TOPOGRAPHY EXPLANATION

- NAD83 STATE GRID
- CONTROL
- INDEX CONTOUR
- INTERMEDIATE CONTOUR
- SPOT ELEVATION + 5000.00
- ROAD – PAVED
- ROAD – PAVED CL
- ROAD – DIRT
- ROAD – TRAIL
- RAILROAD
- RAILROAD – ABANDONED RIGHT OF WAY
- BRIDGE
- STRUCTURE
- TRAILER
- FENCE
- TANK
- FOUNDATION
- STREAMS – PERENNIAL
- STREAMS – INTERMITTENT
- POND
- DITCH
- PIPE
- CUTS
- CREST
- TOE
- POLE
- WELL — WELL NUMBER
- DRILL HOLE – SURVEYED — DH OWNER, DH NUMBER
- DRILL HOLE – UNSURVEYED — DH OWNER, DH NUMBER
- MINE SHAFT (OPEN FENCED / COVERED / BULK HEADED /BACK FILLED)
- MINE SHAFT – MULTI COMPARTMENT
- MINE SHAFT – INCLINED WITH DEGREE OF INCLINATION (60°)
- PROSPECT
- ADIT PORTAL
- TRENCH

GEOLOGIC EXPLANATION

ROCK TYPES

RECENT

Symbol	Description
Qwtc / Qwtf	WASHED TAILS – COARSE & FINES
Qmd / Qhlt	MINE DUMPS & HEAPLEACH TAILS

DISCONFORMITY

CENOZOIC – QUATERNARY / TERTIARY

Symbol	Description
Qu	QUATERNARY UNDIVIDED – PRIMARILY UNTILTED SOIL
T?r	TERTIARY ? RHYOLITIC DIKES
Qb	BASALT INTRUSIVE
Tqg	GILA CONGLOMERATE– CEMENTED & SOMETIMES TILTED GRAVELS

UNCONFORMITY

MESOZOIC – CRETACEOUS

Symbol	Description
Kha	HORNBLENDE ANDESITE PLUG AND ASSOCIATED DIKES
Krd	RHYODACITE
Kg	GRANOPHYRE
Kr	RHOLITE PLUG AND ASSOCIATED DIKES (AGE: 63 M.Y.) POSSIBLE HYPABYSSAL EQUIVALENT OF THE Kcqm
Kcqm	COMSTOCK QUARTZ MONZONITE PORPHYRY (AGE: 63.5 M.Y. FROM SAMPLE COLLECTED BY BRISCOE & DREWES, DATED BY USGS) INTRUSIVE INTO Ksg
Kqlp	QUARTZ LATITE PORPHYRY
Ksg	SCHIEFFELIN GRANODIORITE (AGE: 72 M.Y.)
Kut	UNCLE SAM TUFF (AGE: 71.9 ±2.4 M.Y.)
Kbr	BRONCO RHYOLITE – DOMES AND FLOWS ?
Kap	ANDESITE PORPHYRY DIKES
Kba	BRONCO ANDESITE – LAHARIC FLOW BRECCIAS, FLOWS AND DIKES ?

UNCONFORMITY

Symbol	Description
Kb	BISBEE FORMATION – UNDIFFERENTIATED REDBEDS – SHALE, ARKOSIC QUARTZITE — – — LINE INDICATES MARKER HORIZON OF PETRIFIED WOOD IDENTIFIED BY DR. ERIC FORCE, USGS.
Kjls	JOE LIMESTONE
Kbls	LIMESTONE – INCLUDES BLUE, 12 FOOT, AND 6 FOOT LIME OF LOCAL USAGE
Kbg/Kbn	GLANCE CONGLOMERATE – "NOVACULITE" OF LOCAL USAGE – RANSOME & BUTLER & WILSON. CHARACTERIZED BY INTENSE SILICIFICATION IN MINERALIZED ZONES

UNCONFORMITY

PALEOZOIC – PENNSYLVANIA – PERMIAN

Symbol	Description
Pcn	CONCHA (NACO) LIMESTONE
Ped	EPITAPH DOLOMITE
Pc	COLINA LIMESTONE
IPe	PERMIAN – PENNSYLVANIAN EARP LIMESTONE
IPh	HORQUILLA LIMESTONE

