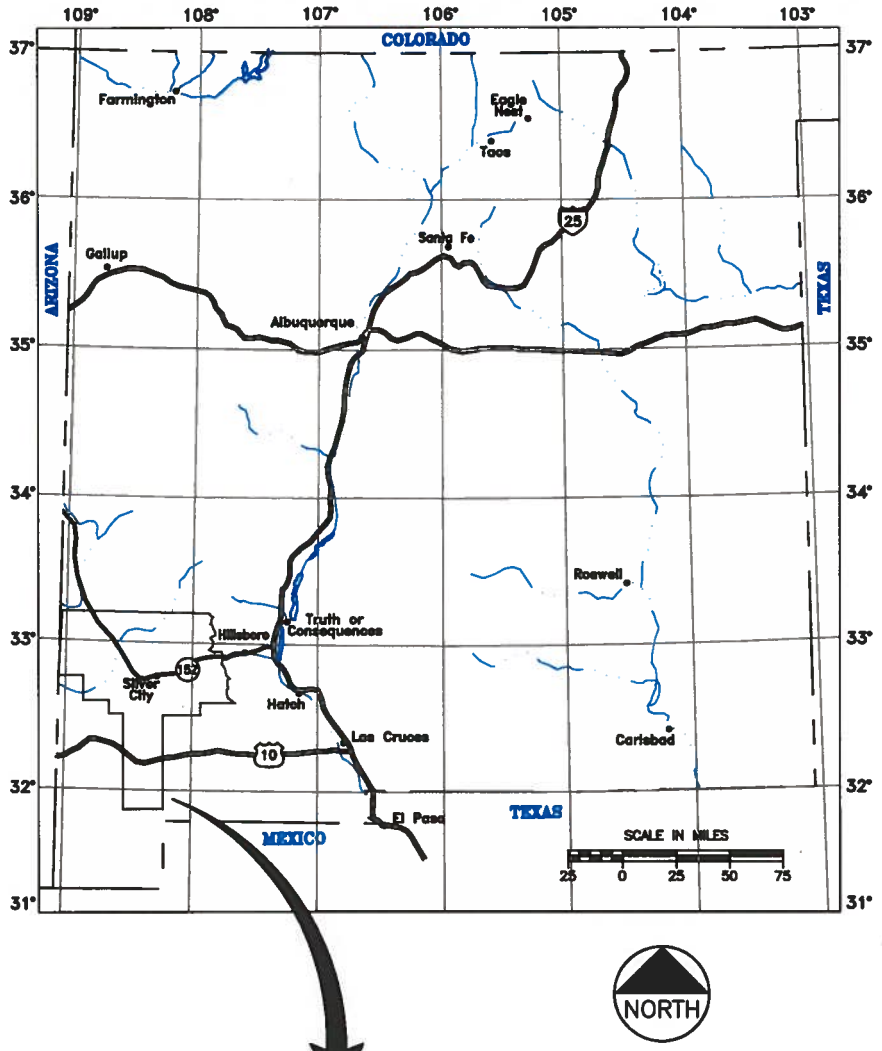
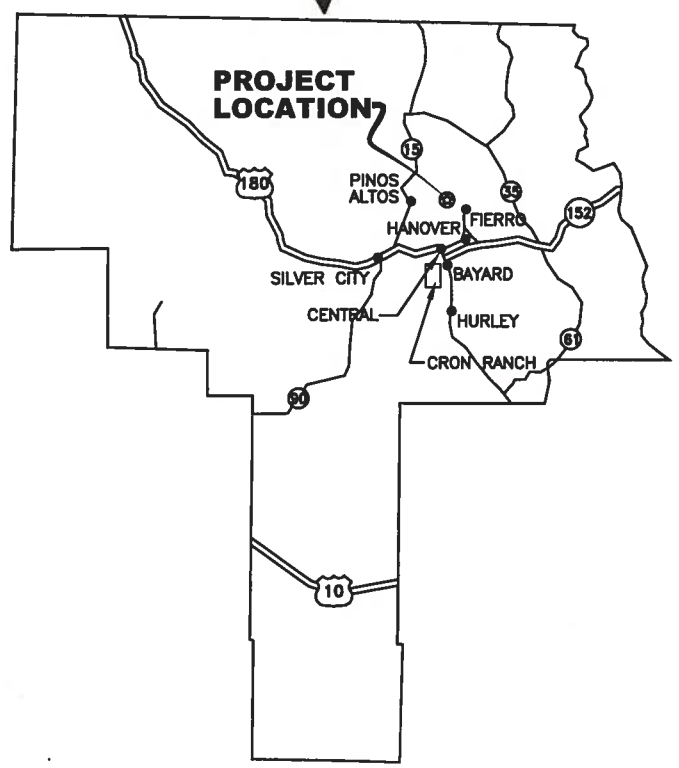
FIGURES



