

WELL CONSTRUCTION SUMMARY

WELL M-21

PROJECT: BMG - Tailings

ELEVATION:

PROJECT NO.: 344e12171

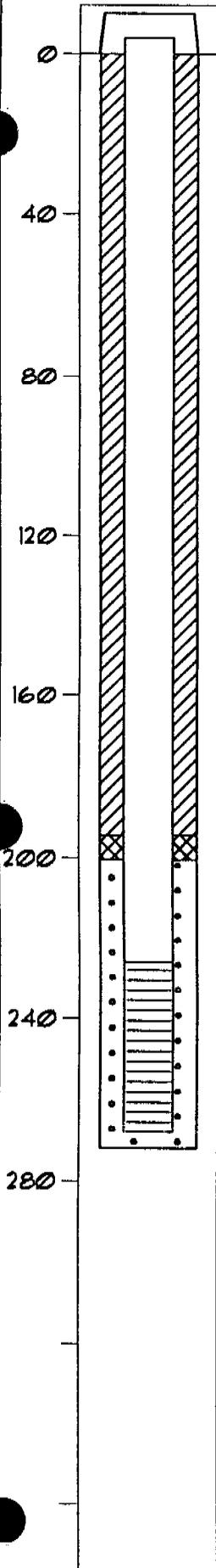
GROUND LEVEL: 4867.19

PERSONNEL: D.A. Merrill

TOP OF RISER: 4868.84

LOCATION OR COORDS: 2093406.47 N
364379.45 E

TOP OF CASING:



DRILLING SUMMARY:

TOTAL DEPTH 266

BOREHOLE DIAMETER 12 1/4"

DRILLER BMG - Denny Reeves

RIG TH-100A

BIT(S) Tricone, 12 1/4"

DRILLING FLUID Air, Water, Foam

SURFACE CASING 20' x 14' mild steel

WELL DESIGN:

BASIS: GEOLOGIC LOG GEOPHYSICAL LOG

CASING STRING(S): C=CASING S=STRINGS

15 - 225 C1

225 - 265 S1

CASING: C1 6' 5CH 80 PVC blank

C2

C3

C4

SCREEN: S1 6' 3ch 80 PVC 50 slot

S2

S3

CENTRALIZERS: 60,120,210,265

FILTER MATERIAL: Gravel 200-266

CEMENT: Cement 0-197'

OTHER: Bentonite pellets 197-200'

CONSTRUCTION TIME LOG:

TASK	START		FINISH	
	DATE	TIME	DATE	TIME
DRILLING:	1991		1991	
<u>Drilling</u>	<u>3/22</u>	<u>0800</u>	<u>3/26</u>	<u>1200</u>
GEOPHYS. LOGGING				
CASING:				
<u>Surface</u>	<u>3/21</u>	<u>1200</u>	<u>3/21</u>	<u>1500</u>
<u>Well</u>	<u>3/26</u>	<u>1230</u>	<u>3/26</u>	<u>1345</u>
FILTER PLACEMENT:	<u>3/27</u>	<u>1815</u>	<u>3/27</u>	<u>0900</u>
CEMENTING:	<u>3/27</u>	<u>1010</u>	<u>3/27</u>	<u>1230</u>
DEVELOPMENT:	<u>3/28</u>	<u>0816</u>	<u>3/28</u>	<u>1030</u>
OTHER:				
<u>Grout</u>	<u>3/27</u>	<u>0905</u>	<u>3/27</u>	<u>0915</u>

WELL DEVELOPMENT:

Air lift and flush with water for
2.25 hours 3/28

COMMENTS:

Cement settled to 10' BGS still in
casing. 0-10' Filled with cuttings to
stabilize well casing.

Water still slightly foamy - slow
recovery - did not measure T, EC
pH.