DISCONFORMITY

MISSISSIPPIAN

Symbol	Description
Me	ESCABROSA LIMESTONE

DISCONFORMITY

DEVONIAN

Symbol	Description
Dm	MARTIN LIMESTONE

DISCONFORMITY

CAMBRIAN

Symbol	Description
€a	ABRIGO LIMESTONE
€b	BOLSA QUARTZITE

NONCONFORMITY

PRECAMBRIAN

Symbol	Description
P€g	GRANITE
P€p	PINAL SCHIST

SYMBOLS

SECTION LINES
a. GEOLOGIC CROSS SECTIONS FROM BUTLER – WILSON REPORT
b. GEOLOGIC CROSS SECTIONS FROM THIS REPORT

CONTACT
DASHED WHERE APPROXIMATELY LOCATED, AND DOTTED WHERE CONCEALED OR INTERPRETED

FAULT
DASHED WHERE APPROXIMATELY LOCATED, AND DOTTED WHERE CONCEALED OR INTERPRETED

VEINS
INCLUDES THE SO CALLED "FISSURES" OF LOCAL USAGE

STRIKE AND DIP
a. BEDDING TRENDS
b. JOINT TRENDS
c. VERTICAL DIP

FLOW STRUCTURE
a. INDICATING STRIKE AND DIP
b. VERTICAL DIP

ANTICLINES AND SYNCLINES
a. THESE ANTICLINES AND SYNCLINES HAVE BEEN TAKEN FROM OLD HISTORIC DATA
b. THESE ANTICLINES AND SYNCLINES WERE INTERPRETED FROM EXISTING MAPPED GEOLOGY BY J. A. BRISCOE

ALTERATION AND MINERALIZATION

- HORNFELS
- SKARN
- SILICIFICATION – MASSIVE TO WEAK
- MARBLE, BLEACHING AND/OR PHYLLIC ALTERATION
- LIMONITE AFTER SULFIDES – MASSIVE TO DISSEMINATED
- MANGANESE – MASSIVE TO DISSEMINATED
- MINED ORE MINERALIZATION FROM HISTORIC DATA
- INFERRED MINERALIZATION SIMILAR TO PREVIOUSLY MINED
- MEASURED ORE FROM DRILL HOLE INFORMATION
- INFERRED DISSEMINATED GOLD & SILVER MINERALIZATION FROM GEOLOGY AND/OR GEOCHEMISTRY/ GEOPHYSICS AND/OR SCOUT DRILLING

UNDERGROUND WORKINGS

SHAFT, STOPE, INCLINE; LEVEL 1 – LEVEL 10

LEVELS	FEET	MILES	% TOTAL	Σ TOTAL
1	9,040	1.7	7.0	7.0
2	21,580	4.1	16.0	23.0
3	46,200	8.8	34.0	57.0
4	23,220	4.4	17.0	74.0
5	14,720	2.8	11.0	85.0
6	14,280	2.7	11.0	96.0
7	5,660	1.1	4.0	100.0
8	800	0.2	1.0	101.0
9	–	–	–	–
10	580	0.1	0.4	101.4
	136,080	25.9	101.4	

NUMBERS INDICATE UNDERGROUND MINE LEVEL FROM SHAFT COLLAR

EXPLANATORY NOTES

Produced for Excellon Resources USA Inc by The Orthoshop Tucson
Aerial Photo Date October 12 1992
Ground control provided by the A-TEAM Professional Associates Inc. using NAD83 State Plane coordinates for the Arizona Eastern Zone

PROPERTY DATA ARE FROM THE RECORDS OF THE COCHISE COUNTY COURTHOUSE, U.S. B.L.M., AND PRIVATE RECORDS OF THE TOMBSTONE DEVELOPMENT Co., INC., RESEARCHED BY THOMAS E. WALDRIP, JR. THEY HAVE BEEN PLOTTED AS CLOSELY AS RECORDS WOULD PERMIT ON THE U.S.G.S. 7 1/2 MINUTE MAPS COVERING THE TOMBSTONE AREA AND ITS ENVIRONS. THESE ARE TOMBSTONE, TOMBSTONE S.E., FAIRBANK AND LEWIS SPRINGS 7 1/2 MINUTE QUADRANGLES – SEE PLATE 3 (BRISCOE & WALDRIP, 1982) THE DATA FROM PLATE 3 WERE ENLARGED PHOTOGRAPHICALLY TO 1" = 500 FEET AND SUPERIMPOSED ON AN ELARGEMENT OF THE TOMBSTONE 7 1/2 MINUTE TOPOGRAPHIC MAP, 1952, PHOTO REVISION, 1978. THE CLAIM DATA WAS RE-DRAFTED AND ADJUSTED WHERE NECESSARY TO CONFORM TO THE RECORDS. NO FIELD CHECKING OF THIS DATA HAS BEEN DONE.

LOCATIONS OF MINE SHAFTS WERE DIGITIZED FROM THE 1908 U.S.G.S. 1" = 500' TOMBSTONE TOPOGRAPHIC MAP. GEOLOGY OF THE TOMBSTONE BASIN AREA HAS BEEN PLOTTED DIRECTLY FROM THE 1955? VINTAGE MAP NOTED IN THE REFERENCES ON THIS MAP SHEET. SOUTH OF THE PROMPTER FAULT, GEOLOGY FROM THE 1955? MAP WAS UPDATED ACCORDING TO THE MORE RECENT WORK BY NEWELL AND DREWES, AS INTERPRETED BY JAMES A. BRISCOE.