NEW MEXICO



GRANT COUNTY

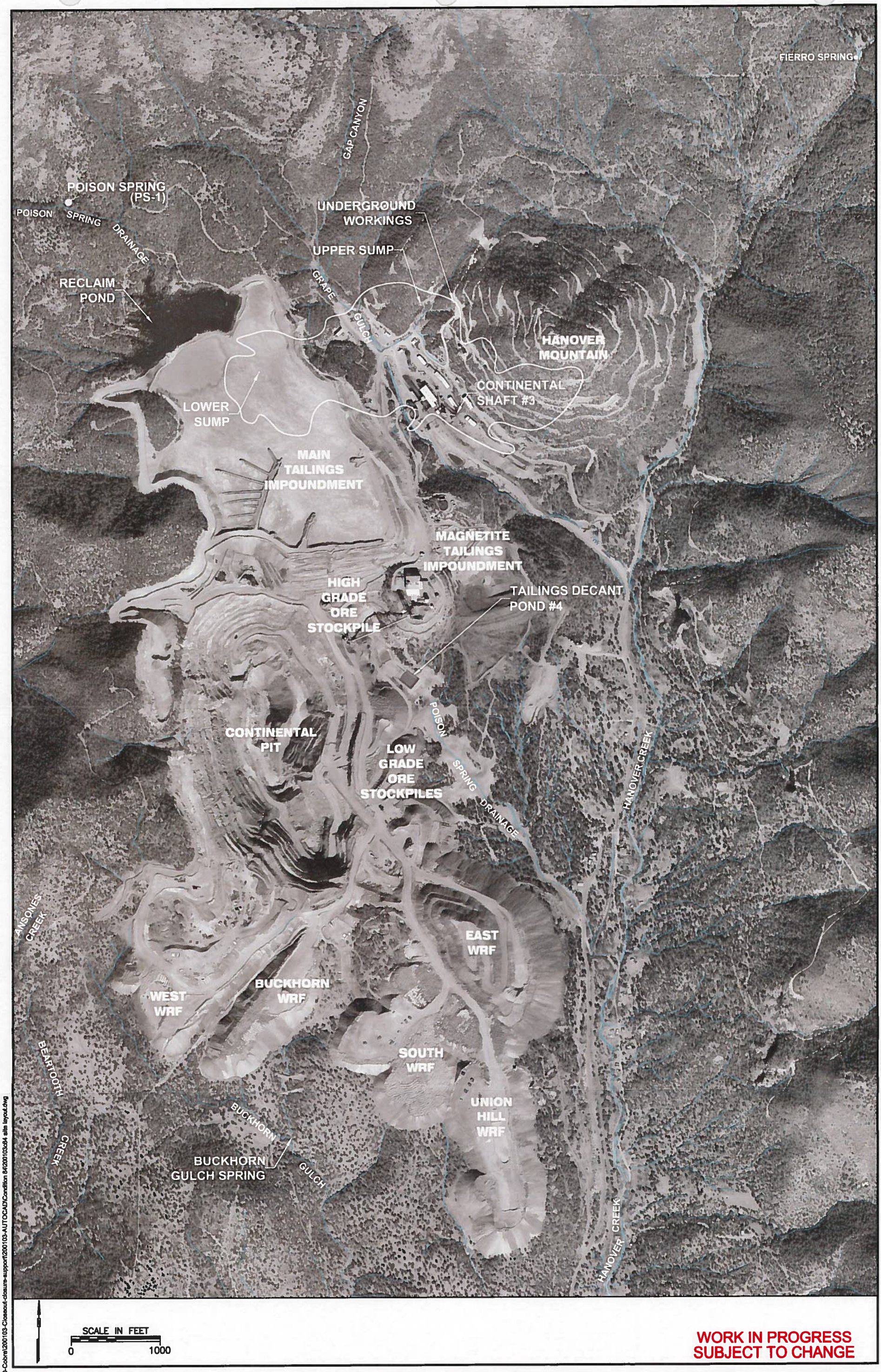
WORK IN PROGRESS
SUBJECT TO CHANGE

PROJECT: 200103	TASK: 84
PREPARED BY: TELESTO SOLUTIONS INCORPORATED	

FIGURE 1-1
SITE LOCATION MAP

PREPARED FOR: dyckes design

8/4/2005 P:\Projects\200-Co 103-Closeout-closure-support\200103-AUTOCAD\Condition 84\200103-84 SITE LOCATION MAP.dwg



