 20 S., R. 23 E.
TOMBSTONE DISTRICT
TOMBSTONE, ARIZONA
SCALE: 1" = 300'
DEC 19 1945
HJS

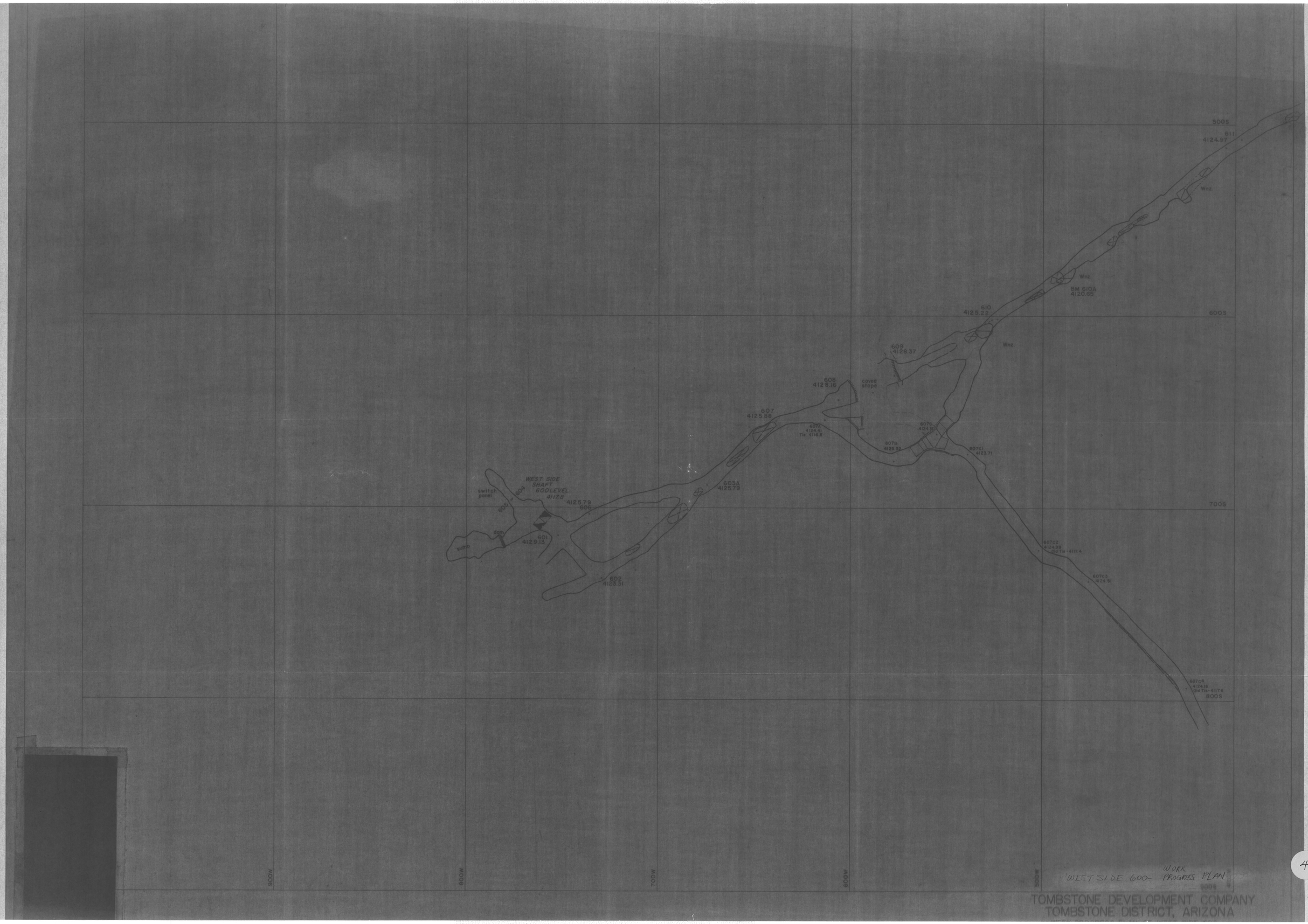


TOMBSTONE DEVELOPMENT COMPANY
TOMBSTONE DISTRICT, ARIZONA
WORK PROGRESS PLAN OF WEST SIDE 600

FILE MAP DRAWN BY: JPM SCALE: 1" = 20'
DATE: 12-53

2518-0-418-AF-316A2
DRAWING NUMBER

3

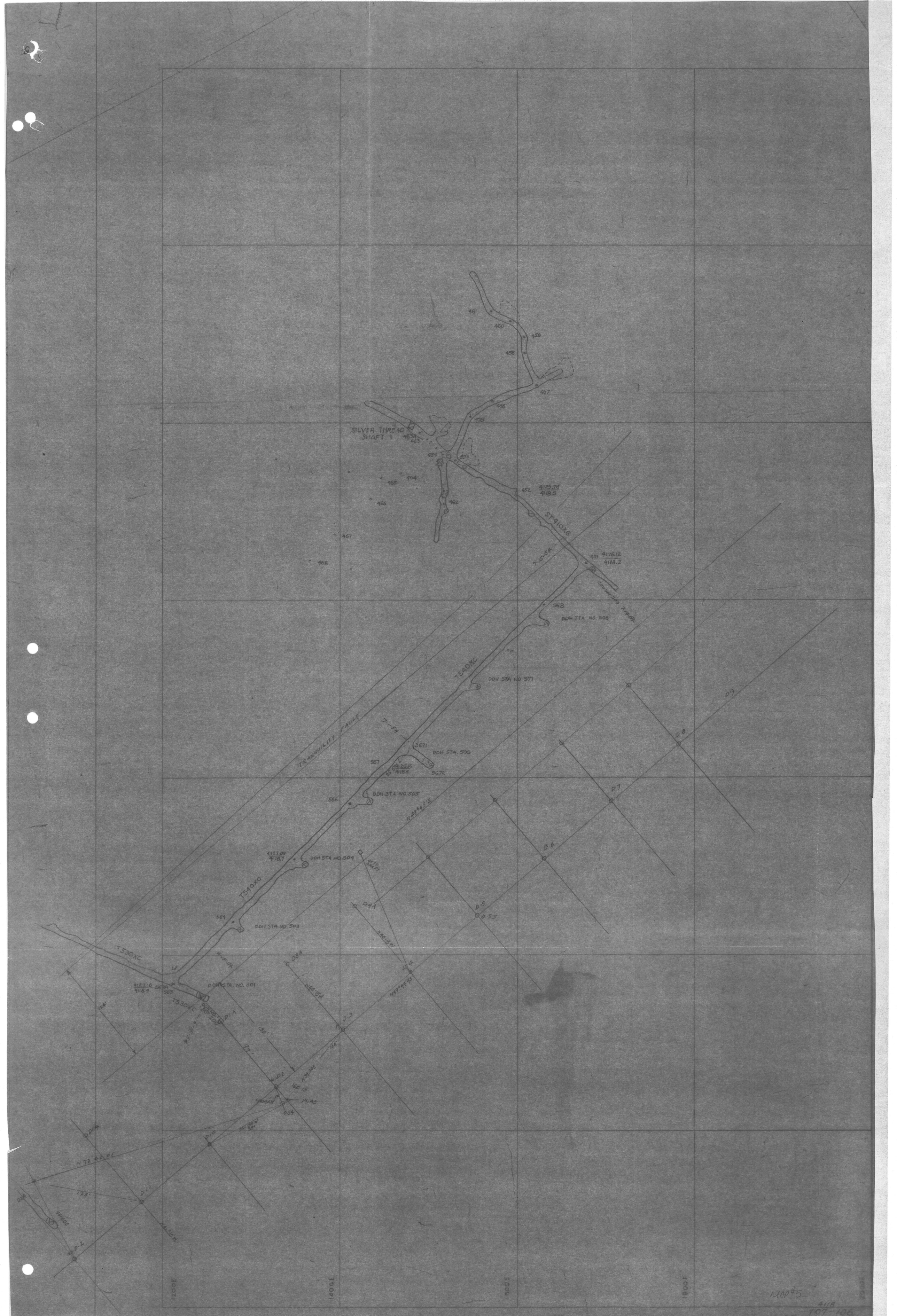


WEST SIDE 600- WORK PROGRESS PLAN

TOMBSTONE DEVELOPMENT COMPANY
TOMBSTONE DISTRICT, ARIZONA

4

19-54



MAP #5

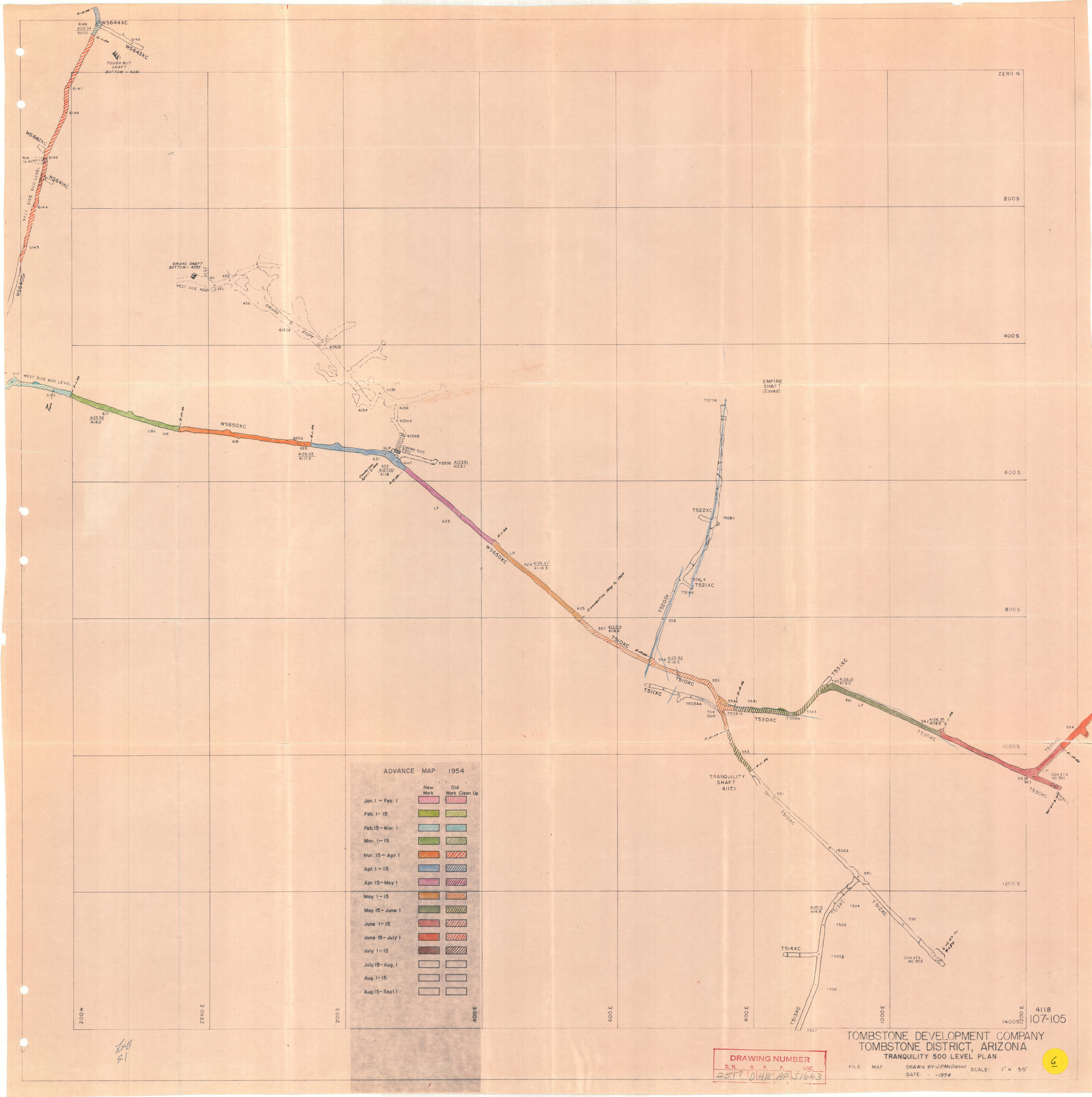
TOMBSTONE DEVELOPMENT COMPANY
TOMBSTONE DISTRICT ARIZONA
TRANQUILITY 500 - SILVER THREAD 400 LEVLEL PLAN

