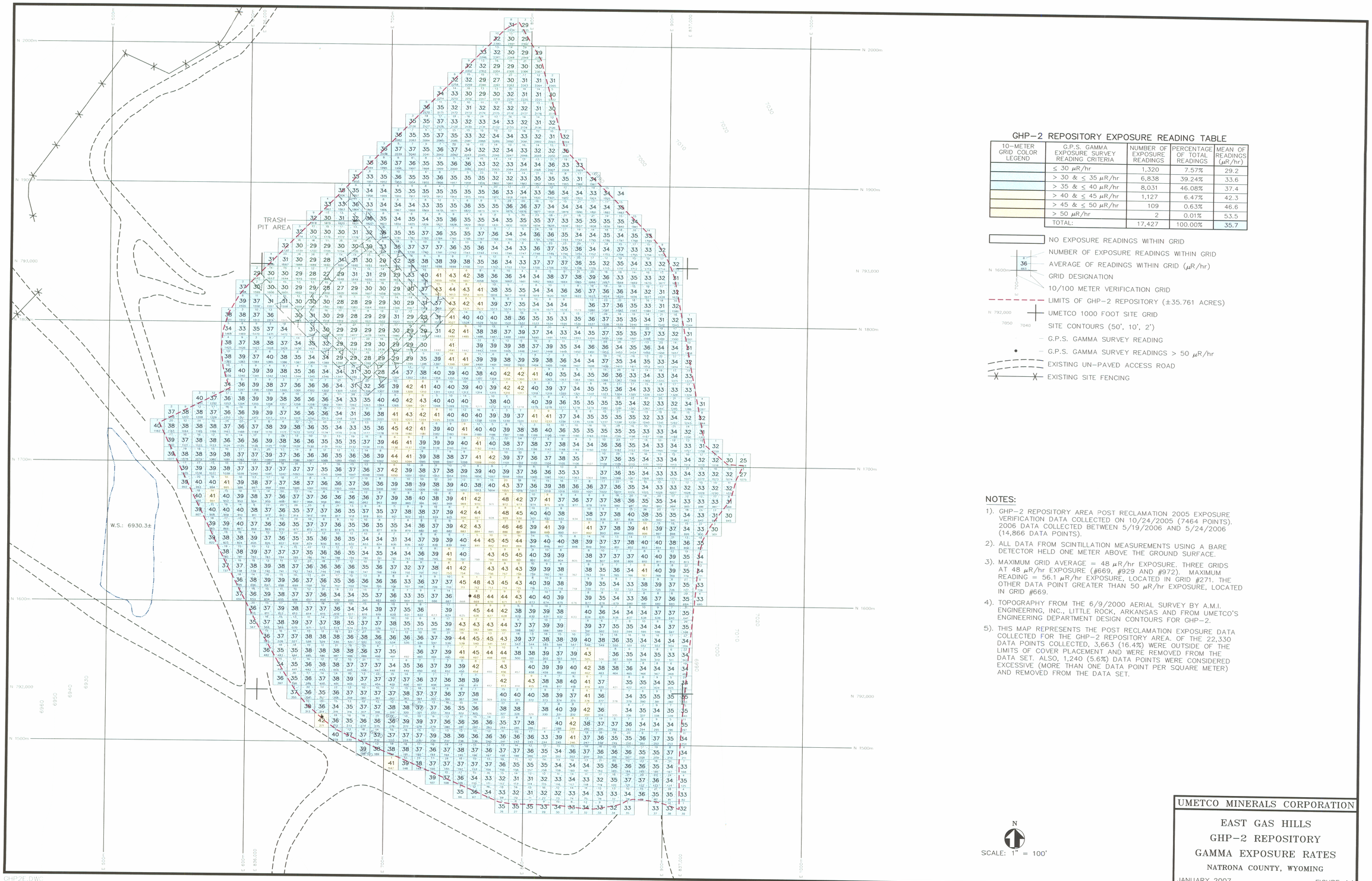

GHP-2 REPOSITORY EXPOSURE READING TABLE

10-METER GRID COLOR LEGEND	G.P.S. GAMMA EXPOSURE SURVEY READING CRITERIA	NUMBER OF EXPOSURE READINGS	PERCENTAGE OF TOTAL READINGS	MEAN OF READINGS (μR/hr)
	$\leq$ 30 μR/hr	1,320	7.57%	29.2
	> 30 & $\leq$ 35 μR/hr	6,838	39.24%	33.6
	> 35 & $\leq$ 40 μR/hr	8,031	46.08%	37.4
	> 40 & $\leq$ 45 μR/hr	1,127	6.47%	42.3
	> 45 & $\leq$ 50 μR/hr	109	0.63%	46.6
	> 50 μR/hr	2	0.01%	53.5
	TOTAL:	17,427	100.00%	35.7

NO EXPOSURE READINGS WITHIN GRID

NUMBER OF EXPOSURE READINGS WITHIN GRID

AVERAGE OF READINGS WITHIN GRID (μR/hr)

GRID DESIGNATION

10/100 METER VERIFICATION GRID

LIMITS OF GHP-2 REPOSITORY (±35.761 ACRES)

UMETCO 1000 FOOT SITE GRID

SITE CONTOURS (50', 10', 2')

G.P.S. GAMMA SURVEY READING

G.P.S. GAMMA SURVEY READINGS > 50 μR/hr

EXISTING UN-PAVED ACCESS ROAD

EXISTING SITE FENCING

NOTES:

1). GHP-2 REPOSITORY AREA POST RECLAMATION 2005 EXPOSURE VERIFICATION DATA COLLECTED ON 10/24/2005 (7464 POINTS). 2006 DATA COLLECTED BETWEEN 5/19/2006 AND 5/24/2006 (14,866 DATA POINTS).

2). ALL DATA FROM SCINTILLATION MEASUREMENTS USING A BARE DETECTOR HELD ONE METER ABOVE THE GROUND SURFACE.

3). MAXIMUM GRID AVERAGE = 48 μR/hr EXPOSURE. THREE GRIDS AT 48 μR/hr EXPOSURE (#669, #929 AND #972). MAXIMUM READING = 56.1 μR/hr EXPOSURE, LOCATED IN GRID #271. THE OTHER DATA POINT GREATER THAN 50 μR/hr EXPOSURE, LOCATED IN GRID #669.

4). TOPOGRAPHY FROM THE 6/9/2000 AERIAL SURVEY BY A.M.I. ENGINEERING, INC., LITTLE ROCK, ARKANSAS AND FROM UMETCO'S ENGINEERING DEPARTMENT DESIGN CONTOURS FOR GHP-2.

5). THIS MAP REPRESENTS THE POST RECLAMATION EXPOSURE DATA COLLECTED FOR THE GHP-2 REPOSITORY AREA. OF THE 22,330 DATA POINTS COLLECTED, 3,663 (16.4%) WERE OUTSIDE OF THE LIMITS OF COVER PLACEMENT AND WERE REMOVED FROM THE DATA SET. ALSO, 1,240 (5.6%) DATA POINTS WERE CONSIDERED EXCESSIVE (MORE THAN ONE DATA POINT PER SQUARE METER) AND REMOVED FROM THE DATA SET.

N

SCALE: 1" = 100'

UMETCO MINERALS CORPORATION

EAST GAS HILLS
GHP-2 REPOSITORY
GAMMA EXPOSURE RATES

NATRONA COUNTY, WYOMING

JANUARY 2007

FIGURE 4.1

GHP2E.DWG