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PROJECT: 200103	TASK: 84
PREPARED BY: TELESTO SOLUTIONS INCORPORATED	

FIGURE 1-2
CONTINENTAL MINE FACILITY LAYOUT

PREPARED FOR:

ERA	PERIOD	DESCRIPTION	SYMBOL	COLUMN	FORMATION	
CENOZOIC	TERTIARY	MAFIC TO FELSIC FLOWS AND TUFFS			VOLCANIC FLOWS & TUFF (0-1000 FT.)	
MESOZOIC	?	ANDESITE BRECCIA WITH MINOR TUFFS AND EPICLASTIC UNITS			ANDESITE BRECCIA (0-500 FT.)	?
	CRETACEOUS	INTERBEDDED SANDSTONE AND SHALE WITH MINOR CONGLOMERATE	Kc		COLORADO FORMATION (+1000 FT.)	CRETACEOUS AQUIFER
		LAMINATED SHALE AND SILTSTONE	Kcsh		COLORADO FORMATION SHALE MEMBER	?
	?	FINE-GRAINED QUARTZITE UPPER & LOWER SHALE UNITS	Kb		BEARTOOTH QUARTZITE (60-140 FT.)	AQUITARD
PALEOZOIC	P.	RED SHALE OR SHALY LIMESTONE	Pa		ABO FORMATION (0-265 FT.)	?
	PENNSYLVANIAN	IMPURE LIMESTONE INTERBEDDED WITH MINOR CALCAREOUS SHALE	Pls		SYRENA FORMATION (170-390 FT.)	PALEOZOIC AQUIFER
		LIMESTONE WITH MINOR SHALE; PARTING SHALE AT BASE	Plo		OSWALDO FORMATION (330-420 FT.)	
	MISS.	CRINOIDAL LIMESTONE WITH MINOR ARGILLACEOUS LIMESTONE; NODULAR CHERT THROUGHOUT	Ml		LAKE VALLEY LIMESTONE (300-400 FT.)	
	DEV.	UPPER NODULAR CALCAREOUS SHALE; LOWER BLACK FISSILE SHALE	Dp		PERCHA SHALE (230-315 FT.)	?
	SIL.	GRAY MASSIVE DOLOMITE, CHERTY	Sf		FUSSELMAN DOLOMITE (100-300 FT.)	
	ORDOVICIAN	LIGHT GRAY MASSIVE DOLOMITE	Om		MONTOYA DOLOMITE (300-350 FT.)	
		THIN TO THICK BEDDED LIMESTONE AND DOLOMITE; CHERT MODULES IN UPPER PART	Oe		EL PASO LIMESTONE (500-520 FT.)	
	Є	GRAY BROWN MASSIVE QUARTZITE	Cb		BLISS FORMATION (140-190 FT.)	
pЄ		PRECAMBRIAN GNEISS AND SCHIST			GNEISS & SCHIST	