TRACED FROM MARKED MAPS
MONTROSE COLO 2-13-62 WRD

DRAWING NUMBER

D.N.	R.	F.	Z.
2515	01418	AF	316A2

5



4118
107-105

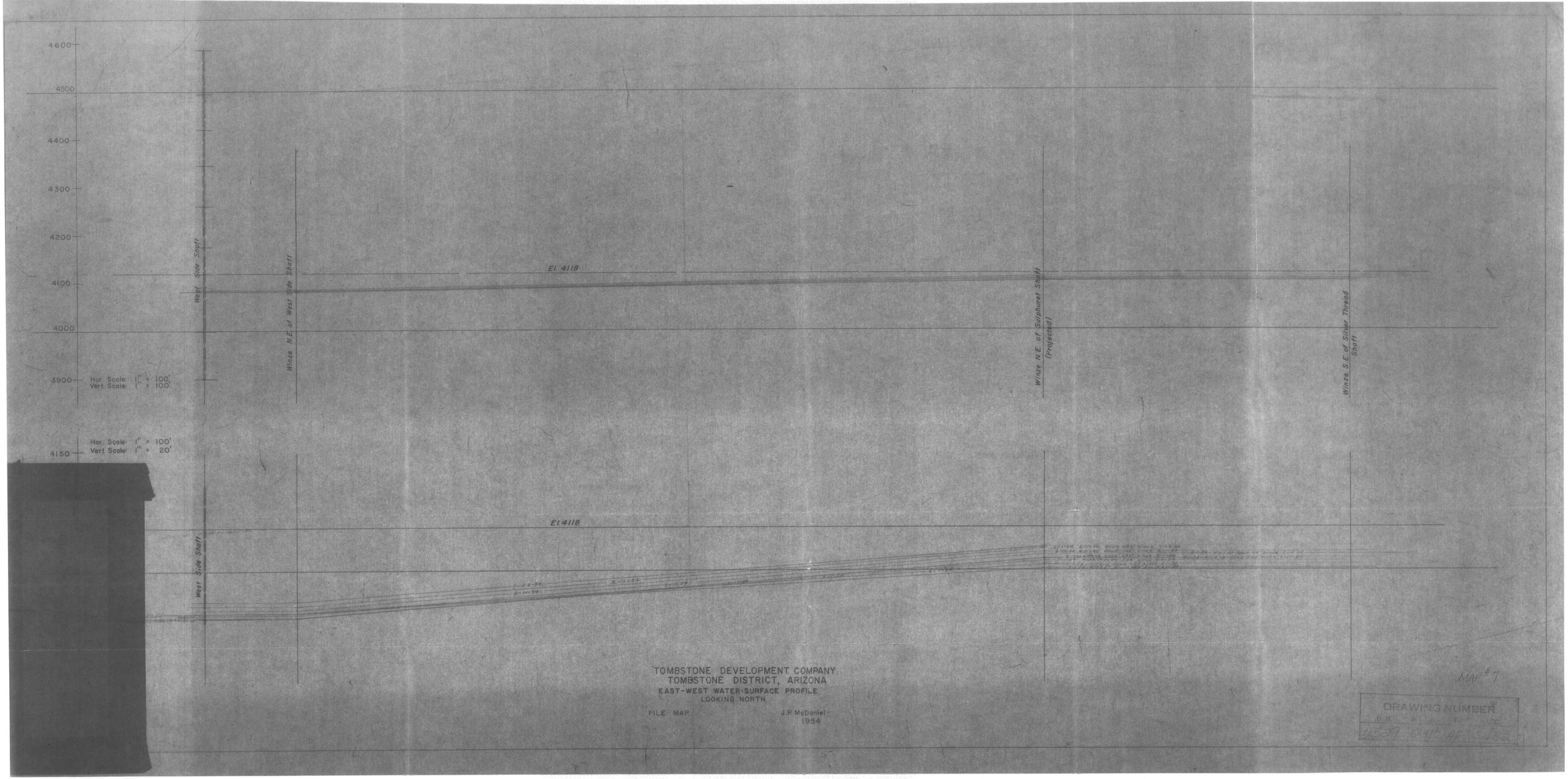
TOMBSTONE DEVELOPMENT COMPANY
TOMBSTONE DISTRICT, ARIZONA
TRANQUILITY 500 LEVEL PLAN

FILE MAP DRAWN BY: J.P.McDaniel SCALE: 1" = 50'
DATE: - -1954

DRAWING NUMBER

D. N.	R.	P.	F.	LOC.
2517	D	418	AF	51643

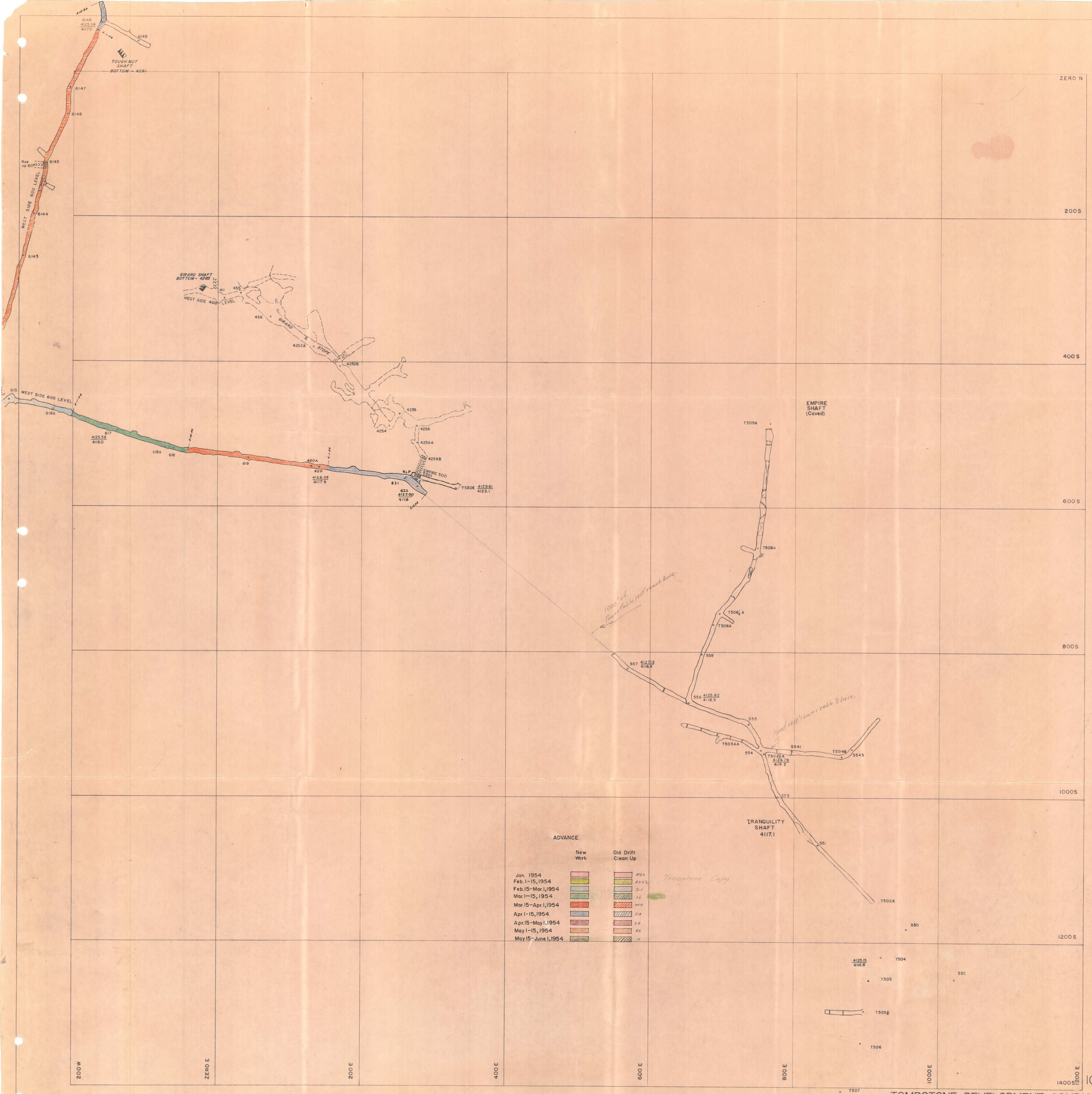
61



TOMBSTONE DEVELOPMENT COMPANY
TOMBSTONE DISTRICT, ARIZONA
EAST-WEST WATER-SURFACE PROFILE
LOOKING NORTH

FILE MAP

J.P. McDaniel
1954



4118
107-105

TOMBSTONE DEVELOPMENT COMPANY
TOMBSTONE DISTRICT, ARIZONA
TRANQUILITY 500 LEVEL PLAN WORK PROGRESS

FILE MAP

DRAWN BY: J.P. McDaniel
DATE: 3-17-1954

SCALE: 1" = 50'

