LEGEND

- BEAR CANYON PERMIT
- FEDERAL LEASE BOUNDARIES
- FOREST SERVICE BOUNDARY
- SUBSIDENCE STATION
- SECTION LINE
- SUBSIDENCE IMPACT CONTOURS — 4.5
- CASTLEGATE SANDSTONE
- JOINT SURVEY LOCATION
- ROCK FALL
- WEAK BLOCK
- FAULT LINE

INSTABILITY LEVEL: LOW, MEDIUM, HIGH

THIS PLATES SHOWS CUMULATIVE SUBSIDENCE FROM ALL SEAMS
SEE PLATES 5-1 FOR INDIVIDUAL SEAM SUBSIDENCE COUNTOURS
SEE PLATES 5-1 FOR PROJECTED MINING
SEE APPENDIX 5-C FOR SUBSIDENCE MITIGATION DESCRIPTION

REV.	DATE	REMARKS	APPR.
1	12-16-94	Mitigation Area 1 Added, Map Area Expanded (94J)	4-28-95
2	6-18-97	U-024316 Added/Subsidence Barriers Shown (97-1)	2-13-98
3	8-15-00	Mitigation Area 2 Added (AM00B)	9-25-00
4	6-25-01	Wild Horse Ridge Area Added to Permit (SR98-1)	7-03-01
5	3-08-02	Mortland Area Added to Permit (AM02E)	8-12-02
6	2-03-05	Changed name from plate 3-3 to plate 5-3	1-15-06
7	1-04-07	Added Subsidane areas 51-57	
8			
9			
10			

Survey lines to be established. Numbers and exact locations will be provided following approval and establishment of the points.

LICENSED PROFESSIONAL ENGINEER MARK A. REYNOLDS 5040979-2202 STATE OF UTAH

CO-OP MINING CO.

HUNTINGTON, UTAH

SUBSIDENCE MAP

SCALE:	DRAWN BY:	DATE:
1" = 1000'	C. Reynolds	07-11-05

BEAR CANYON | PLATE 5-3

RECEIVED
JAN 16 2007
DIV. OF OIL, GAS & MINING