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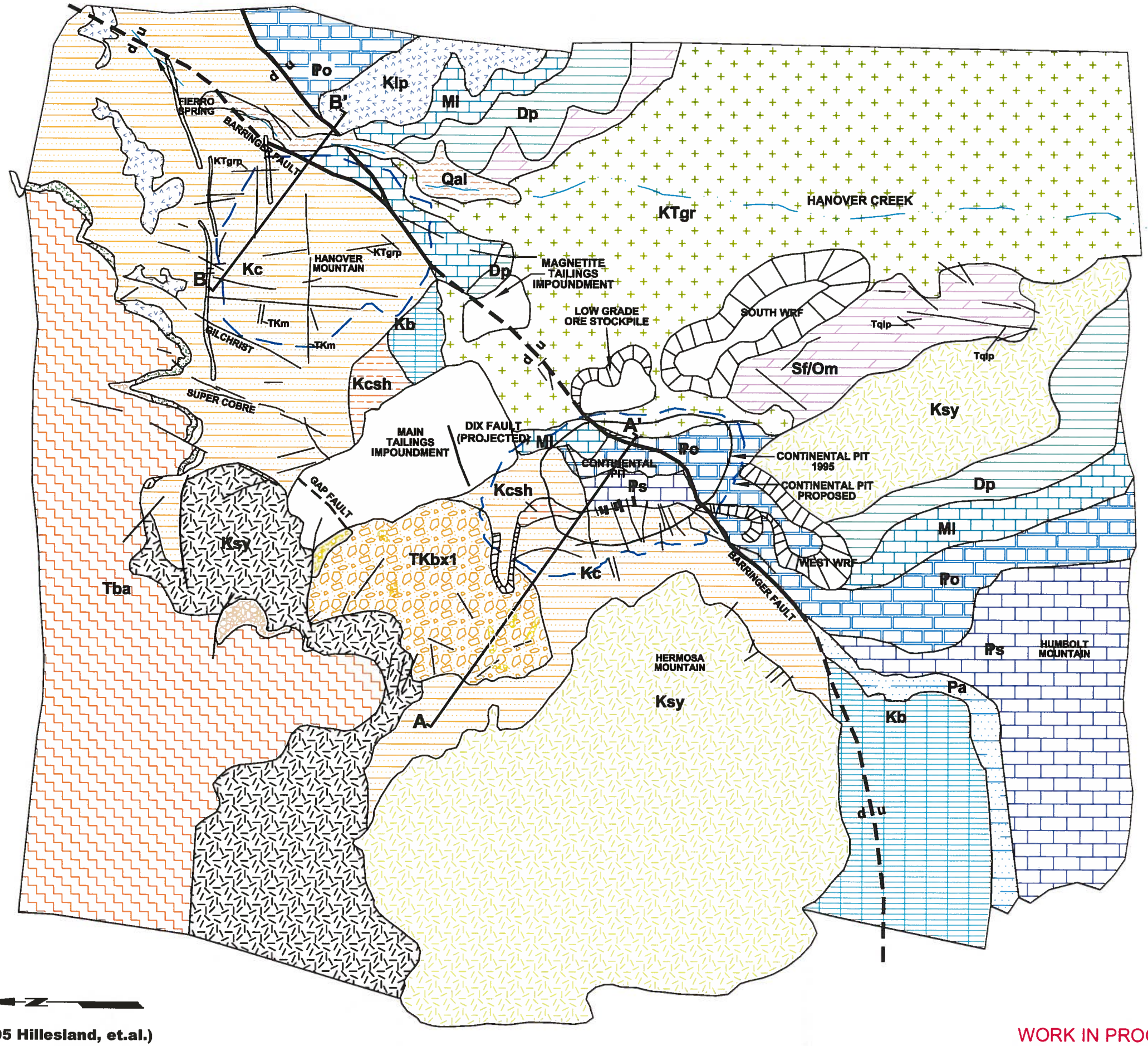
SOURCE: HILLESLAND ET AL., 1995

8/4/2005 P:\Projects\200-Co 103-Closeout-closure-support\200103-AUTOCAD\Condition 84\200103c84 STRATIGRAPHIC COLUMN.dwg

PROJECT: 200103 TASK: 84
PREPARED BY: TELESTO SOLUTIONS INCORPORATED

FIGURE 3-1
STRATIGRAPHIC COLUMN

PREPARED FOR: phelps dodge



WORK IN PROGRESS
SUBJECT TO CHANGE

LEGEND

- Qal — QUATERNARY ALLUVIUM
- Tba — BASALTIC ANDESITE FLOWS
- TKbx1 — CLAST-RICH CONTINENTAL BRECCIA PIPE
- TKbx2 — MATRIX-RICH CONTINENTAL BRECCIA PIPE
- Tgr — GRAVEL AND BOULDER DEPOSITS

CRETACEOUS & TERTIARY INTRUSIVE ROCKS

- Ttn — RYOLITE TUFF
- TKm — MAFIC DIKES
- KTgr — HANOVER-FIERRO STOCK
- KTgrp — GRANODIORITE PORPHYRY
- Ksy — SYENODIORITE PORPHYRY
- Klp — HORNBLENDE QUARTZ DIORITE

PALEOZOIC & MESOZOIC SEDIMENTARY ROCKS

- Kc — COLORADO FORMATION
- Kcsh — COLORADO FORMATION, SHALE MEMBER
- Kb — BEARTOOTH QUARTZITE
- Pa — ABO FORMATION
- Ps — SYRENA FORMATION
- Pc — OSWALDO FORMATION
- Ml — LAKE VALLEY LIMESTONE
- Dp — PERCHA SHALE
- Sf/Om — FUSSELMAN AND MONTOYA DOLOMITES
- Oe — EL PASO LIMESTONE
- Cb — BLISS FORMATION
- —— FAULTS (DASHED WHERE APPROXIMATE)