DRAWING NUMBER

D. N.	R.	P.	F.	LOC.
2516	0	418	AF	S16A-3

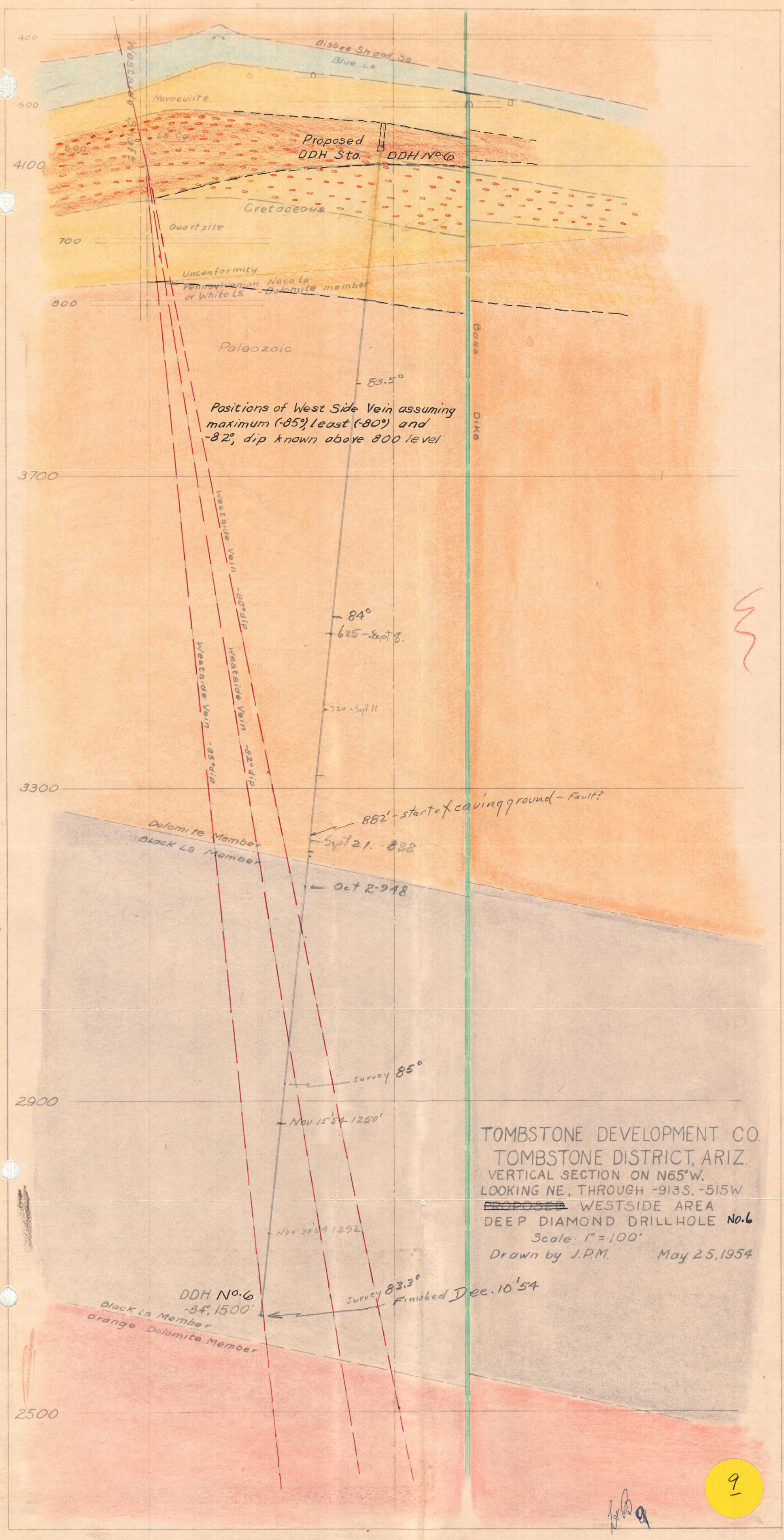
8

TOMBSTONE DEVELOPMENT CO. 4118
Tombstone District, Ariz. 107-105

TRANQUILITY 500 LEVEL PLAN

Scale: 1" = 50'
Dated: May 3-17-1954 3-12
Drawn by J.P. McDaniel

Progress Map ~~May 15~~ - ~~June 1~~, 1954
April 1-15 '54


400
500
4100
700
800
3700
3300
2900
2500
Bisbee Sh and Ss.
Blue Ls
Novaculite
Ls Cg
Proposed
DDH Sta.
DDH No. 6
Cretaceous
Quartzite
Unconformity
Pennsylvanian Naco Ls
or White Ls - Dolomite member
Paleozoic
Boss
Dike
83.5°
Positions of West Side Vein assuming
maximum (-85°), least (-80°) and
-82°, dip known above 800 level
Westside Vein -80° dip
Westside Vein -85° dip
Westside Vein -82° dip
84°
625 - Sept 8.
720 - Sept 11
882' - start of caving ground - Fault?
Sept 21. 828
Dolomite Member
Black Ls Member
Oct 2-948
survey 85°
Nov 15 '54 1250'
Nov 30 '54 1392
DDH No. 6
-84°, 1500'
survey 83.3°
Finished Dec. 10 '54
Black Ls Member
Orange Dolomite Member
TOMBSTONE DEVELOPMENT CO.
TOMBSTONE DISTRICT, ARIZ.
VERTICAL SECTION ON N65°W.
LOOKING NE, THROUGH -913S, -515W
~~PROPOSED~~ WESTSIDE AREA
DEEP DIAMOND DRILLHOLE No. 6
Scale: 1" = 100'
Drawn by J.P.M.
May 25, 1954

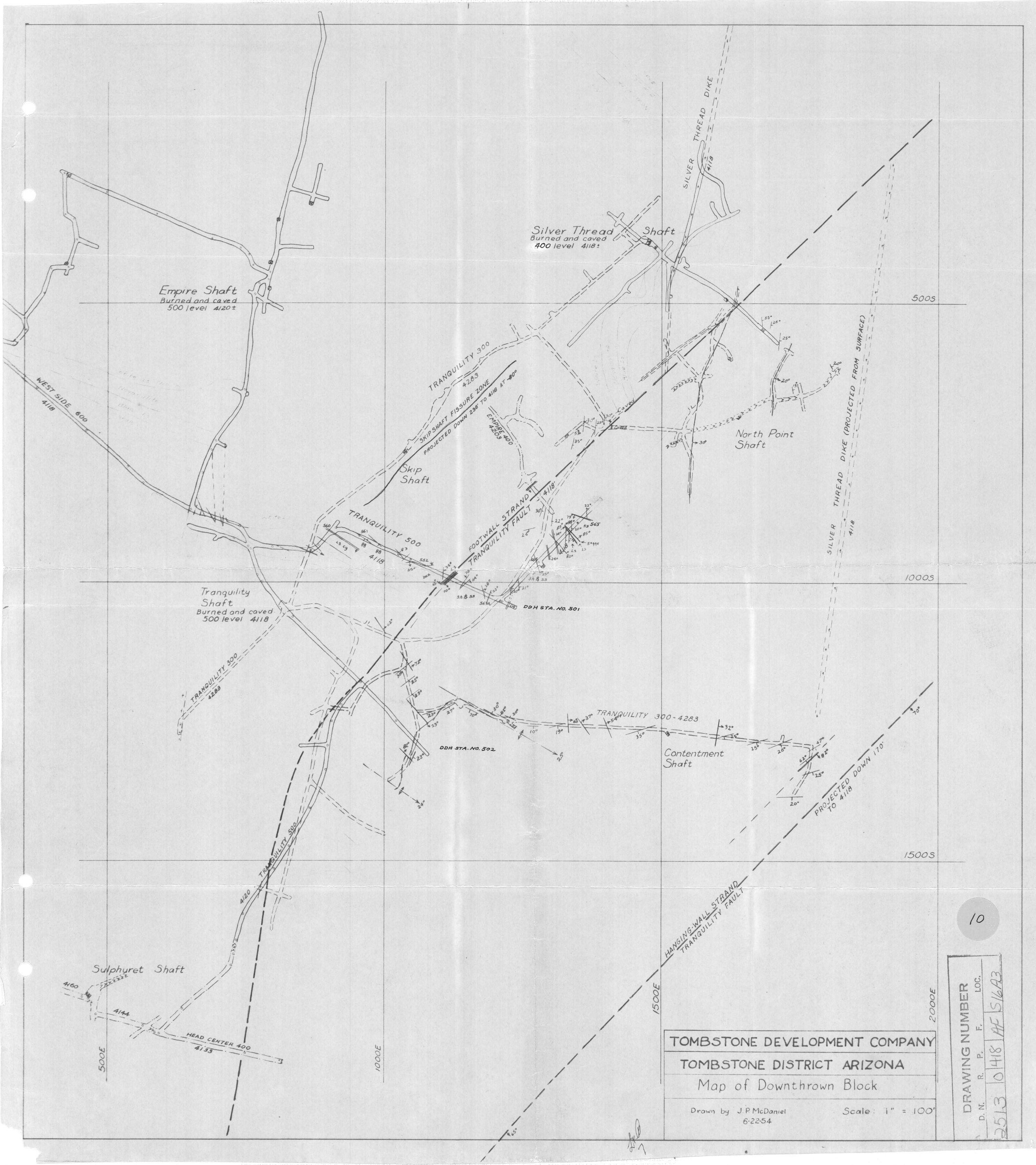
9

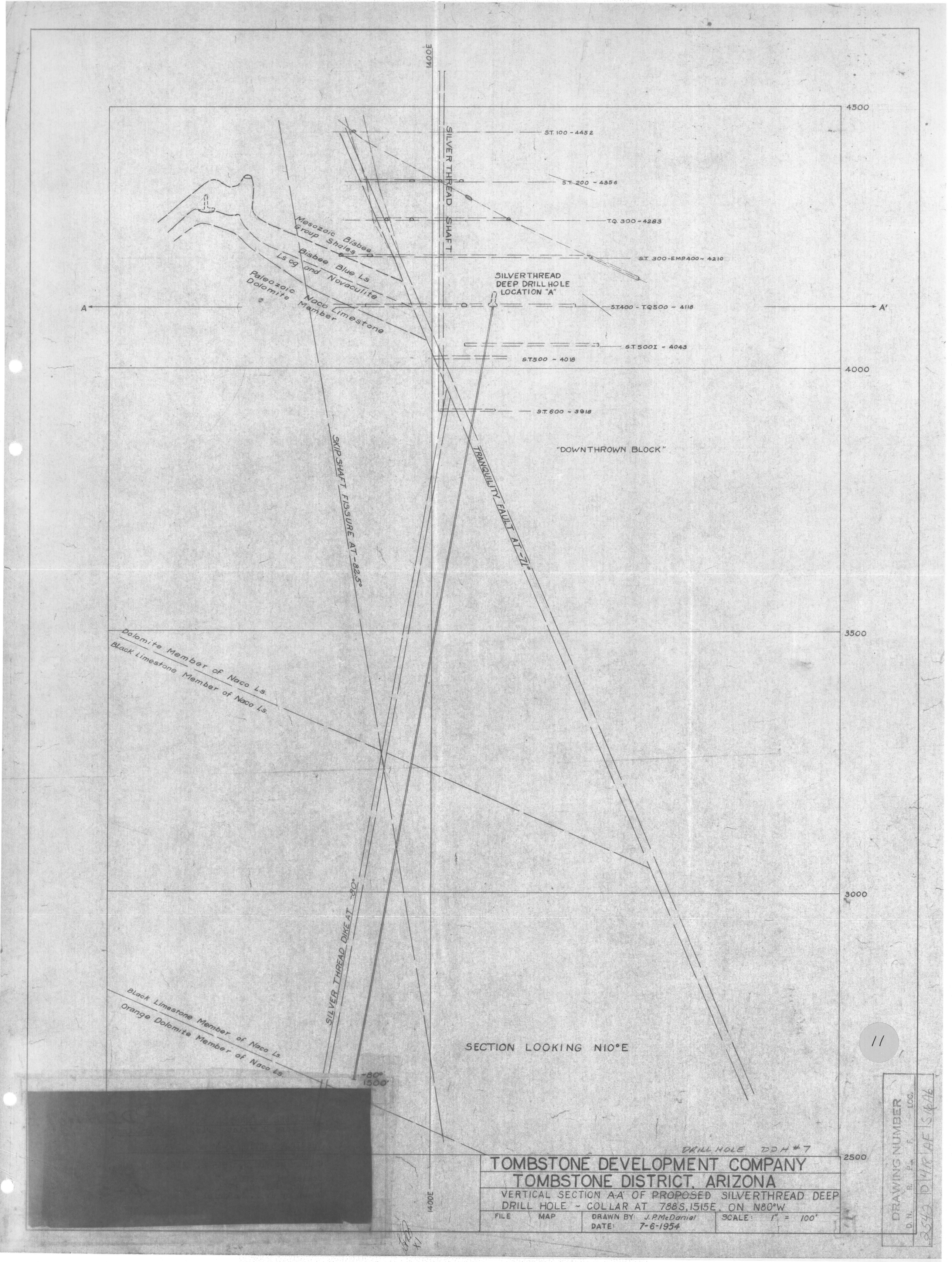
TOMBSTONE DEVELOPMENT CO.
Tombstone, Ariz.

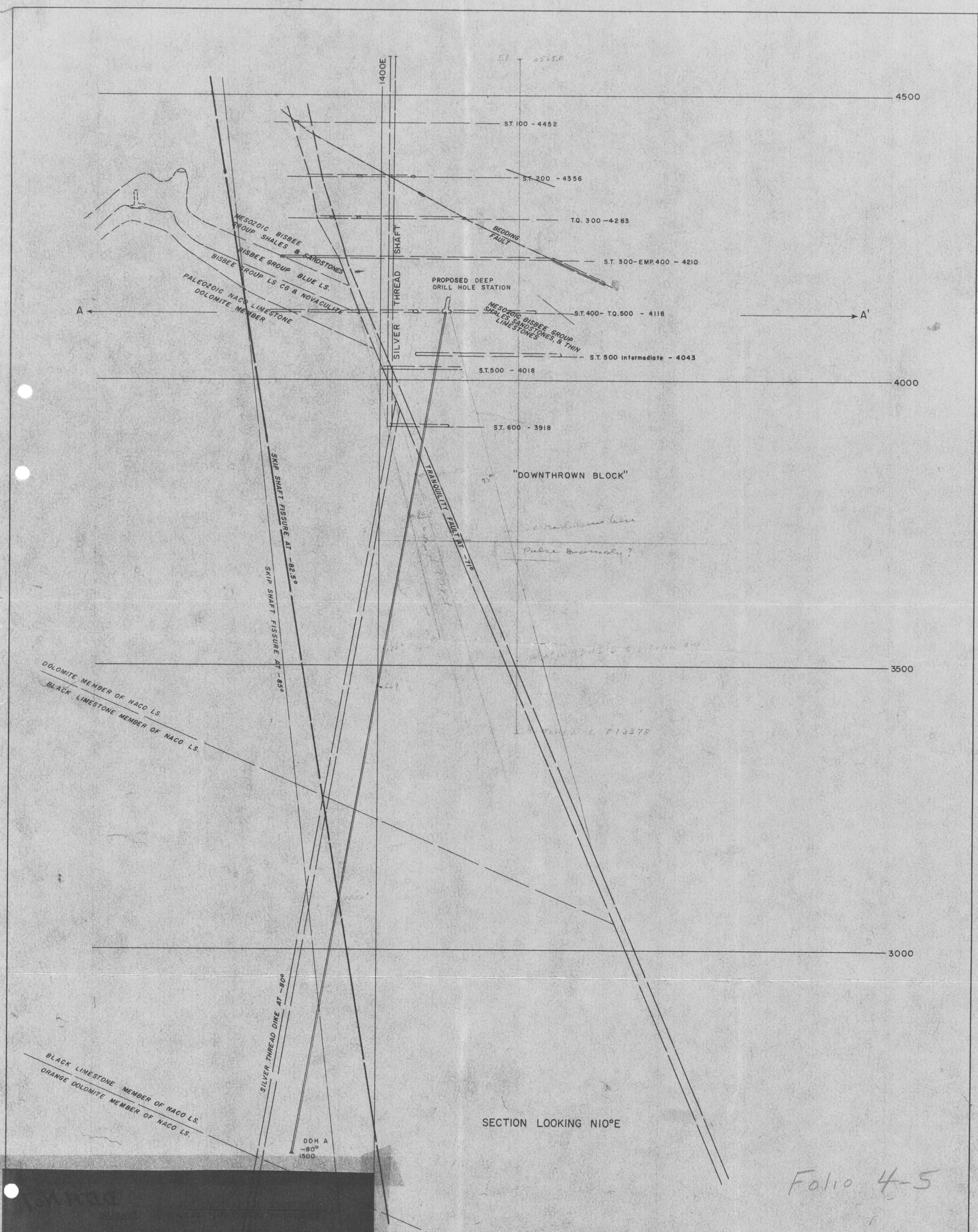
VERTICAL SECTION ON N 65° W
Looking N E, through - 913 S, - 515 W
WESTSIDE AREA DEEP DIAMOND DRILL HOLE
D.D.H. No 6

Scale: 1" = 100'
Dated: May 25, 1954
Drawn by J. P. M.

