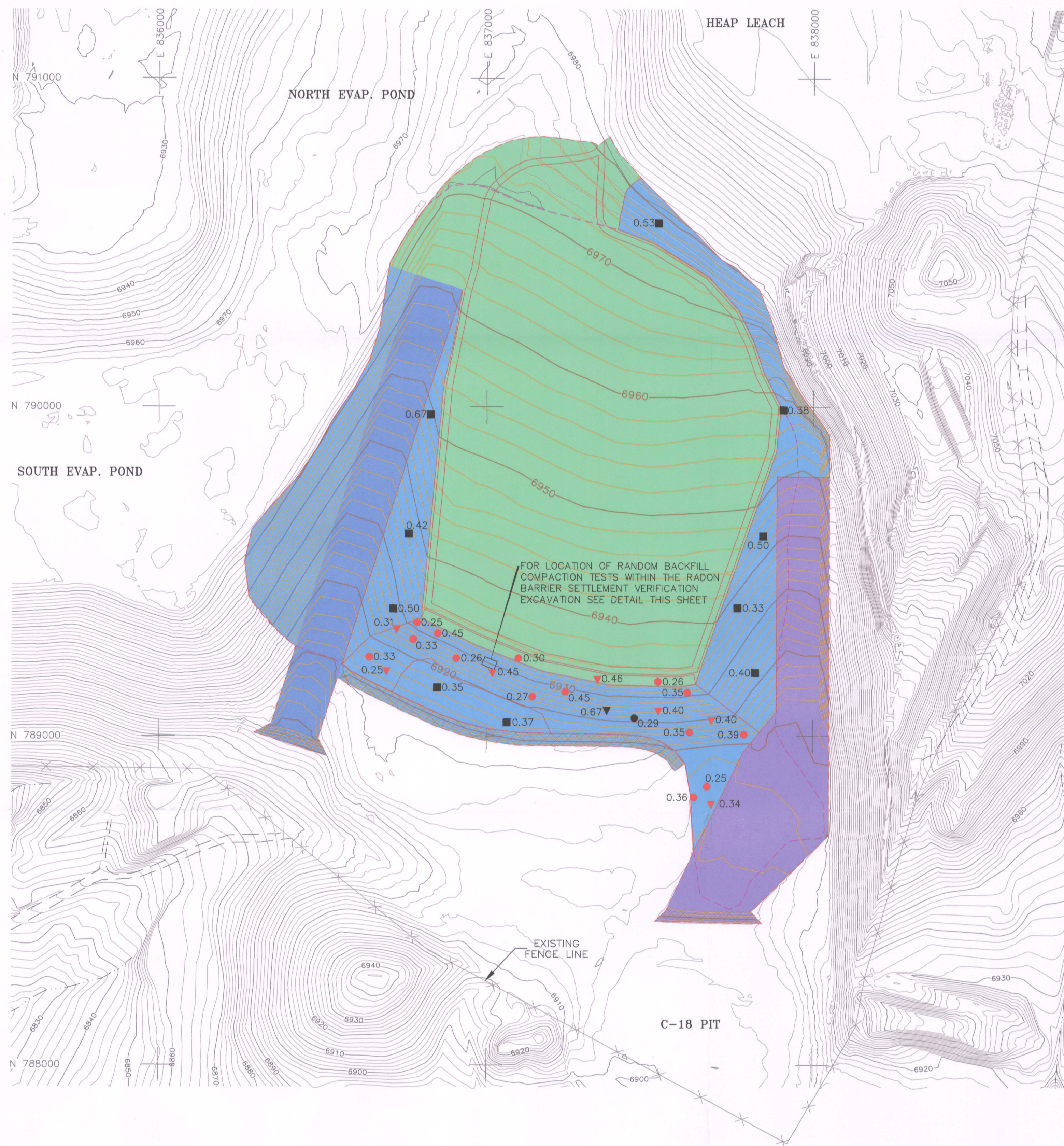
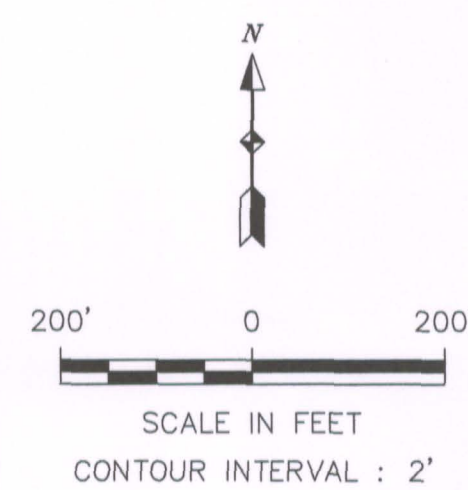