FIGURE 3-2
GEOLOGIC MAP OF THE CONTINENTAL MINE

PROJECT: 200103	TASK: 84
PREPARED BY: TELESTO SOLUTIONS INCORPORATED	PREPARED FOR: phelps dodge

NW

A

N57W

SE

A'

HERMOSA MOUNTAIN

CHALCOCITE MINERALIZATION

PROPOSED PIT OUTLINE

OPEN PIT

HM-11

HM-10

CF-100

CF-26

CF-195

CF-188

CF-103

CF-5

7,000 ft

6,000 ft

5,000 ft

4,000 ft

CONTINENTAL BRECCIA PIPE

Tkbx1

Kc

Kb

Pa

Ps

Po

Ml

Ksy

Dp

Sf

Om

Oe

Cb

?

INTRUSION BRECCIA

KTgr

BARRINGER FAULT

EXPLANATION

SIGNIFICANT INTERCEPTS > 0.5% COPPER

SEE FIGURE 3-7 FOR COMPLETE LEGEND

SCALE IN FEET

0 600

(FROM HILLESLAND, et.al., 1995)

WORK IN PROGRESS
SUBJECT TO CHANGE

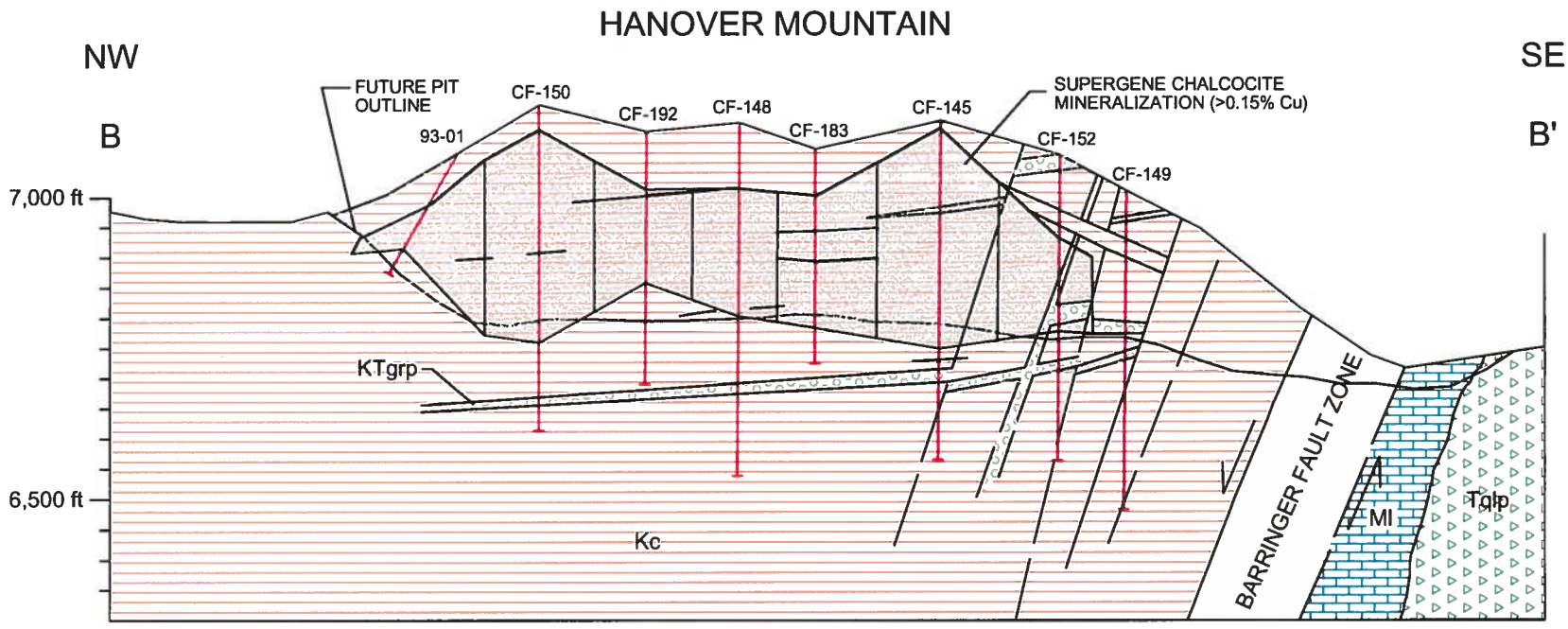
8/4/2005 P:\Projects\200-Cobre\200103-Closeout-closure-support\200103-AUTOCAD\Condition 84\200103c84 CROSS-SECTION A-A.dwg