4-8


Empire Shaft
Burned and caved
500 level 4120±
Silver Thread Shaft
Burned and caved
400 level 4118±
SILVER THREAD DIKE
4118
500S
TRANQUILITY 300
4283
SKIP SHAFT FISSURE ZONE
PROJECTED DOWN 238' TO 4118 AT 80°
EMPIRE 400
4203
Caved
North Point Shaft
SILVER THREAD DIKE (PROJECTED FROM SURFACE)
WEST SIDE 600
4118
Skip Shaft
TRANQUILITY 500
FOOTWALL STRAND
TRANQUILITY FAULT
4118'
10000S
Tranquility Shaft
Burned and caved
500 level 4118
DDH STA. NO. 501
TRANQUILITY 300
4283
TRANQUILITY 300-4283
DDH STA. NO. 502
Contentment Shaft
PROJECTED DOWN 170' TO 4118
1500S
TRANQUILITY 500
4120
HANGING-WALL STRAND
TRANQUILITY FAULT
Sulphuret Shaft
4160
4144
HEAD CENTER 400
4133
500E
1000E
1500E
2000E
TOMBSTONE DEVELOPMENT COMPANY
TOMBSTONE DISTRICT ARIZONA
Map of Downthrown Block
Drawn by J. P. McDaniel
6-22-54
Scale: 1" = 100'
DRAWING NUMBER
D. N. 2513
R. 0
P. 418
F. AF
LOC. 5/6A3
10

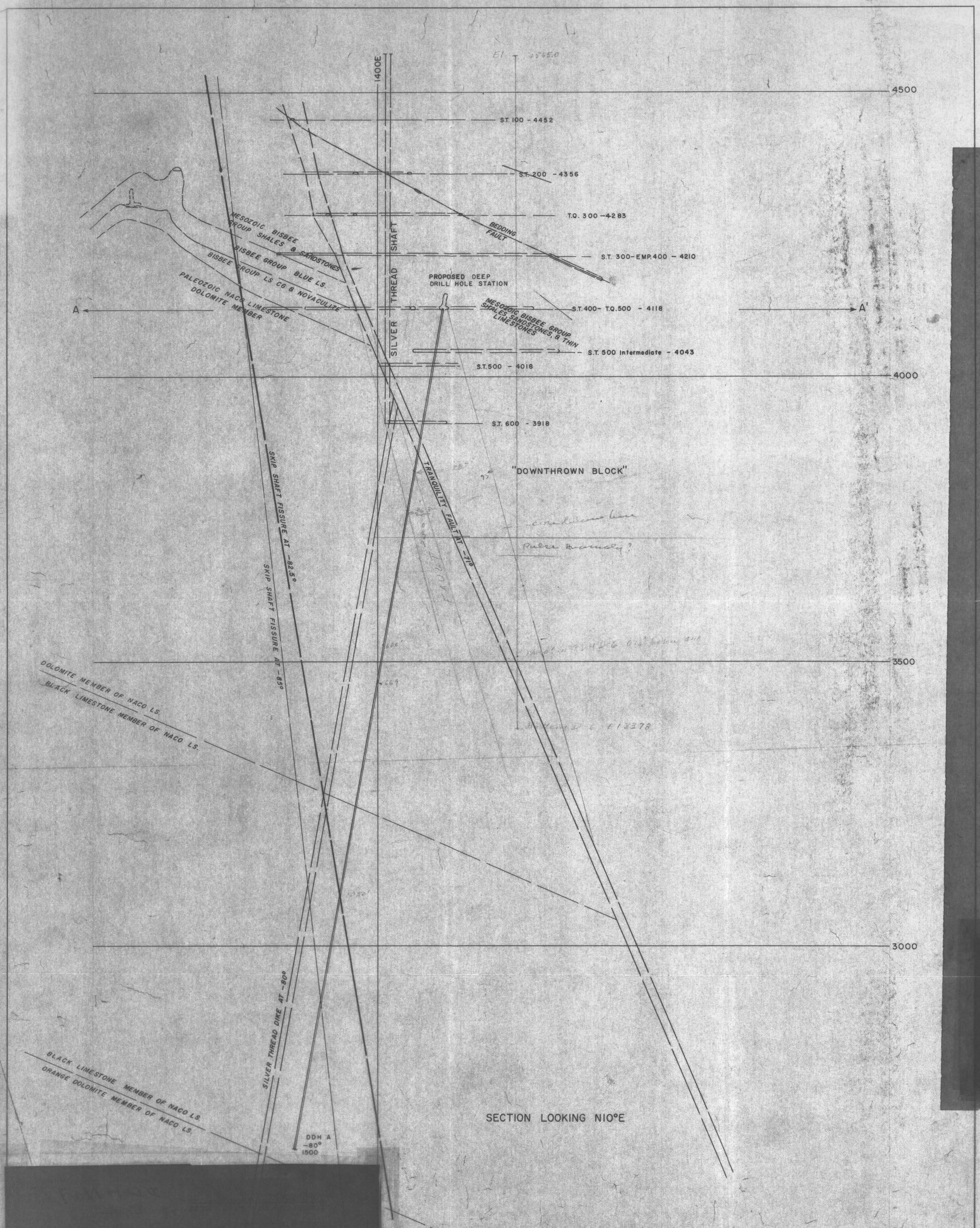

1400E
4500
4000
3500
3000
2500
SILVER THREAD SHAFT
S.T. 100 ~ 4452
S.T. 200 ~ 4356
T.Q. 300 ~ 4283
S.T. 300-EMP400 ~ 4210
SILVERTHREAD DEEP DRILL HOLE LOCATION "A"
S.T.400 - T.Q500 ~ 4118
S.T.500I ~ 4043
S.T.500 ~ 4018
S.T.600 ~ 3918
A
A'
Mesozoic Bisbee Group Shales
Bisbee Blue Ls
Ls cg and Novaculite
Paleozoic Naco Limestone
Dolomite Member
"DOWNTHROWN BLOCK"
SKIP SHAFT FISSURE AT -82.5°
TRANQUILITY FAULT AT -71°
Dolomite Member of Naco Ls.
Black Limestone Member of Naco Ls.
SILVER THREAD DIKE AT -80°
Black Limestone Member of Naco Ls.
Orange Dolomite Member of Naco Ls.
-80°
1500'
SECTION LOOKING N10°E
DRILL HOLE DDH #7
TOMBSTONE DEVELOPMENT COMPANY
TOMBSTONE DISTRICT, ARIZONA
VERTICAL SECTION A-A' OF PROPOSED SILVERTHREAD DEEP DRILL HOLE ~ COLLAR AT 788'S, 1515E, ON N80°W
FILE MAP
DRAWN BY: J. P. McDaniel
DATE: 7-6-1954
SCALE: 1" = 100'
DRAWING NUMBER
D.N. R. F. LOC.
2343 D 418 AF 5 46 46
11



Folio 4-5

TOMBSTONE DEVELOPMENT COMPANY TOMBSTONE DISTRICT, ARIZONA		
VERTICAL SECTION A-A' OF PROPOSED SILVER THREAD DEEP DRILL HOLE - COLLAR AT 788S, 1515E, 4118, ON N80°W, -80°		
FILE MAP	DRAWN BY: J.P. McDaniel DATE: 7-6-1954	SCALE: 1" = 100'

12

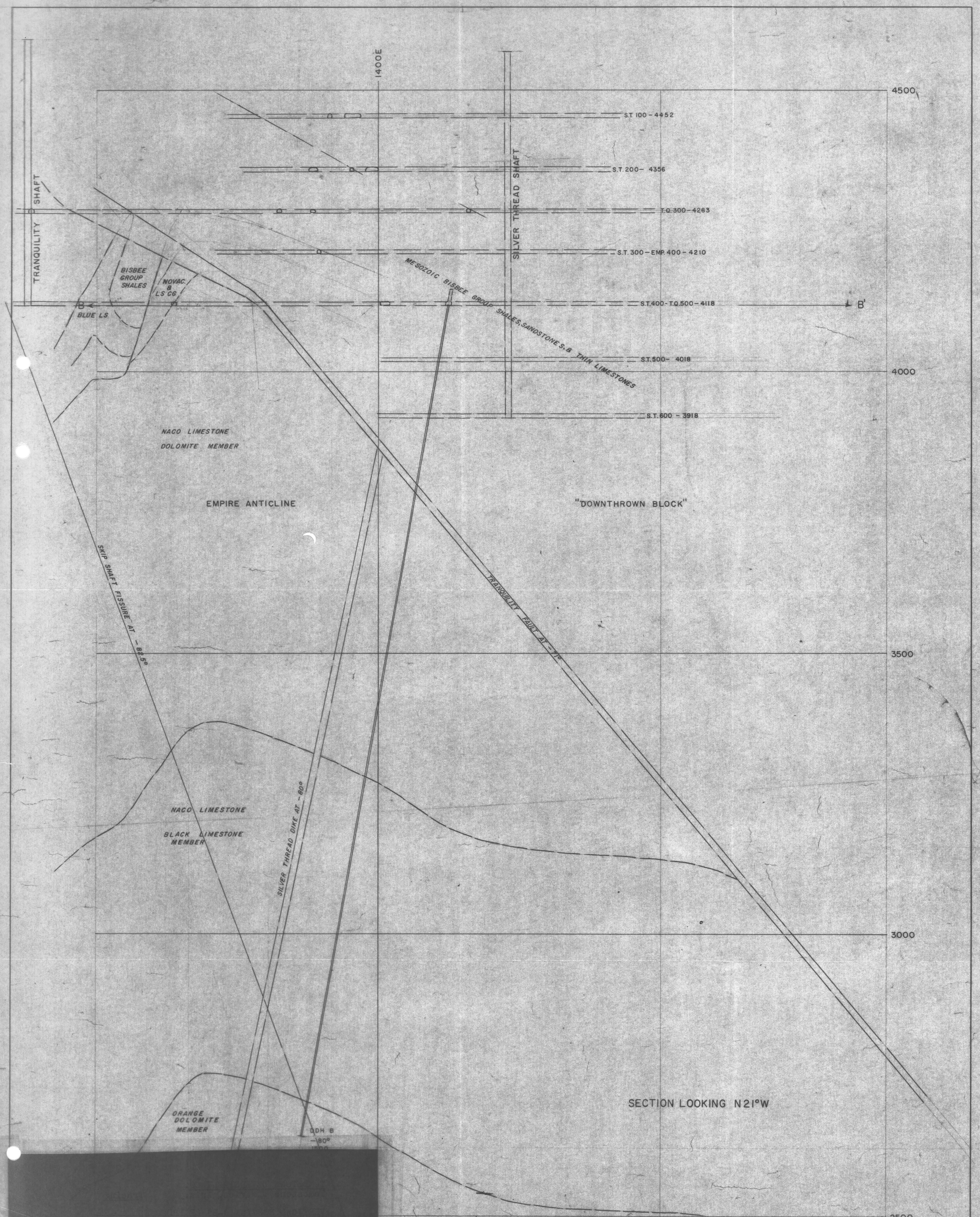


TOMBSTONE DEVELOPMENT COMPANY
TOMBSTONE DISTRICT, ARIZONA

VERTICAL SECTION A-A' OF PROPOSED SILVER THREAD DEEP DRILL HOLE - COLLAR AT 788S, 1515E, 4118, ON N80°W, -80°

FILE	MAP	DRAWN BY: J.P. McDaniel DATE: 7-6-1954	SCALE: 1" = 100'