IN SEPTEMBER 1992, THE NORTHERN PART OF THE TOMBSTONE HILLS WAS REMAPPED. A BASE TRIANGULATION SURVEY WAS PERFORMED BY "THE A-TEAM" REGISTERED PROFESSIONAL SURVEYORS, OF PHOENIX AND TUCSON, AZ USING GPS EQUIPMENT AND TIED TO THE AZ STATE PLANE COORDINATES. THE AREA WAS THEN FLOWN PHOTOGRAMMETRICALLY BY THE ORTHO SHOP OF TUCSON AT A PHOTO SCALE OF 1:24,000, IN COLOR. SEVERAL PRODUCTS FROM THIS PHOTOGRAMMETRIC WORK HAVE BEEN PRODUCED TO DATE: 1. AT A SCALE OF 1:24,000 A BLACK AND WHITE ORTHOPHOTO MAP WITH SURVEY BASE AND 1,000 FOOT GRID TICKS. 2. AT A SCALE OF 1:2,400 (1" = 200') AND 5' CONTOURS A DIGITAL TERRAIN MODEL (DTM) WITH A. TOPOGRAPHIC HARD COPY B. ORTHOPHOTO MAP WITH 20' CONTOURS SUPERIMPOSED. C. ORTHOPHOTO MAP WITH GRID TICKS BUT NO TOPOGRAPHY. SHEET 5 PRODUCED IN OCTOBER 1992 AND SHEET 8 IN NOVEMBER 1993. NO OTHER SHEETS (AS SHOWN ON THE INDEX MAP ARE EXTANT AT THIS DATE). STILL EXISTING MINE OPENINGS WERE INTERPRETED FROM PHOTOGRAPHY AND LIMITED FIELD CHECKING. MOST MINE DUMPS ASSOCIATED WITH EARLY DAY MINING WERE REMOVED CIRCA 1972 BY 1971 MINERALS LIMITED, TO A CENTRAL HEAP LEACH PAD WHERE THEY WERE LEACHED WITH CYANIDE. THE OPEN PIT WAS PRIMARILY EXCAVATED CIRCA 1978 – 1985 BY TEI (TOMBSTONE EXPLORATION INC.), WITH MINIMAL FURTHER EXCAVATION BY PBR – COWICHAN MINES INC. AND MERRILL-CROWE PLANT AND HEAP LEACH PAD CONSTRUCTION (SEE SHEET 8) CIRCA 1987 – 1990. MANY SHAFTS WERE SEALED OFF OR FILLED PRIMARILY BY SANTA FE MINERALS INC. UNDER THEIR LEASE WITH TOMBSTONE DEVELOPMENT CO., INC. CIRCA 1987 – 1990.

THIS MAP WAS PRODUCED USING COMPUTER AIDED DRAFTING (AUTOCAD R. 12.C2) SOFTWARE AND PRINTED IN COLOR USING A HEWLETT – PACKARD INK JET PLOTTER. THE DATA IN THE COMPUTER IS A 3 DIMENSIONAL DIGITAL TERRAIN MODEL. CAD DRAFTING HAS BEEN DONE BY MESSRS PETER BONDANTE CIRCA 1988 – 1993, AND UPDATED AND REVISED BY GARY M. BLACHARSKI. SUPERVISION PROVIDED BY JAMES A. BRISCOE, THOMAS E. WALDRIP JR., AND ROBERT J. MACER, GEOLOGISTS, JABA INC.

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15

REFERENCES - GEOLOGY

DREWES, HARALD, 1980, TECTONIC MAP OF SOUTHEAST ARIZONA, U.S. GEOLOGICAL SURVEY MAP I-1109.

NEWELL, ROGER A., 1974, EXPLORATION GEOLOGY AND GEOCHEMISTRY OF THE TOMBSTONE – CHARLESTON AREA, COCHISE COUNTY, ARIZONA. PLATE 2, STANFORD UNIVERSITY PH.D. DISSERTATION.

UNKNOWN, CIRCA 1955 PROBABLY A NEWMONT MINING CO. GEOLOGIC AND ALTERATION MAP, WITH SURFACE PROJECTION OF UNDERGROUND MINE WORKINGS, PLOTTED ON U.S.G.S. 1:6,000 (1" = 500') TOMBSTONE ARIZONA AND VICINITY TOPOGRAPHIC MAP, 1908, REPRINTED 1948, CONTOUR INTERVAL 10 FEET. FROM THE FILES OF THE TOMBSTONE DEVELOPMENT COMPANY, INC.

SCALE 1" = 200'
200 100 0 200 400 600 800
CONTOUR INTERVAL = 5 ft

NORTH
TRUE NORTH, MAGNETIC NORTH 12°
APPROXIMATE MEAN DECLINATION, 1980

INDEX MAP 1992 PHOTOGRAPHY & PHOTOGRAMMETRY (SHADING SHOWS SHEETS EXTANT AS OF THIS DATE)

1	2	3
4	CONTENTION SHEET 5	6
7	GRAND CENTRAL 8	9
10	11	12
13	14	15

PREPARED BY: JABA INC. TUCSON ARIZONA

TOMBSTONE, ARIZONA COCHISE COUNTY CONTENTION SHEET No 5 WITH MINE WORKINGS

TYPE	AUTHORS LIST	DATE
GEOLOGY	JAMES A. BRISCOE	
PROPERTY	T.E.W. Jr.	
TOPOGRAPHY	THE ORTHO SHOP	
SURVEY	A-TEAM SURVEYORS	
CADD	GARY M. BLACHARSKI	12/05/93
APPROVED	J.A.B.	05/01/94

200 100 0 400
SCALE 1" = 200' CONTOURS AT 5'

PREPARED FOR: **Tombstone Development Co. (TDC) Inc.**
P.O. BOX 1445
Grand Island, Nebraska

COUNTRY: U.S.A. STATE: ARIZONA COUNTY: COCHISE
MOUNTAIN RANGE: TOMBSTONE HILLS
MINING DISTRICT: TOMBSTONE
USGS QUAD SHEET(S): TOMBSTONE, Az 7 1/2 MIN.