PROJECT:	TASK:
200103	84

PREPARED BY: TELESTO SOLUTIONS INCORPORATED

FIGURE 3-3
GEOLOGIC CROSS-SECTION A-A'

PREPARED FOR: phelps dodge



SCALE IN FEET
0 300

(FROM HILLESLAND, et.al., 1995)

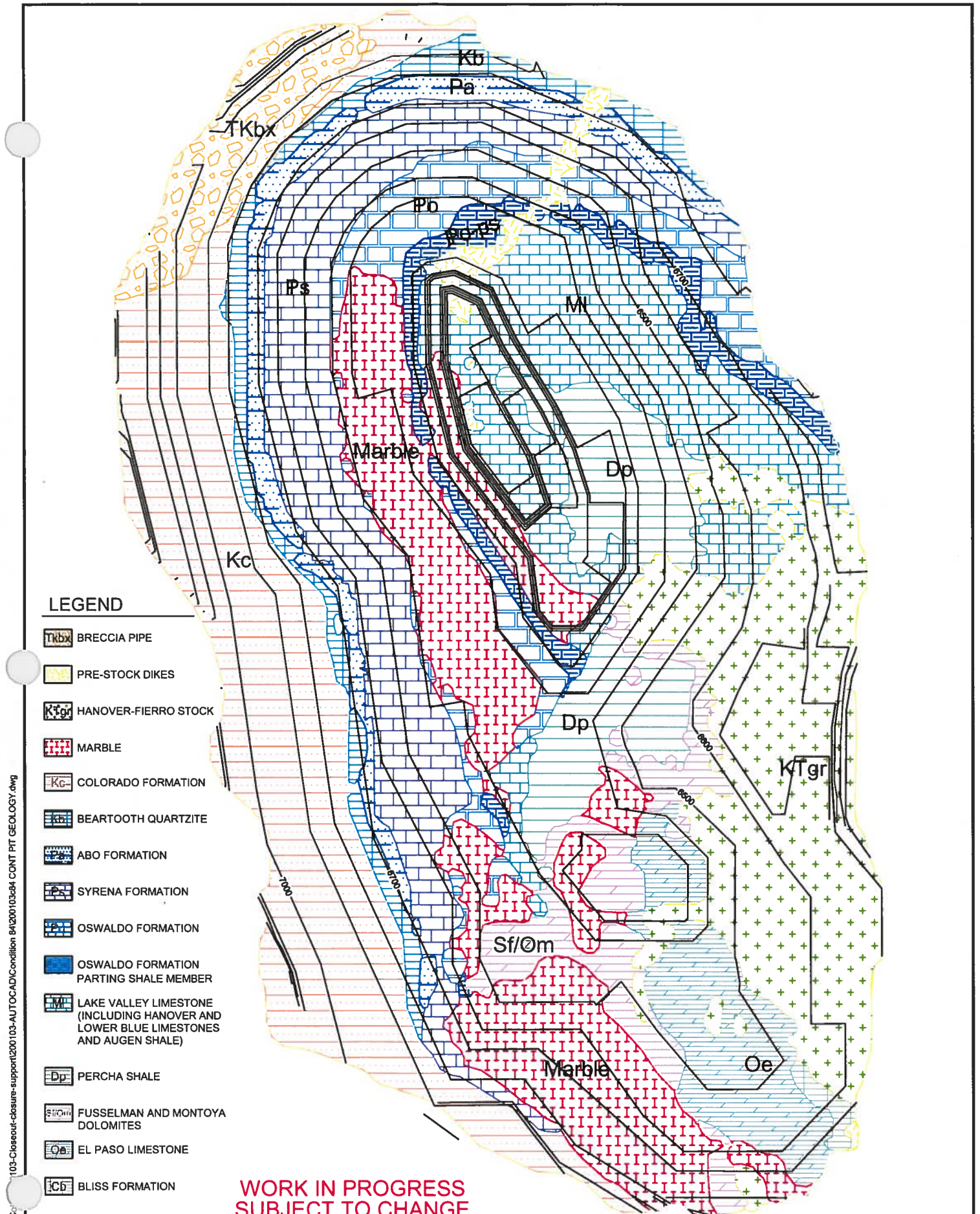
WORK IN PROGRESS
SUBJECT TO CHANGE

8/5/2005 P:\Projects\200-Cobre\200103-Closeout-closure-support\200103-AUTOCAD\Condition 84\200103c84 CROSSBB.dwg