12



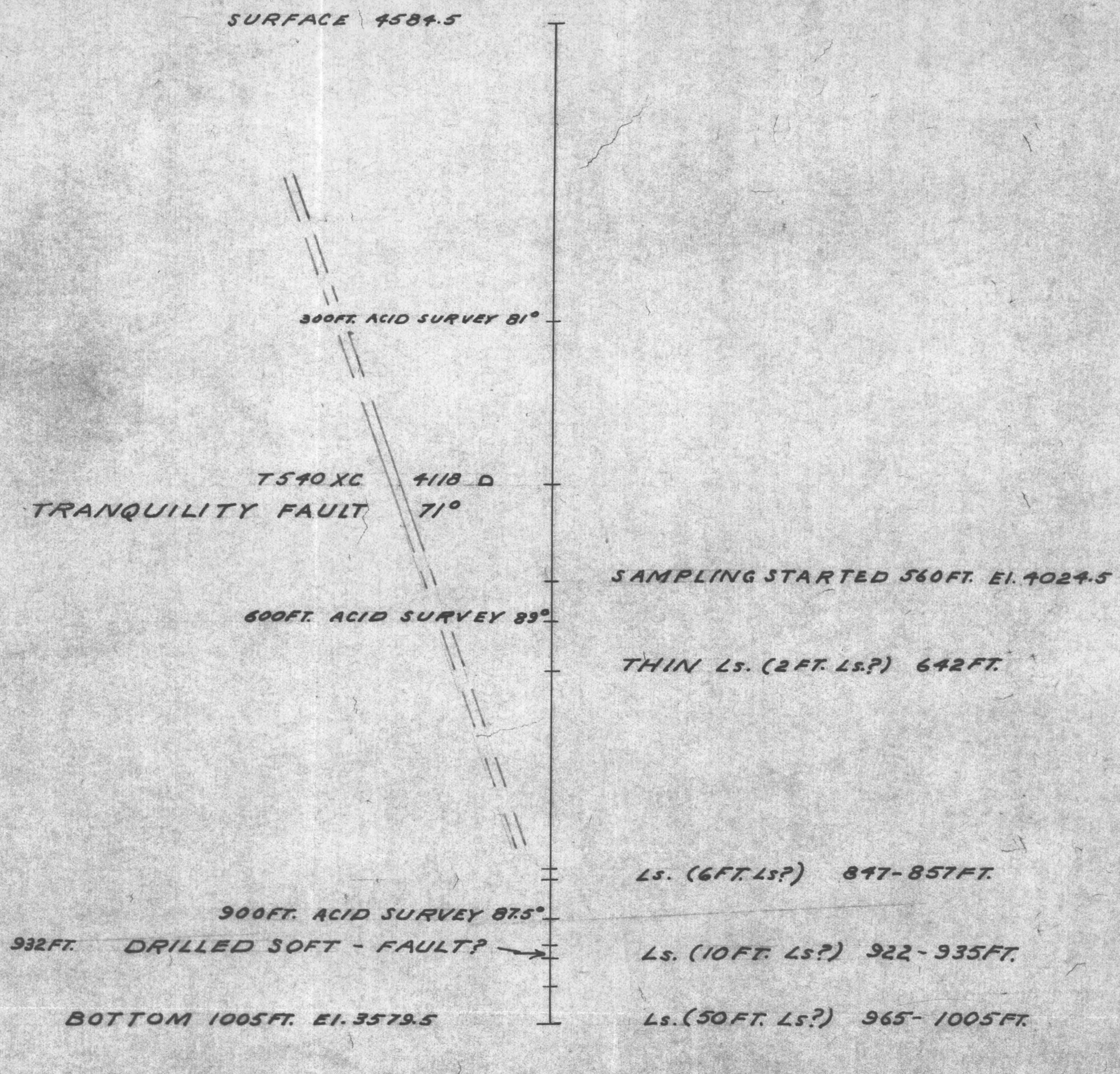
TOMBSTONE DEVELOPMENT COMPANY
TOMBSTONE DISTRICT, ARIZONA

VERTICAL SECTION B-B' OF PROPOSED SILVER THREAD DEEP DRILL HOLE - COLLAR AT 788S, 1515E, 4118, ON S69°W, -80°

FILE MAP	DRAWN BY: J.P. McDaniel DATE: 7-6-1954	SCALE: 1" = 100'

13

2554

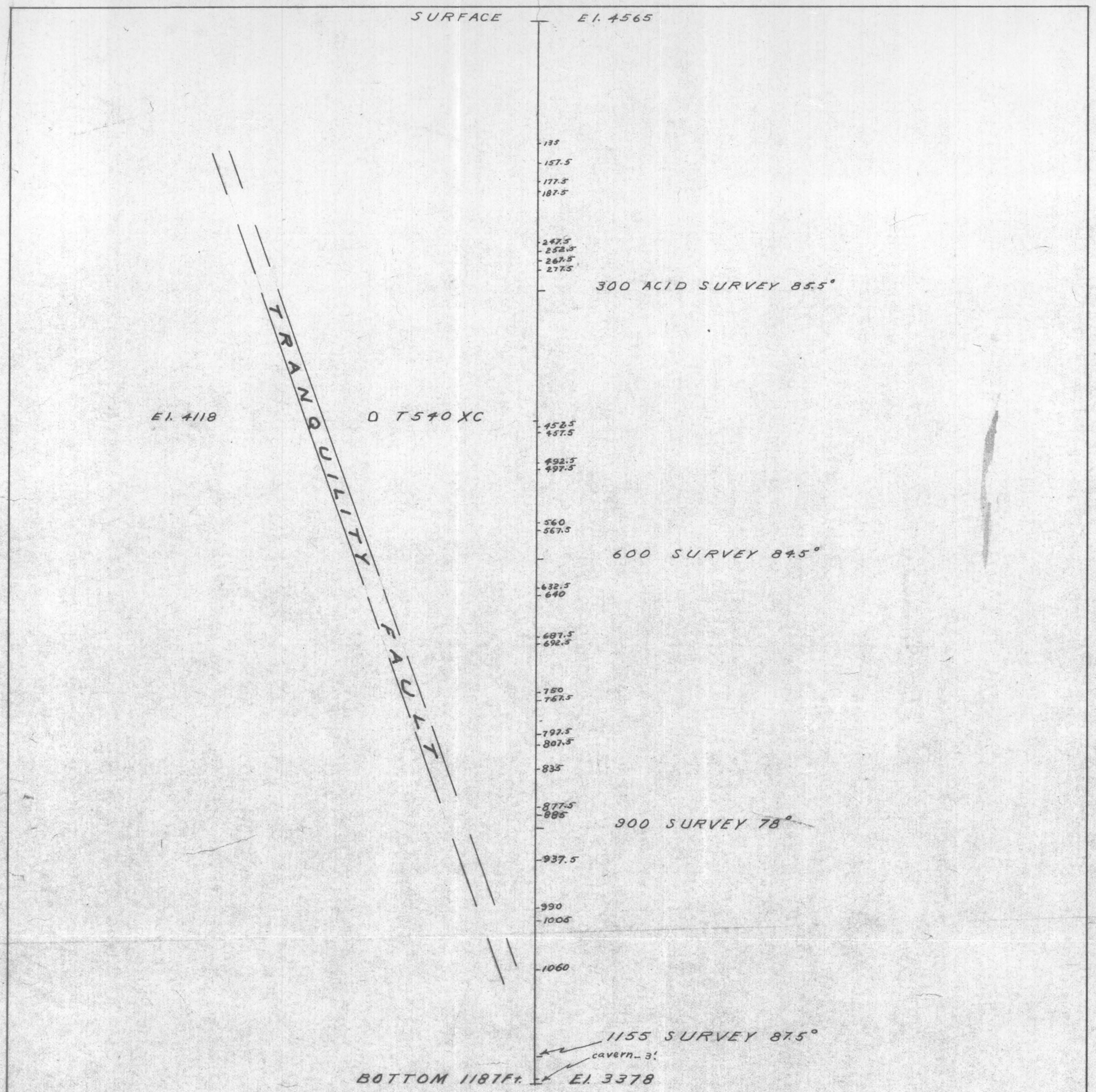


TOMBSTONE DEVELOPEMENT CO.
TOMBSTONE ARIZONA
SECTION OF SURFACE 4¾" ROTARY HOLE D-1-A

COLLAR LOCATION -1075.7S + 1266.2E
DRILLED BY G.S.I. OF DALLAS TEXAS
LOOKING N50°E 1 IN = 100FT.
SEPT. 30 1954 D.H.

15

DRAWING NUMBER				
D.N.	R.	P.	F.	LOC.
2528	6	418	AF	516A6



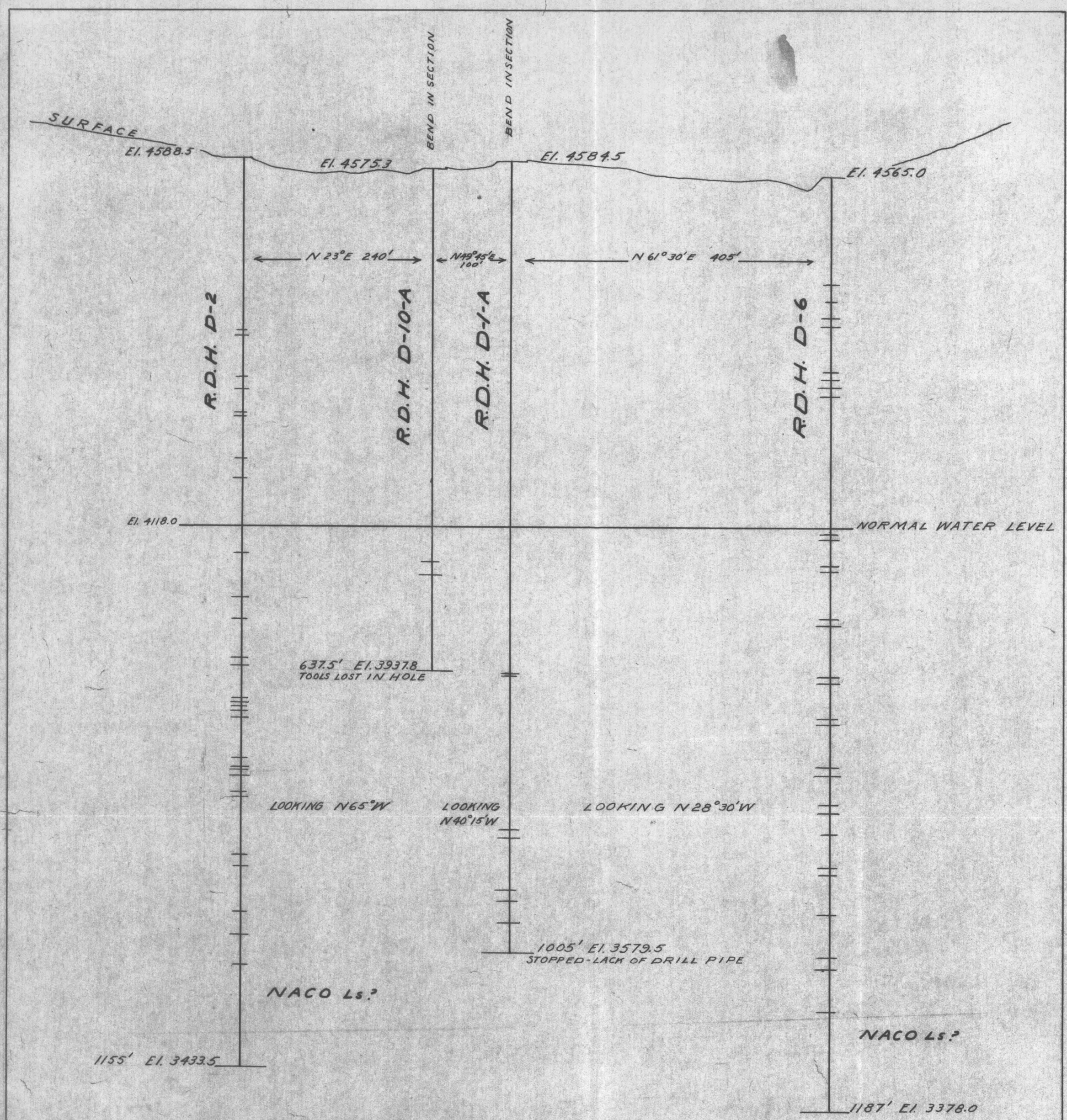
TOMBSTONE DEVELOPEMENT CO.
TOMBSTONE ARIZONA
SECTION OF SURFACE 4¾" ROTARY HOLE D-6
COLLAR LOCATION 875S 1620E
DALLAS TEXAS
N 50° E
= 100 Ft.
D.H.