CAD No	REV DATE	DWG NUMBER	REV
TMD-05B2	06/17/94		6

TOPOGRAPHY EXPLANATION

NAD83 STATE GRID
CONTROL
INDEX CONTOUR
INTERMEDIATE CONTOUR
SPOT ELEVATION 5000.00
ROAD - PAVED
ROAD - PAVED CL
ROAD - DIRT
ROAD - TRAIL
RAILROAD
RAILROAD - ABANDONED RIGHT OF WAY
BRIDGE
STRUCTURE
TRAILER
FENCE
TANK
FOUNDATION
STREAMS - PERENNIAL
STREAMS - INTERMITTENT
POND
DITCH
PIPE
CUTS
CREST
TOE
POLE
WELL — WELL NUMBER
DRILL HOLE - SURVEYED — DH OWNER / DH NUMBER
DRILL HOLE - UNSURVEYED — DH OWNER / DH NUMBER
MINE SHAFT — OPEN FENCED / COVERED / BULK HEADED TIMBER FILLED
MINE SHAFT - MULTI COMPARTMENT
MINE SHAFT - INCLINED WITH DEGREE OF INCLINATION — 45° / 60° / 90°
PROSPECT
ADIT PORTAL
TRENCH

GEOLOGIC EXPLANATION

ROCK TYPES

RECENT	Qmtc	Qmt	BASINED TAILS - COARSE & FINES
	Qmd	Qmt	MINE DUMPS & HEAPLEACH TAILS
CENOZOIC / QUATERNARY	DISCONFORMITY		
	Qu		QUATERNARY UNDIVIDED - PRIMARILY UNTILED SOIL
TERTIARY	Tfr		TERTIARY FRHYOLITIC DIKES
	Qb		BASALT INTRUSIVE
	Tgg		GILA CONGLOMERATE (CEMENTED & SOMETIMES TILTED SEDIMENTS)
MESOZOIC / CRETACEOUS	UNCONFORMITY		
	Khg		HORNBLENDE ANDESITE PLUG AND ASSOCIATED DIKES
	Krd		RHYODACITE
	Kg		GRANOPHYRE
	Kr		RHYOLITE PLUG AND ASSOCIATED DIKES (AGE: 63 M.Y. POSSIBLE HYDROTHERMAL EQUIVALENT OF THE ROOF)
	Kcqp		COMSTOCK QUARTZ MONZONITE PORPHYRY (AGE: 63.5 M.Y. FROM SAMPLE COLLECTED BY BRISCOE & DRENNEN, DATED BY USGS) INTRUSIVE INTO Kgg
	Kqlp		QUARTZ LATITE PORPHYRY
	Ksg		SCHEEFFELIN GRANODIORITE (AGE: 72 M.Y.)
	Kut		UNCLE SAM TUFF (AGE: 77.9 ± 2.4 M.Y.)
	Kbr		BRONCO RHYOLITE + DOMES AND FLOWS ?
	Kap		ANDESITE PORPHYRY DIKES
	Kbg		BRONCO ANDESITE + HYDROTHERMAL BRECCIAS, FLOWS AND DOMES ?
	UNCONFORMITY		
	Kb		BISBEE FORMATION - UNDIFFERENTIATED (CONGLOMERATE, SHALE, ARKOSIC QUARTZITE LENS INDICATES MARKER HORIZON OF PETRIFIED WOOD IDENTIFIED BY DR. ERIC FORPE, USGS.
	Kjls		JOE LIMESTONE
	Kbls		LIMESTONE - INCLUDES BUILT 12 FOOT, AND 68 FOOT LIMESTONE LOCAL LENSES
	Kbg/Kbr		GLANCE CONGLOMERATE - "SCHOLLITE" OF LOCAL USAGE - RANSOME & BUTLER & WILSON, CHARACTERIZED BY INTENSE SILICIFICATION IN MINERALIZED ZONES
PALEOZOIC / PENNSYLVANIA - PERMIAN	UNCONFORMITY		
	Pcn		CONCHA (NACO) LIMESTONE
	Ped		EPITAPH DOLOMITE
	Pc		COLINA LIMESTONE
	Pe		PERMIAN - PENNSYLVANIAN, EARP LIMESTONE
	Ph		HORQUILLA LIMESTONE
DEVONIAN - MISSISSIPPIAN	DISCONFORMITY		
	Me		ESCABROSA LIMESTONE
DEVONIAN	DISCONFORMITY		
	Dm		MARTIN LIMESTONE
CAMBRIAN	DISCONFORMITY		
	Cc		ABRIGO LIMESTONE
	Cb		BOLSA QUARTZITE
PRECAMBRIAN	NONCONFORMITY		
	Pcg		GRANITE
	Pcp		PINAL SCHIST