A-9 REPOSITORY
EROSION AND RILL REPAIR PLAN

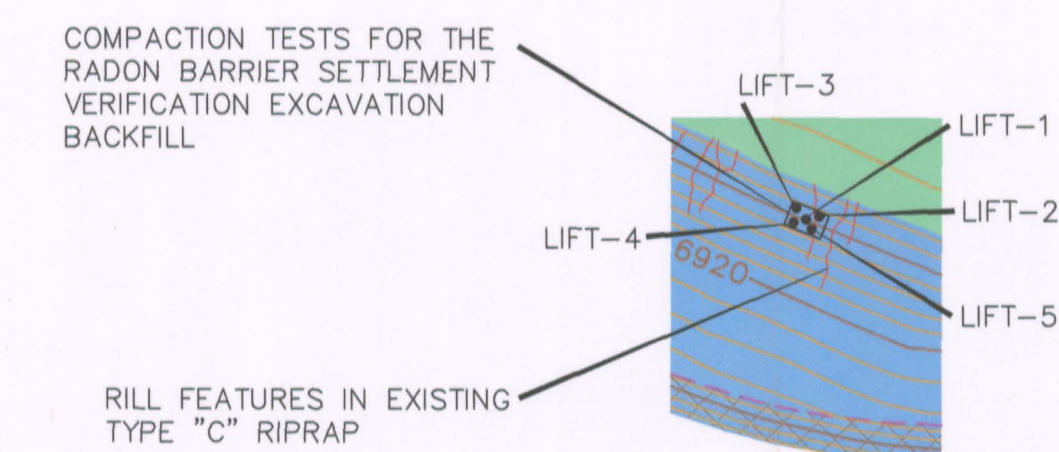


LEGEND:

- 7000 AERIAL TOPOGRAPHY
UPDATED WITH 2006 SURVEYS
- DRAINAGE PATH/PONDED WATER
- UNPAVED ROADS
- UMETCO 1000' SITE GRID
- FINISH GRADE TOPOGRAPHY
OF THE A-9 REPOSITORY EROSION
PROTECTION LAYER
- LIMIT OF RADON BARRIER SOILS
- RILL FEATURES IN EXISTING TYPE "C" RIPRAP
- 6 INCHES OF TYPE B RIPRAP
D₅₀ = 3.0 INCH
- 12 INCHES OF TYPE C RIPRAP
D₅₀ = 6.0 INCH
- 12 INCHES OF TYPE C RIPRAP
D₅₀ = 6.0 INCH
WITH 6 INCHES OF TYPE A BEDDING
D₅₀ = 1.0 INCH
- 24 INCHES OF TYPE D RIPRAP
D₅₀ = 16.0 INCH
WITH 6 INCHES OF TYPE A BEDDING
D₅₀ = 1.0 INCH
- BELOW GRADE TOE APRON
- REPAIR METHOD 1:
IN-PLACE DEPTH VERIFICATION CHECK
● 0.25-----TYPE A BEDDING MATERIAL, LAYER DEPTH IN FEET (0.25)
● 0.25-----30/70 BLEND BEDDING MATERIAL, LAYER DEPTH IN FEET (0.25)
- REPAIR METHOD 1:
IN-PLACE GRADATION TEST AND DEPTH VERIFICATION CHECK
▼ 0.25-----TYPE A BEDDING MATERIAL, LAYER DEPTH IN FEET (0.25)
▼ 0.25-----30/70 BLEND BEDDING MATERIAL, LAYER DEPTH IN FEET (0.25)
- REPAIR METHOD 2:
IN-PLACE GRADATION TEST AND DEPTH VERIFICATION CHECK
■ 0.33-----30/70 BLEND BEDDING MATERIAL, LAYER DEPTH IN FEET (0.33)

METHOD 1 BEDDING PLACEMENT			
	TOTAL AREA:	5.4	ACRES
TOTAL NUMBER OF IN-PLACE GRADATIONS/DEPTH CHECKS:	8	TESTS	
NUMBER OF DEPTH CHECKS ONLY:	15	TESTS	
TOTAL NUMBER OF DEPTH CHECKS:	23	TESTS	
IN-PLACE GRADATION FREQUENCY:	1.5	TESTS PER ACRE	
DEPTH CHECK FREQUENCY:	4.3	TESTS PER ACRE	
AVERAGE DEPTH MEASURED (IN FEET):	0.36		

METHOD 2 BEDDING PLACEMENT			
	TOTAL AREA:	8.3	ACRES
TOTAL NUMBER OF IN-PLACE GRADATIONS/DEPTH CHECKS:	10	TESTS	
NUMBER OF DEPTH CHECKS ONLY:	0	TESTS	
TOTAL NUMBER OF DEPTH CHECKS:	10	TESTS	
IN-PLACE GRADATION FREQUENCY:	1.2	TESTS PER ACRE	
DEPTH CHECK FREQUENCY:	1.2	TESTS PER ACRE	
AVERAGE DEPTH MEASURED (IN FEET):	0.45		



A-9 REPOSITORY
COMPACTION TESTS LOCATIONS

AS-BUILT

				Umetco Minerals Corporation 2754 COMPASS DRIVE, SUITE 280, GRAND JUNCTION, CO 81506	
				GAS HILLS, WYOMING	
				A-9 REPOSITORY DESIGN ENHANCEMENT IN-PLACE GRADATION AND DEPTH VERIFICATION CHECK LOCATIONS	
				DESIGN: JHH	DRAWN: JHH
				CHECKED BY:	DATE: 12-8-2010
1 1-2012 AS BUILT R.W.O. NO. DATE REVISION - DESCRIPTION BY DWG: GH-A9-REPAIR-12-11-AB-DCK				ENGINEERING APPROVAL:	HS & EA APPROVAL:
				SHEET 7 OF 7	

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