PROJECT: 200103	TASK: 84
PREPARED BY: TELESTO SOLUTIONS INCORPORATED	

FIGURE 3-4
GEOLOGIC CROSS-SECTION B-B'

PREPARED FOR: phelps dodge



PROJECT: 200103 | TASK: 84

PREPARED BY: TELESTO SOLUTIONS INCORPORATED

FIGURE 3-5
GEOLOGY OF FINAL CONTINENTAL PIT

PREPARED FOR: phelps dodge

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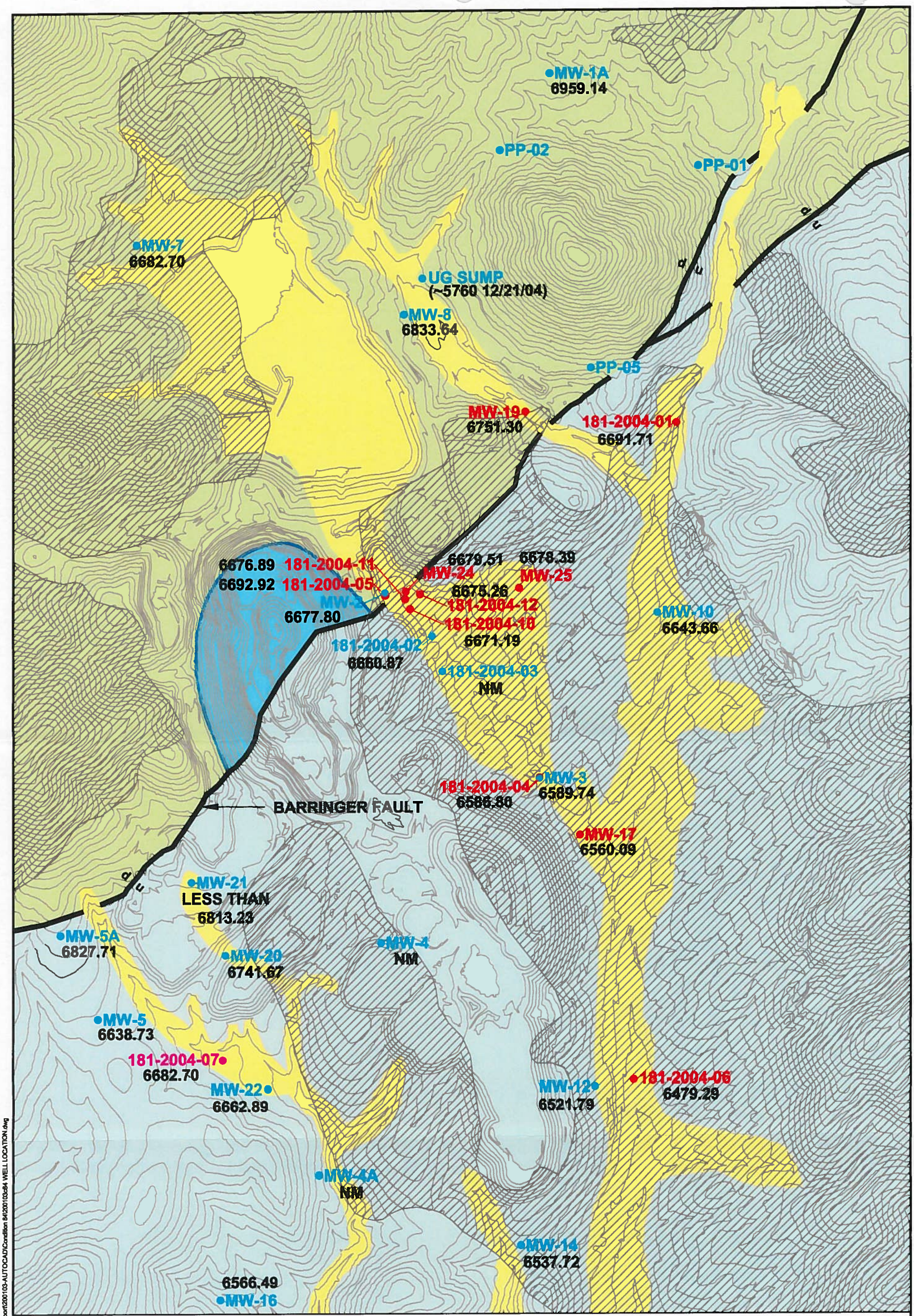