SYMBOLS

SECTION LINES
a. GEOLOGIC CROSS SECTIONS FROM BUTLER - WILSON REPORT
b. GEOLOGIC CROSS SECTIONS FROM THIS REPORT

CONTACT
DASHED WHERE APPROXIMATELY LOCATED, AND DOTTED WHERE CONCEALED OR INTERPRETED

FAULT
DASHED WHERE APPROXIMATELY LOCATED, AND DOTTED WHERE CONCEALED OR INTERPRETED

INCLUDES THE SO CALLED "TISSURES" OF LOCAL USAGE

STRIKE AND DIP
a. BEDDING TRENDS
b. JOINT TRENDS
c. VERTICAL DIP

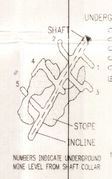
FLOW STRUCTURE
a. INDICATING STRIKE AND DIP
b. VERTICAL DIP

ANTICLINES AND SYNCLINES
a. THESE ANTICLINES AND SYNCLINES HAVE BEEN TAKEN FROM OLD HISTORIC DATA
b. THESE ANTICLINES AND SYNCLINES WERE INTERPRETED FROM EXISTING MAPPED GEOLOGY BY J. A. BRISCOE

ALTERATION AND MINERALIZATION

HORNFELS
SKARN
SILICIFICATION - MASSIVE TO WEAK
MARBLE BLEACHING AND/OR PHYLLIC ALTERATION
LIMONITE AFTER SULFIDES - MASSIVE TO DISSEMINATED
MANGANESE - MASSIVE TO DISSEMINATED
MINOR ORE MINERALIZATION FROM HISTORIC DATA
INFERRED MINERALIZATION SIMILAR TO PROVIDENT MINES
MEASURED ORE FROM DRILL HOLE INFORMATION
INFERRED ASSOCIATED GOLD & SILVER MINERALIZATION FROM GEOLOGY AND/OR GEOCHEMISTRY - GEMPHYS MAJOR SOAT DRILLING

UNDERGROUND WORKINGS



NUMBERS INDICATE UNDERGROUND MINE LEVEL FROM SHAFT COLLAR

NOS	LEVEL	FEET	% TOTAL	FEET TOTAL
1		14,040	1.1	0
2		21,580	4.5	14.0
3		46,280	9.6	34.5
4		23,220	4.4	57.9
5		14,720	2.8	71.0
6		14,260	2.7	85.8
7		5,660	1.1	96.8
8		920	0.2	102.0
9		-	-	103.2
10		580	0.1	103.4
		136,260	25.9	101.4

PROPERTY DATA ARE FROM THE RECORDS OF THE COCHISE COUNTY COURTHOUSE, U.S. CO., INC., RESEARCHED BY THOMAS E. WALDROP, JR. THEY HAVE BEEN PLOTTED AS CLOSELY AS RECORDS WOULD PERMIT ON THE U.S.G.S. 7 1/2 GEOLOGY FROM THE 1955R MAP WAS UPDATED ACCORDING TO THE MORE RECENT WORK BY HEWELL AND DRENNEN, AS INTERPRETED BY JAMES A. BRISCOE. ARE TOMBSTONE, TOMBSTONE S.E., FAIRBANK AND LEWIS SPRINGS 7 1/2 WHITE SURFACES. 33 PLATS 1 BRIDGE & MILNER, 1903 RE-DATA FROM PLAT 3 MRE ELARGEMENT OF THE TOMBSTONE, 7 1/2 MINUTE TOPOGRAPHIC MAP, 1952, PHOTO REVISION, 1978. THE CLAIM DATA WAS RE-DRAFTED AND PLOTTED Produced from the Tombstone by the Tombstone Development Co. Aerial photo done in December 12 1992 Ground control provided by the A-Team Professional Association, Inc. THIS DATA WAS RECORDED using NAD83 State Plane coordinates for the Arizona Central zone.

LOCATIONS OF MINE SHAFTS WERE DIGITIZED FROM THE 1909 U.S.G.S. 1" = 500' SCALE OF 1:24,000 A BLACK AND WHITE ORTHOPHOTO MAP WITH SURVEY BASE AND 1,000 FOOT GRID TICKS. 2. AT A SCALE OF 1:2,400 (1" = 200') AND 5' CONTOURS A DIGITAL TERRAIN MODEL (DTM) WAS PLOTTED DIRECTLY FROM THE 1955T VINTAGE MAP NOTED IN THE REFERENCES ON THIS MAP SHEET. SOUTH OF THE PROMPTED FAULT TOPOGRAPHIC HARD COPY. B. ORTHOPHOTO MAP WITH 20' CONTOURS SUPERIMPOSED. C. ORTHOPHOTO MAP WITH GRID TICKS BUT NO TOPOGRAPHY. SHEET 5 PRODUCED IN OCTOBER 1992 AND SHEET 8 IN NOVEMBER 1993. ALL OTHER SHEETS (AS SHOWN ON THE INDEX MAP ARE EXTANT AT THIS DATE). STILL EXISTING MINE OPENINGS WERE INTERPRETED FROM PHOTOGRAPHY AND LIMITED FIELD CHECKING. MOST MINE DUMPS ASSOCIATED WITH EARLY DAY MINING WERE REMOVED CIRCA 1972 BY 1971 MINERALS LIMITED. TO A CENTRAL HEAP LEACH PAD WHERE THEY WERE LEACHED WITH CYANIDE. THE OPEN PIT WAS PRIMARILY EXCAVATED CIRCA 1978 - 1985 BY TEL TOMESTONE EXPLORATION INC.), WITH WINDMAL FURTHER EXCAVATION BY