[redacted]

Oct. 12, 1954

DRAWING NUMBER				
D. N.	B	P.	E.	LOC.
2527	0	418	AF	S16A6

16



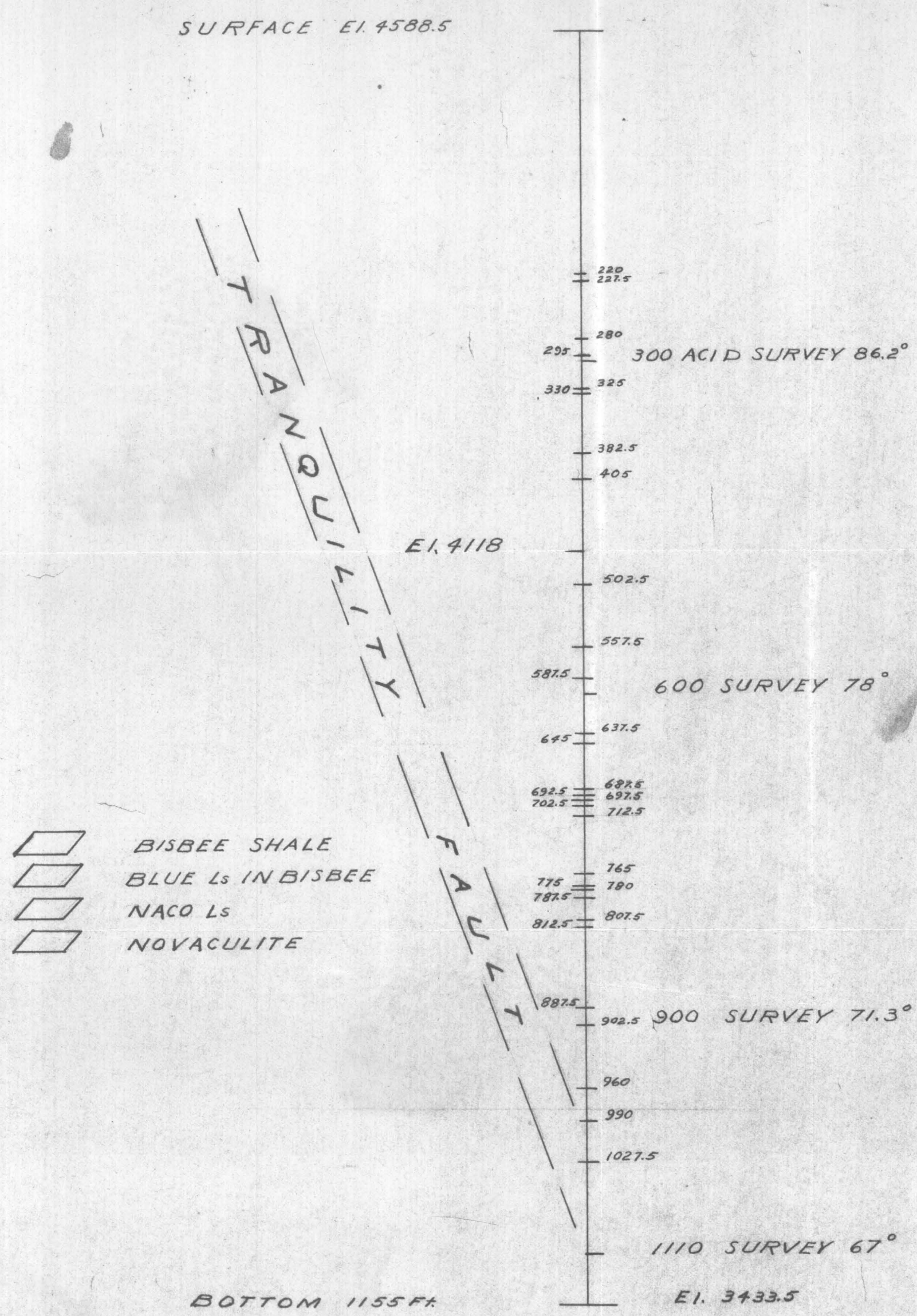
TOMBSTONE DEVELOPEMENT CO.
TOMBSTONE ARIZONA
SECTION OF SURFACE HOLES G.S.I. DRILLED
D-2, D-1-A AND D-6 ARE 4¾ IN.
D-10-A IS 6¼ IN. ALL DRILLED BY ROTARY RIG
START AUG 17 — COMPLETED OCT. 25 1954
1 IN = 100 Ft.

D.H.

17

DRAWING NUMBER

D.N.	R	P.	F.	LOC.
2545	0	418	AF	51681



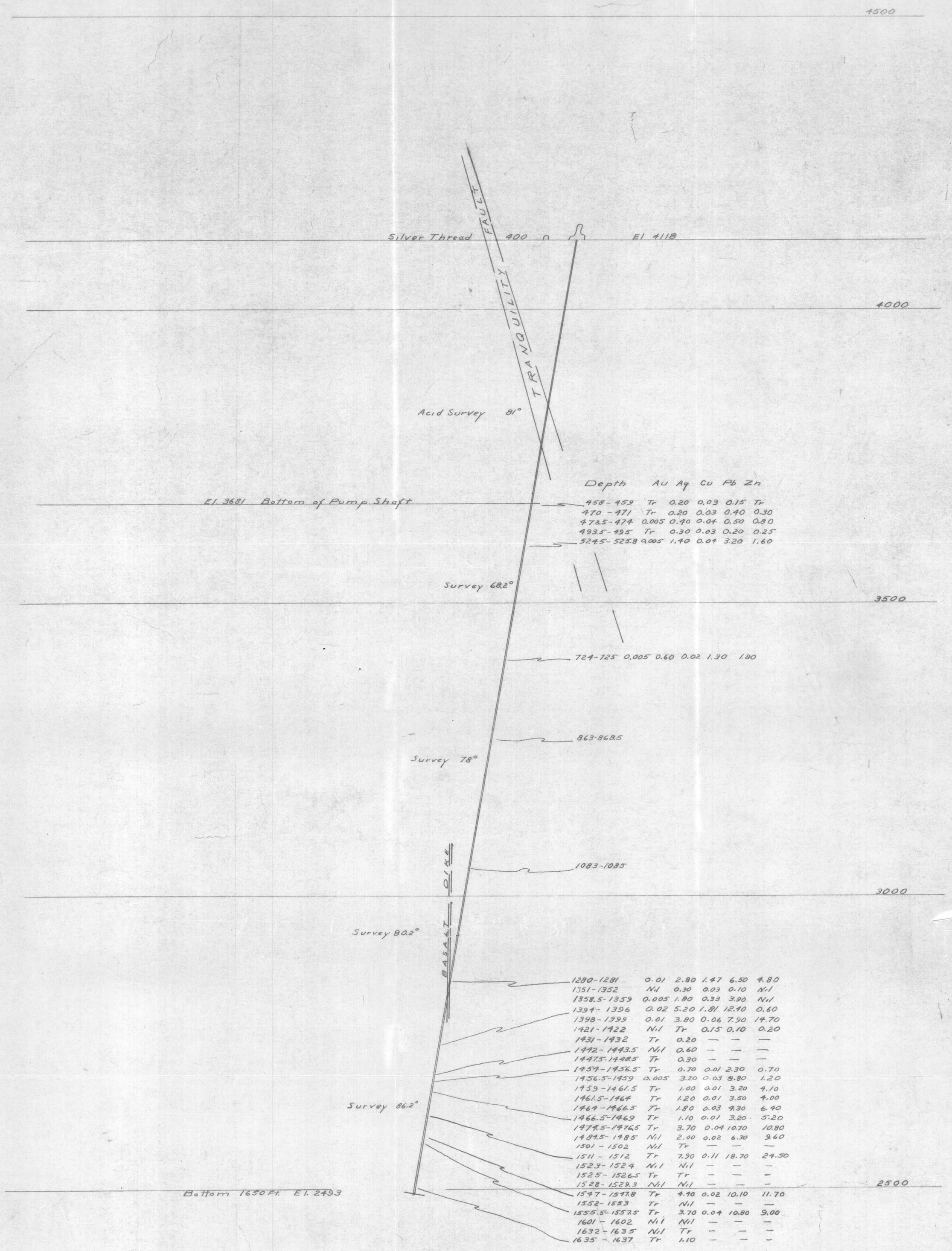
TOMBSTONE DEVELOPEMENT CO.
TOMBSTONE ARIZONA
SECTION OF SURFACE 4¾" ROTARY HOLE D-2
COLLAR LOCATION 1363S 1095.5E
DRILLED BY G.S.I. DALLAS TEXAS
LOOKING N60°E
N = 100 Ft.

D.H.

18

DRAWING NUMBER				
D.N.	R.	P.	F.	LOC.
2526	0	48	HF	S16A6

S-4



TOMBSTONE DEVELOPEMENT CO.
TOMBSTONE ARIZONA
ASSAY MAP OF D.D. HOLE NO. 7.
COLLAR LOCATION - D.D. STATION T-506
788 S, 1515 E
BEARING N80°W DIP -80°

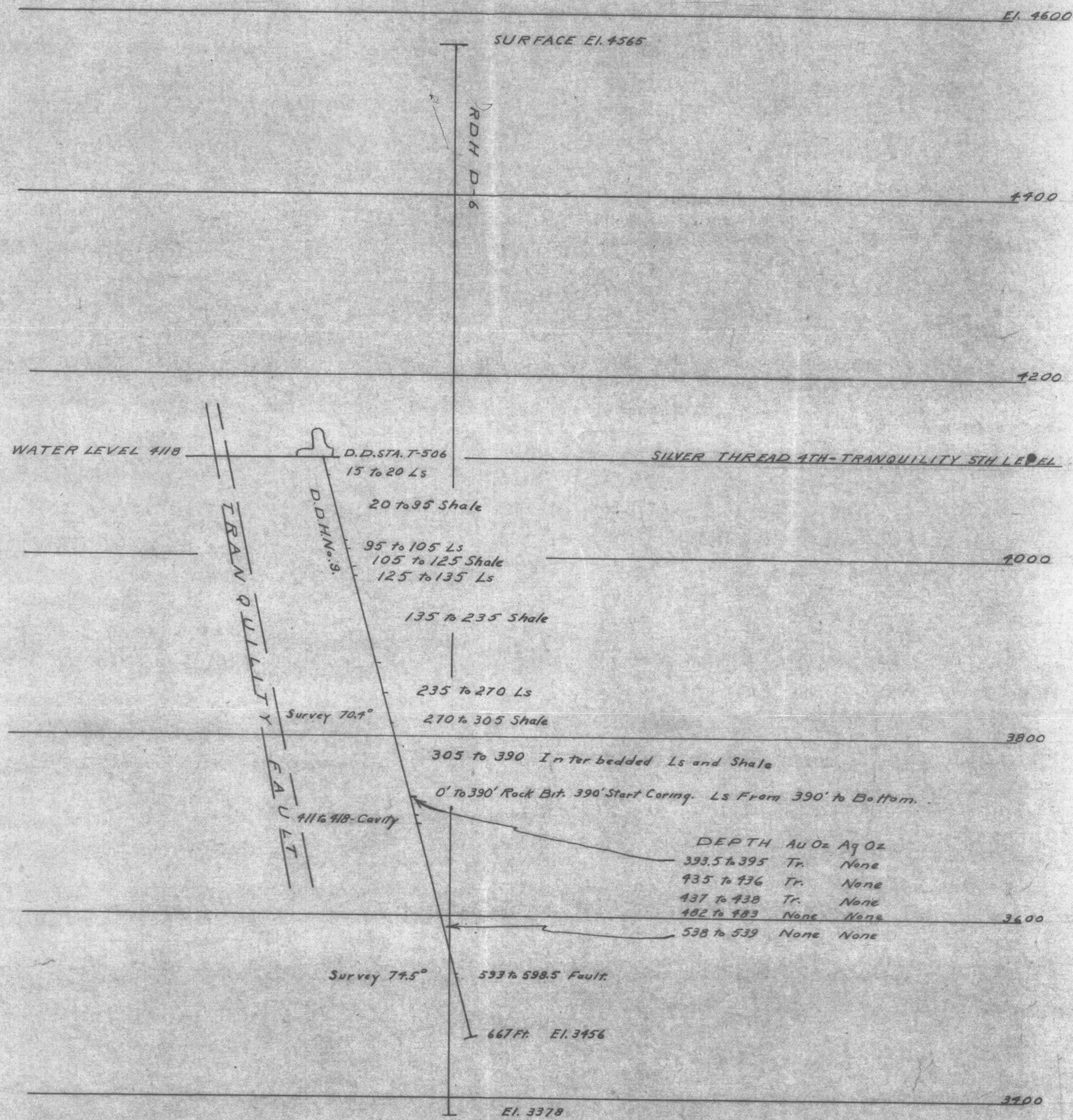
DEC. 31 1954 D.H.