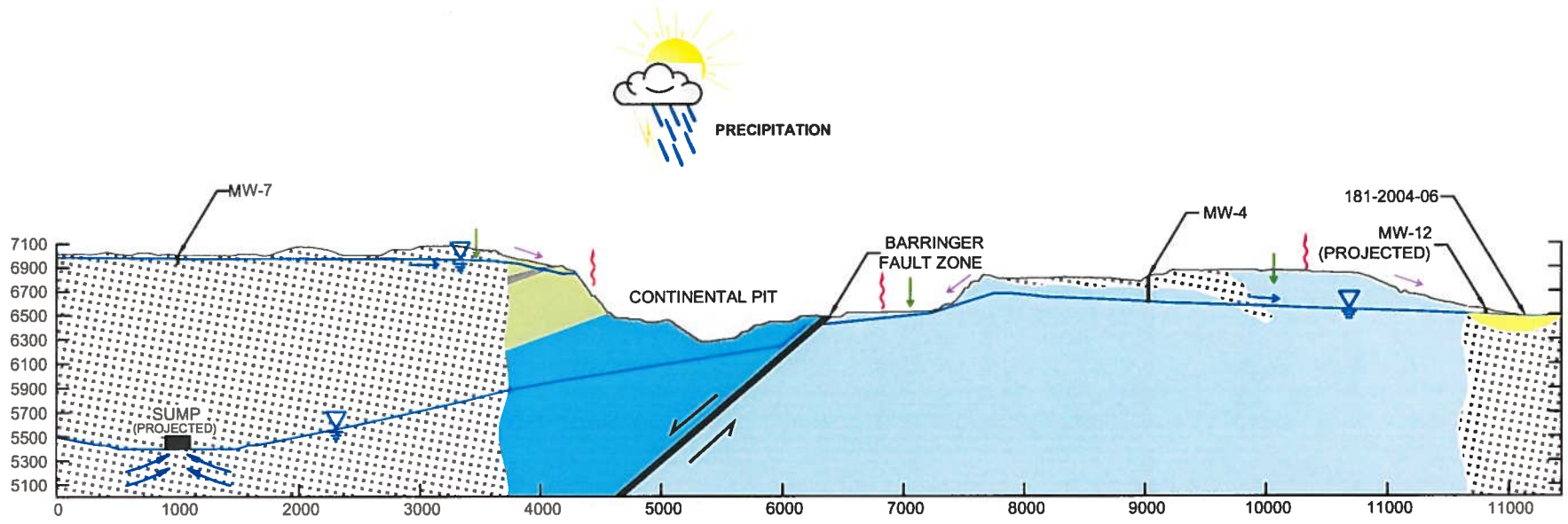
PROJECT: 200103 | TASK: 84

PREPARED BY: TELESTO SOLUTIONS INCORPORATED

FIGURE 5-1
GROUND WATER FLOW SYSTEMS

PREPARED FOR: Phelps Dodge

8/4/2005 P:\Projects\200-Cobre\200103-Closeout-closure-support\200103-AUTOCAD\Condition 84\200103c84 WELL LOCATION.dwg



LEGEND

- ALLUVIUM
- NORTH CRETACEOUS FLOW SYSTEM
- AQUITARD
- NORTH PALEOZOIC FLOW SYSTEM
- SOUTH PALEOZOIC FLOW SYSTEM
- INTRUSIVE IGNEOUS ROCKS
- GROUND WATER FLOW DIRECTION
- WATER LEVEL
- EVAPORATION/ TRANSPIRATION
- RECHARGE
- RUNOFF
- FLOW

NOT TO SCALE

WORK IN PROGRESS
SUBJECT TO CHANGE

PROJECT:	TASK:
200103	84

PREPARED BY: TELESTO SOLUTIONS INCORPORATED

FIGURE 5-2
DIAGRAMMATIC CONCEPTUAL FLOW MODEL

PREPARED FOR: Phelps Dodge

8/5/2005 P:\Projects\200-Cobre\200103-Closeout-closure-support\200103-AUTOCAD\Condition 84\200103c84 diagramatic conceptual flow model.dwg