1	2	3
CONTENTION SHEET 5		
4	5	6
GRAND CENTRAL 8		9
10	11	12
13	14	15

FOR CONCHAN MINES INC. AND MERRILL-CROWE PLANT AND HEAP LEACH OPERATION (HCI SHEET 8) CIRCA 1987 - 1998. MANY SHAFTS WERE LEACH PAD PRIMARILY BY SANTA FE MINERALS INC. UNDER THEIR ON SHEET 8). FROM THE TOMBSTONE DEVELOPMENT CO., INC. CIRCA 1987 - 1998. PROJECTED USING COMPUTER AIDED DRAFTING (AUTOCAD R. 12.0) THE COMPUTER IS A 3 DIMENSIONAL DIGITAL TERRAIN MODEL ON SHEET 8A, FRONTED IN COLOR USING A HEWETT - PACKARD INK JET PLOTTER. UNKNOWN, CIRCA 1955. PROBABLY A NEWMONT MINING CO. GEOLOGIC AND ALTERATION MAP, WITH SURFACE EXPRESSION OF UNDERGROUND MINE WORKINGS, PLOTTED ON CONTOUR INTERVAL AIR PHOTOGRAPHS OF TOMBSTONE ARIZONA AND VICINITY. TOPOGRAPHIC MAP, 1988, RETRIOTED 1948, CONTOUR INTERVAL 10 FEET. FROM THE FILES OF THE TOMBSTONE DEVELOPMENT COMPANY, INC.

EXPLANATORY NOTES

REFERENCES - GEOLOGY

DREWES, HARALD, 1980, TECTONIC MAP OF SOUTHEAST ARIZONA, U.S. GEOLOGICAL SURVEY MAP I-1109

NEWELL, ROGER A. 1974, EXPLORATION GEOLOGY AND GEOCHEMISTRY OF THE TOMBSTONE MINING DISTRICT, COCHISE COUNTY, ARIZONA, M.S.A.T.

UNKNOWN, CIRCA 1955. PROBABLY A NEWMONT MINING CO. GEOLOGIC AND ALTERATION MAP, WITH SURFACE EXPRESSION OF UNDERGROUND MINE WORKINGS, PLOTTED ON CONTOUR INTERVAL AIR PHOTOGRAPHS OF TOMBSTONE ARIZONA AND VICINITY. TOPOGRAPHIC MAP, 1988, RETRIOTED 1948, CONTOUR INTERVAL 10 FEET. FROM THE FILES OF THE TOMBSTONE DEVELOPMENT COMPANY, INC.

INDEX MAP 1992 PHOTOGRAPHY & PHOTOGRAMMETRY (SHADING SHOWS SHEETS EXTANT AS OF THIS DATE)

1	2	3
4	CONTENTION SHEET 5	6
7	GRAND CENTRAL 8	9
10	11	12
13	14	15

SCALE 1" = 200'

APPROXIMATE MEAN DECLINATION, 1988

TOMBSTONE ARIZONA

PREPARED BY: JABA INC. / TUCSON, ARIZONA

TYPE	AUTHORS LIST	DATE
GEOLOGY	JAMES N. BRISCOE	
PROPERTY	C. L. W.	
TOPOGRAPHY	THE ORTHO SHOP	
SURVEY	A-TEAM SURVEYORS	
CADD	GARY M. BLACHARSKI	12/05/93
APPROVED		