MAP #19

19

DRAWING NUMBER
D. N. R. P. F. LOC.
2543

17



TOMBSTONE DEVELOPMENT CO.
TOMBSTONE ARIZONA
SECTION OF DRILL HOLE NO. 9
COLLAR LOCATION — D.D. STATION T-506
788S 1515E
BEARING S50°E DIP -75°
LOOKING N50°E

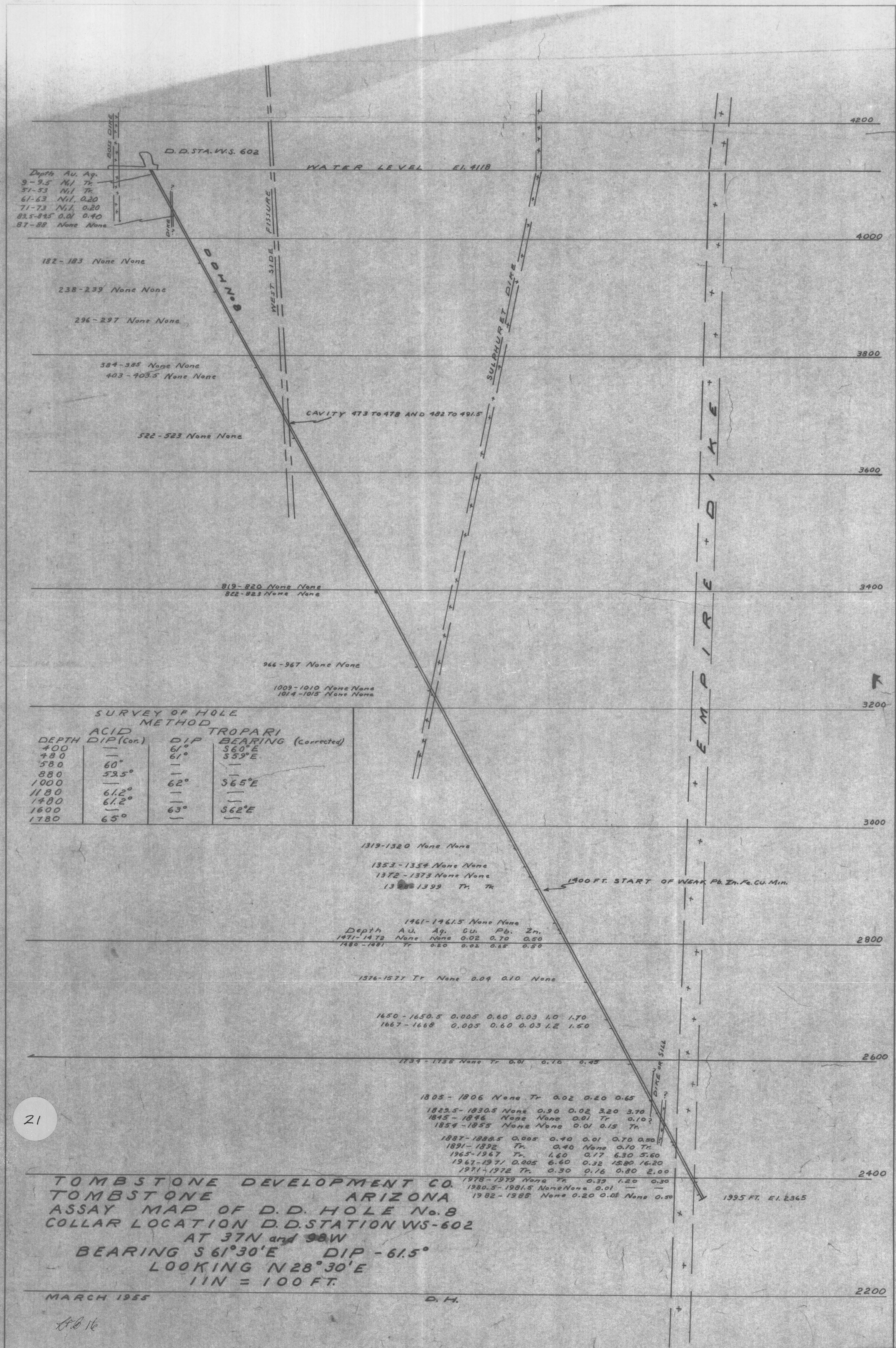
FEB. 22 1955

D.H.

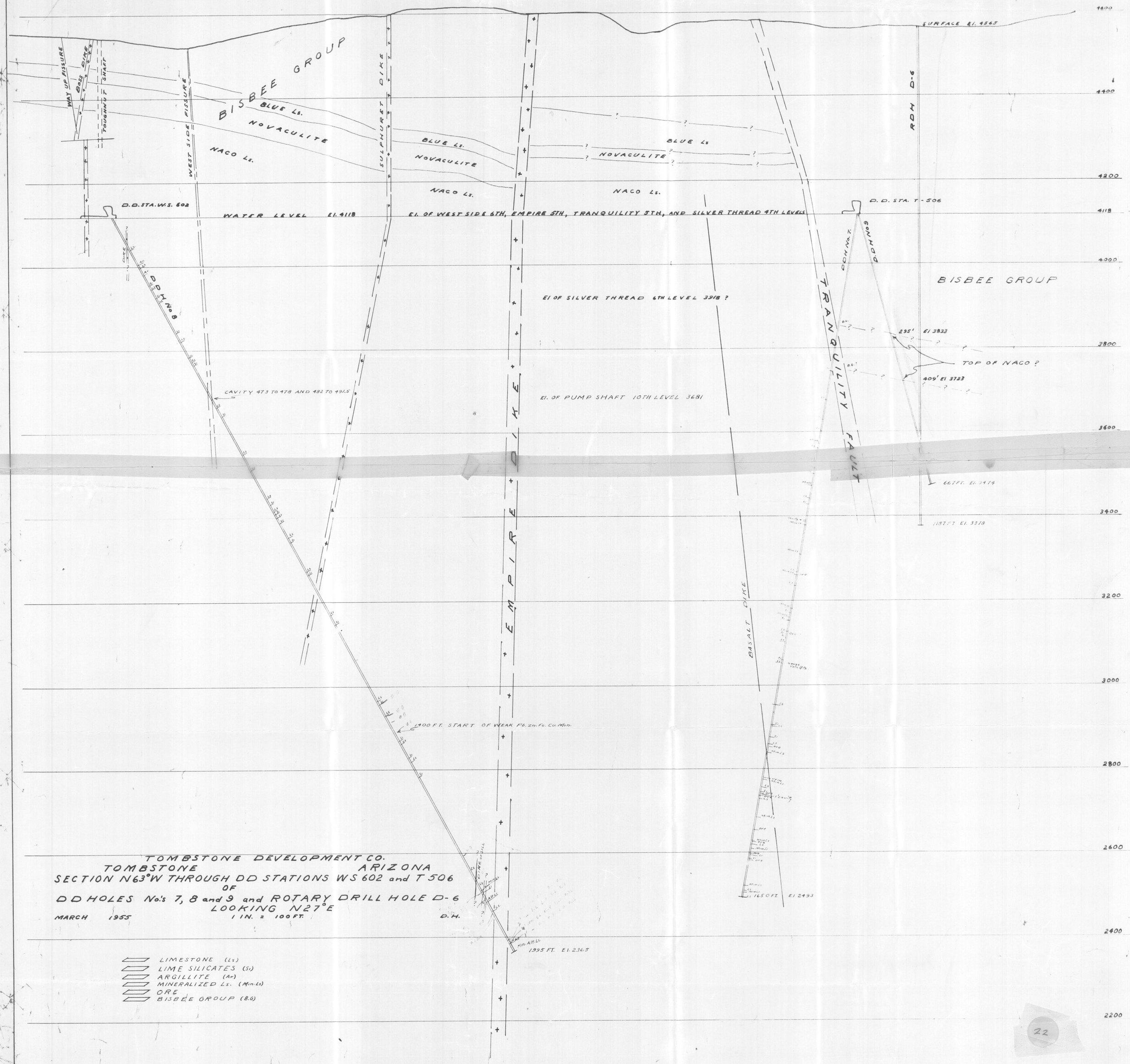
Lt-B18

DRAWING NUMBER

20


D.D. STA. W.S. 602
WATER LEVEL El. 4118
BOJS DIKE
Depth Au. Ag.
9-9.5 Nil Tr.
51-53 Nil Tr.
61-63 Nil 0.20
71-73 Nil 0.20
83.5-84.5 0.01 0.40
87-88 None None
182-183 None None
238-239 None None
296-297 None None
384-385 None None
403-403.5 None None
522-523 None None
819-820 None None
822-823 None None
966-967 None None
1009-1010 None None
1014-1015 None None
1319-1320 None None
1353-1354 None None
1372-1373 None None
1398-1399 Tr. Tr.
1461-1461.5 None None
Depth Au. Ag. Cu. Pb. Zn.
1471-1472 None None 0.02 0.70 0.50
1480-1481 Tr 0.20 0.02 0.65 0.50
1576-1577 Tr None 0.04 0.10 None
1650-1650.5 0.005 0.60 0.03 1.0 1.70
1667-1668 0.005 0.60 0.03 1.2 1.50
1734-1735 None Tr 0.01 0.10 0.45
1805-1806 None Tr 0.02 0.20 0.65
1823.5-1830.5 None 0.90 0.02 3.20 3.70
1845-1846 None None 0.01 Tr 0.10?
1854-1855 None None 0.01 0.15 Tr.
1887-1888.5 0.005 0.40 0.01 0.70 0.50
1891-1892 Tr. 0.40 None 0.10 Tr.
1965-1967 Tr. 1.60 0.17 6.30 5.60
1967-1971 0.005 6.60 0.32 15.80 16.20
1971-1972 Tr. 0.30 0.16 0.80 2.00
1978-1979 None Tr. 0.39 1.20 0.30
1980.5-1981.5 None None 0.01 — —
1982-1985 None 0.20 0.01 None 0.50
DOH No. 8
WEST SIDE FISSURE
SULPHURET DIKE
CAVITY 473 TO 478 AND 482 TO 491.5
1400 FT. START OF WEAK Pb. Zn. Fe. Cu. Min.
DIKE OR SILL
1995 FT. El. 2365
4200
4000
3800
3600
3400
3200
3000
2800
2600
2400
2200
SURVEY OF HOLE
METHOD
ACID TROPARI
DEPTH DIP (Cor.) DIP BEARING (Corrected)
400 — 61° S60°E
480 — 61° S59°E
580 60° — —
880 59.5° — —
1000 — 62° S65°E
1180 61.2° — —
1480 61.2° — —
1600 — 63° S62°E
1780 65° — —
TOMBSTONE DEVELOPMENT CO.
TOMBSTONE ARIZONA
ASSAY MAP OF D.D. HOLE No. 8
COLLAR LOCATION D.D. STATION WS-602
AT 37N and 98W
BEARING S 61°30'E DIP -61.5°
LOOKING N 28°30'E
1IN = 100 FT.
MARCH 1955
D.H.