GRAND CENTRAL SHEET NO. 8

TOMBSTONE, ARIZONA
COCHISE COUNTY
GRAND CENTRAL SHEET No 8
WITH MINE WORKINGS

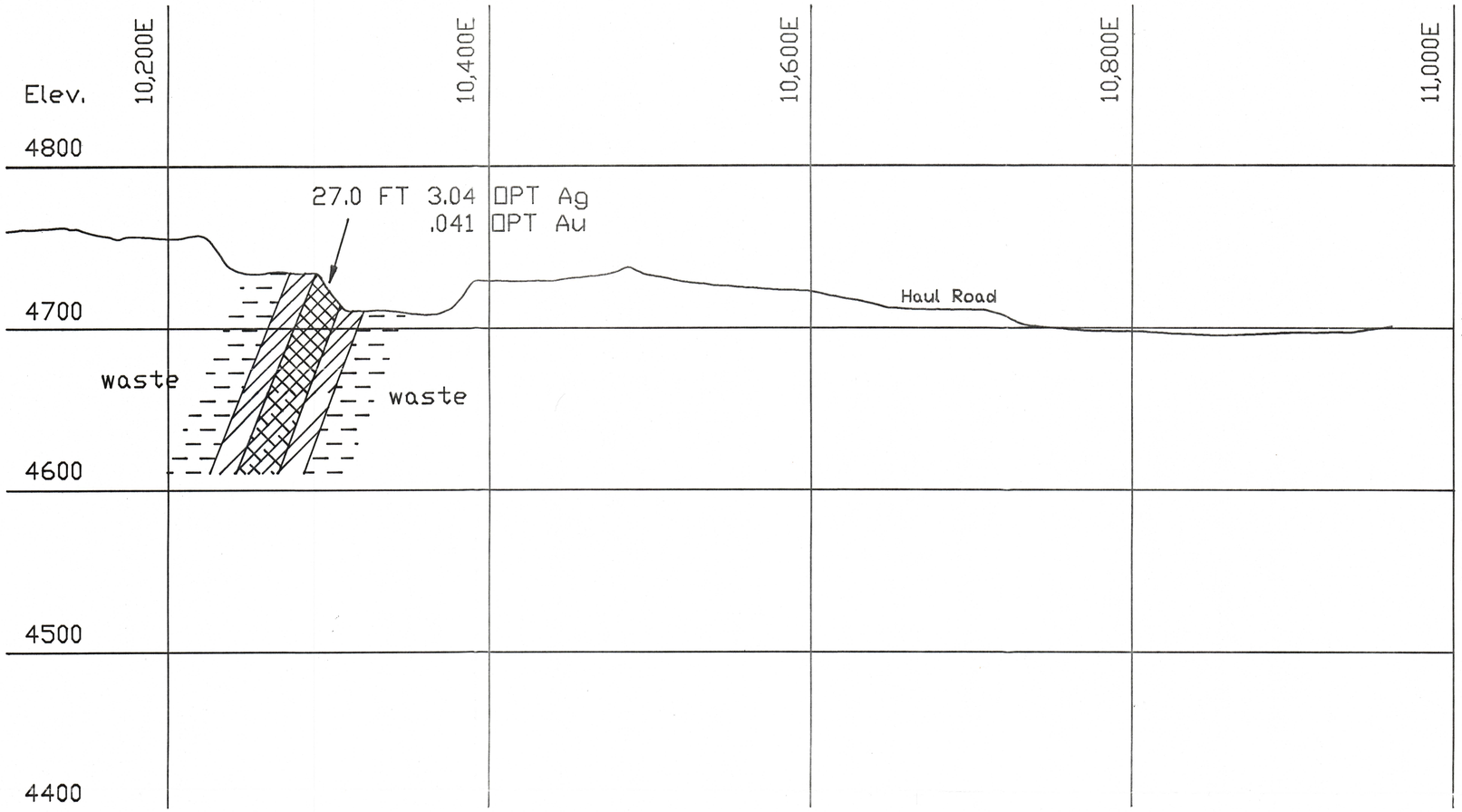
SCALE 1" = 200' CONTOURS AT 5'

200 100 0 400

PREPARED FOR: Tombstone Development Co. (TDC) Inc.
P.O. BOX 1445
Grand Island, Nebraska

COUNTRY: U.S.A. STATE: ARIZONA COUNTY: COCHISE
MOUNTAIN RANGE: TOMBSTONE HILLS
MINING DISTRICT: TOMBSTONE
USGS QUAD SHEET(S): TOMBSTONE, Az 7 1/2 MIN.

CAD No.	REV. DATE	DWG. NUMBER	REV.
TMD-0882	06/17/94		6



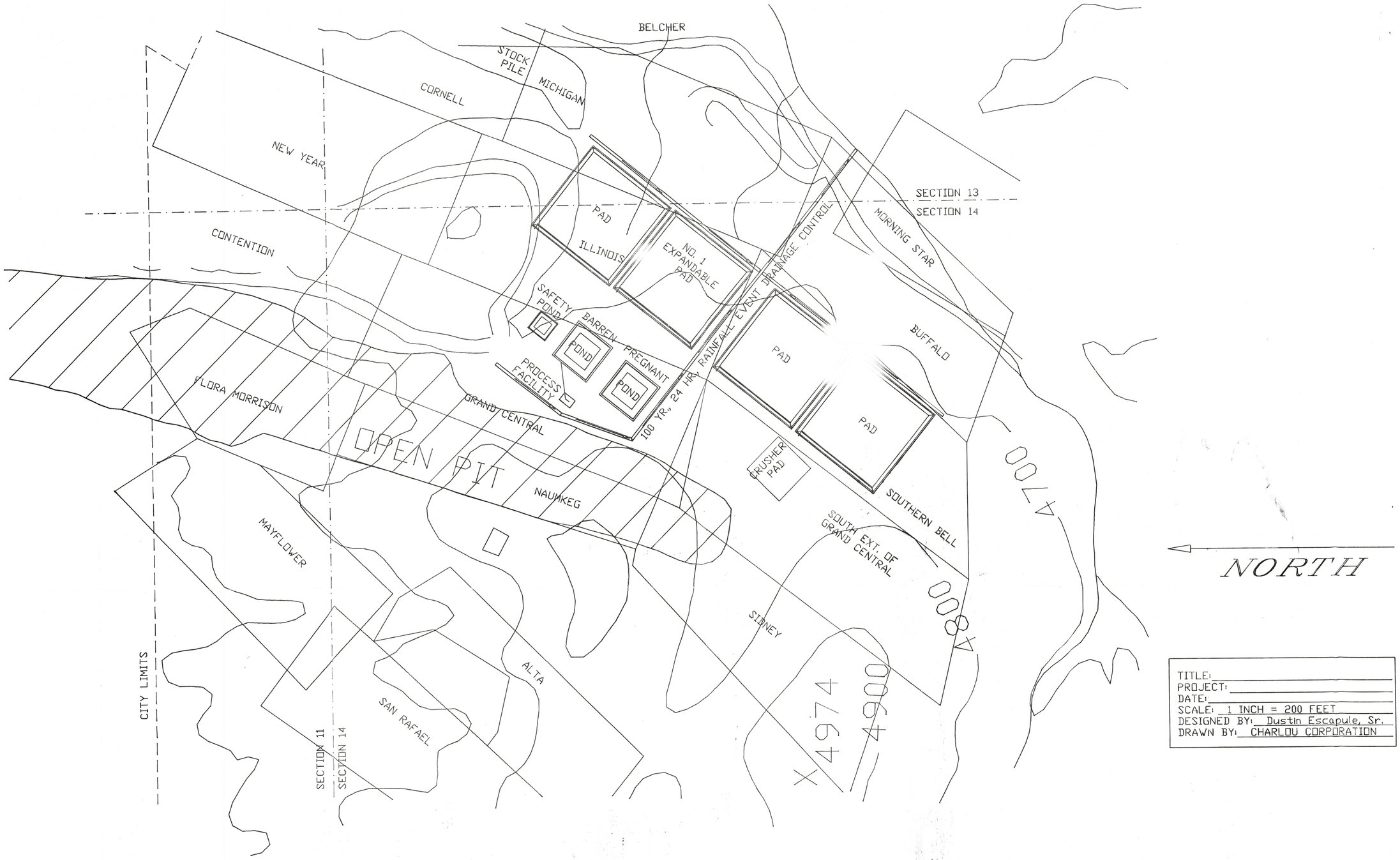
PBR OPEN PIT ORE ZONE CROSS SECTION 10,000 NORTH

(looking north)

SCALE: 1 INCH = 40 FEET

EXPLANATION

- Indicated □re - <1.0 □PT Ag <.008 □PT Au
- Indicated Midgrade - 0.25-1.0 □PT Ag Tr-.008 □PT Au
- Inferred □re - <1.0 □PT Ag <.008 □PT Au
- Inferred Midgrade - 0.25-1.0 □PT Ag Tr-.008 □PT Au
- Waste - <0.25 □PT Ag <Tr Au



TITLE: _____
PROJECT: _____
DATE: _____
SCALE: 1 INCH = 200 FEET
DESIGNED BY: Dustin Escapule, Sr.
DRAWN BY: CHARLOU CORPORATION

NORTH
100 YR., 24 HR., RAINFALL EVENT DRAINAGE CONTROL
NO. 1
EXPANDABLE
PAD
PREGNANT
POND
BARREN
POND
SAFETY
POND
PROCESS
FACILITY
TITLE:
PROJECT:
DATE: 1986
1 INCH = 100 FEET
DESIGNED BY: Dustin Escapule, Sr.
DRAWN BY: CHARLOU CORPORATION

PROCESS FACILITY
BUILDING
60 FT
40 FT
FLOOR DRAINS
TO BARREN POND
6 IN. CURB
PLAN VIEW
END VIEW
SIDE VIEW -3 DEG GRADE
TITLE:
PROJECT:
DATE:
SCALE: 1 INCH = 2 FEET
DESIGNED BY: Dustin Escapule, Sr.
DRAWN BY: CHARLOU CORPORATION

4,587
4,555
4,530
4,535
4,547
4,534
4,529
4,507
4,505
4,499
4,508
SHELF
SHELF
APPROXIMATE BOTTOM PIT
ROAD
11
12
12
MRKD STN (700)
12
12
BC/83026
152
724
722
723
T1A (TEI)
Rebar (681)
T1B (TEI)
Rebar (682)
4,613
T-1 (TEI)
BC (670)
712
708
MARTHA (Maria)
Survey (151)
U.S.M.M. 1
BC (9)
HAMMERSLOT
G.N. 118
M 3869
HAMMERSLOT No. 1
G.N. 119
ROAD
725
729
721
TP-12 (TEI)
Rebar (791)
BELSHAW LOT 708
M 3808
TRACY (Maria)
Survey (150)
709
710
711
T5B (TEI)
Rebar (691)
T-5 (TEI)
BC (673)
T5A (TEI)