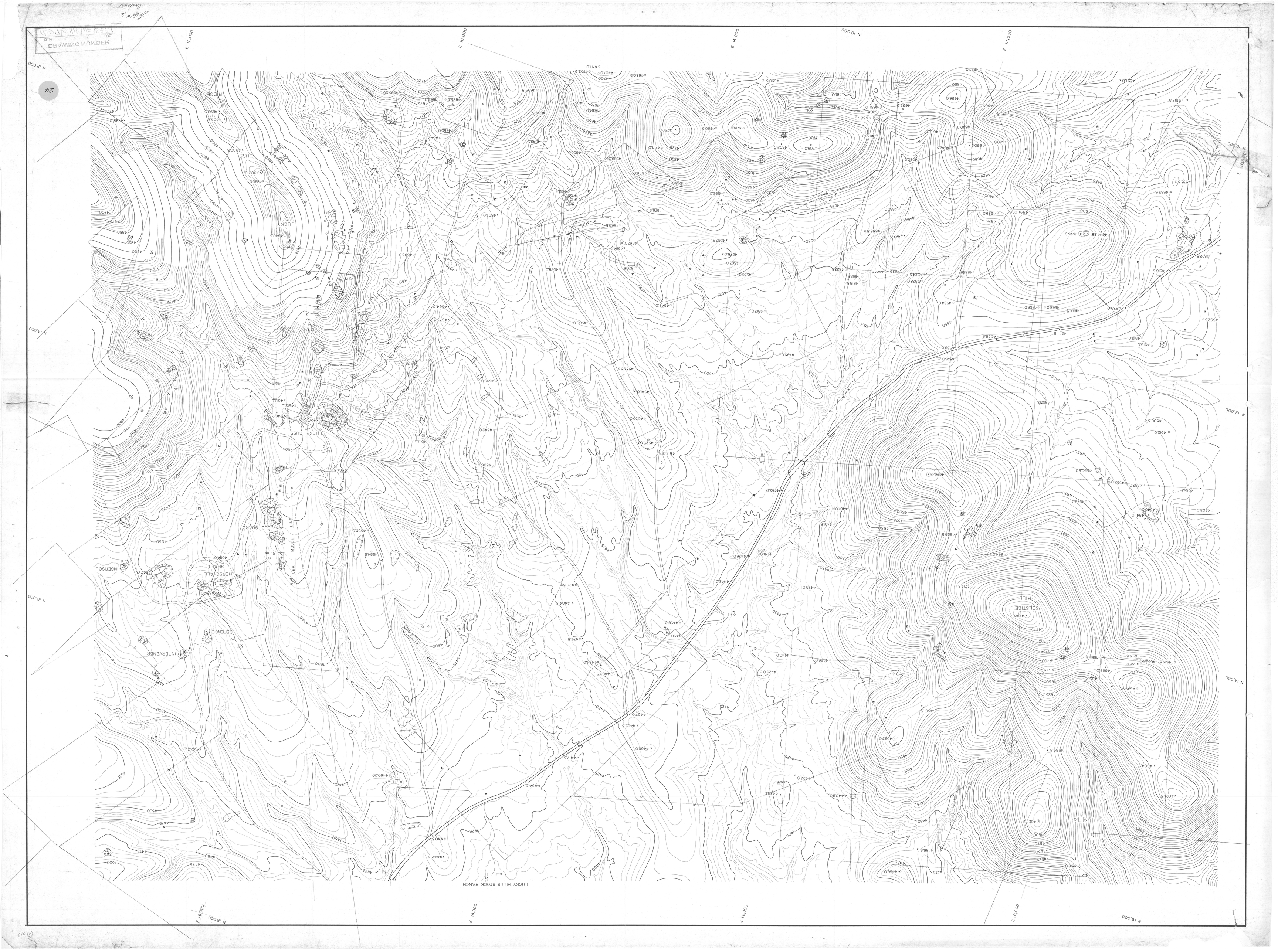
21



TOMBSTONE DEVELOPMENT CO.
TOMBSTONE ARIZONA
SECTION N63°W THROUGH DD STATIONS WS 602 and T 506
OF
DD HOLES No's 7, 8 and 9 and ROTARY DRILL HOLE D-6
LOOKING N27°E
MARCH 1955 1 IN. = 100 FT. D.H.

LIMESTONE (Ls)
LIME SILICATES (Si)
ARGILLITE (Ar)
MINERALIZED Ls. (Min-Ls)
ORE
BISBEE GROUP (B.G)

1024 D-105-AF S11A-4 (1972)



LUCKY HILLS STOCK RANCH
SOLSTICE HILL
LUCKY CUSS
OLD GUARD
NEAT MODEL LINE
HERSCHALL SHAFT
INGERSOL
DEFENCE
INTERVENER
RIDGE
CUSS
LUCKY
N 12,000
N 14,000
N 16,000
N 18,000
E 18,000
E 16,000
E 14,000
E 12,000
E 10,000

Qa

Qal

Ksg

Kup

LOWER GROUP SEDIMENTS

Kp — Shale, sandstone, quartzite and carbonate undifferentiated Martin and Martin Limestone, approximately [illegible] feet thick.

Kpb — Limestone - Primarily the "Bar" [illegible] and "Blue Limestone", about 50 to [illegible] feet thick.

Kc — Novaculite member - the Limestone area Bisbee formation.

Kbg — Glance conglomerate - Glance pebble conglomerate, occurs only in the Fly Ranch area. Apparently part of the remainder of the Lower formation [illegible]

PALEOZOIC SEDIMENTS

Pm — Naco limestone - Not identified in the [illegible] State of Maine area, shown only on cross section.

Other Paleozoic sediments undifferentiated

SYMBOLS

Mine shaft, with and without dumps - barbs show direction of inclination

Prospect

Primary survey control point, first order survey

Claim monument or stake - Ground targeted and surveyed photogram metrically to nearest 1/2 foot

Fence line

Section corner

Road - paved, improved dirt and bulldozer road or jeep trail.

Exact plot of dozer trench

Approximate location dozer trench

Cross section

Proposed rotary or diamond drill hole

Completed rotary, hammer or diamond drill holes RDH-HDH-DDH

Proposed air track drill hole

Vein or vein zone showing showing moderate to intense alteration and limonite. Predominate sericitic alteration and red to maroon limonite.

Vein or vein zone showing weak to moderate alteration and limonite. Predominate argillic alteration and orange and yellow limonite.

Manganese oxide mineralization

Silicification

Mineralized joint systems, color denotes alteration and mineralization as in vein systems.

Calc-silicate alteration in limey sediments

Anticline or syncline showing apparent direction of plunge

Fault mapped on the ground

Photo linears - Identified on black and white vertical air photos of the area. Probably represents fault or fracture zones.

Scale

200 200 400

200

Contour [illegible] 5 feet

13°

N

JAMES A. BRISCOE, CONSULTING GEOLOGIST

STATE: Ariz[illegible]	PROJECT - 107	DATE: Sept. 1973
COUNTY: [illegible]	TOMBSTONE MINING DISTRICT	GEOLOGY BY: J. A. Briscoe
MINING DIST: Tombstone	STATE OF MAINE AREA	DRAFTED BY: [illegible]
MTN. RANGE:		SAMPLES ASSAYED BY: Hawley and Hawley

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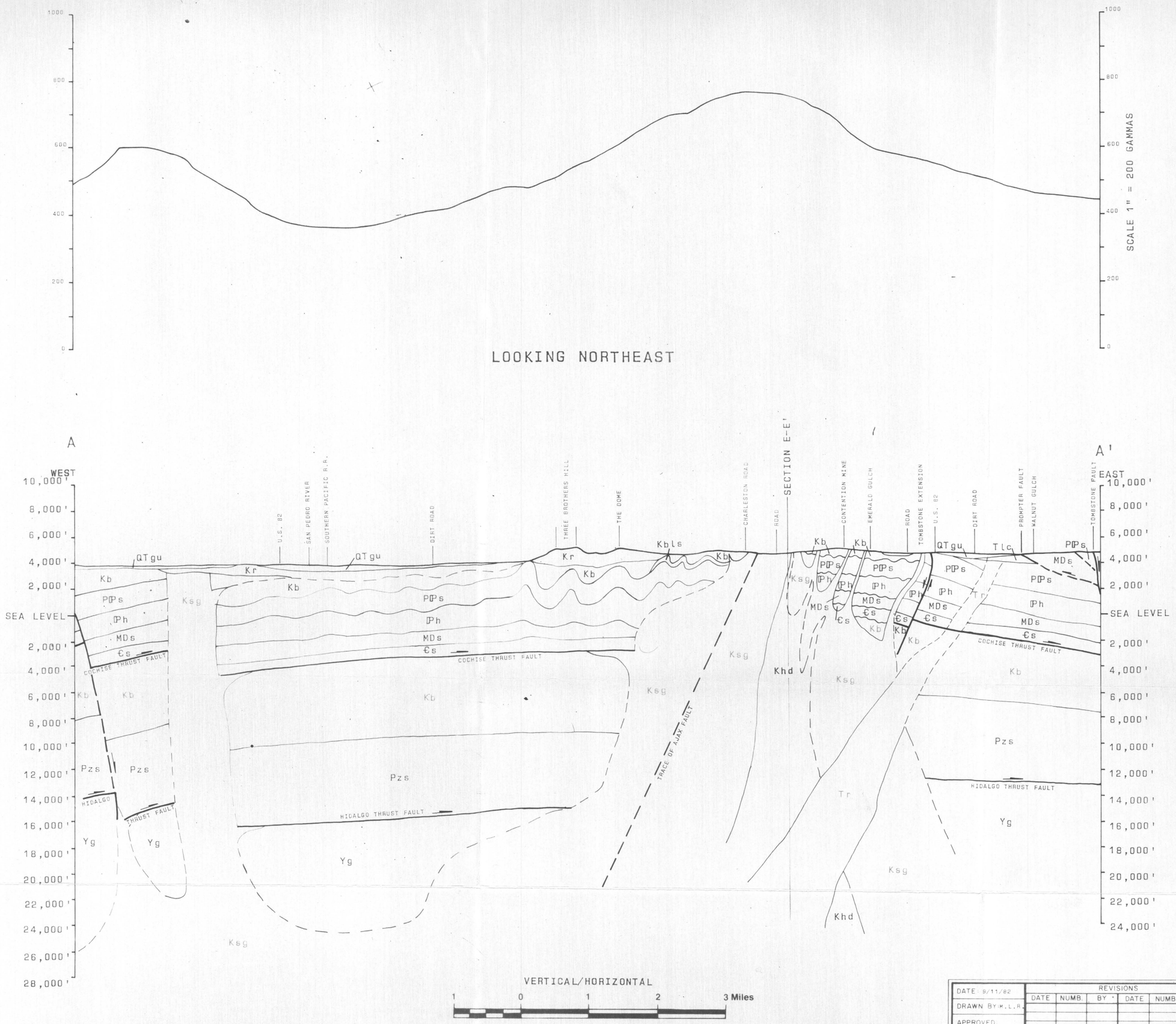

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#27

TOMBSTONE DEVELOPMENT COMPANY, INC.
T.19S. R.22E.,T.19S. R.23E.
SECTION A-A'

DATE: 9/11/82	REVISIONS						
DRAWN BY: M.L.R.	DATE	NUMB.	BY	DATE	NUMB.	BY	
APPROVED							
	DRAWING NUMBER						
D.N.	R.	P.	F.	LOC.			

COUNTRY: U.S.A. GEOLOGY BY: James A. Briscoe
STATE: ARIZONA
COUNTY: COCHISE
MOUNTAIN RANGE: TOMBSTONE HILLS
MINING DISTRICT: TOMBSTONE

James A. Briscoe & Associates, Inc.
Tucson, Arizona