## LEGEND

- BEAR CANYON PERMIT
- FEDERAL LEASE BOUNDARIES
- FOREST SERVICE BOUNDARY
- MINE WORKINGS
- PILLARED AREA
- SECTION LINE
- COAL OUTCROP
- FAULT LINE
- POTENTIAL SUBSIDENCE ZONE
- SUBSIDENCE IMPACT CONTOURS — 5

Note: Subsidence impact countours only show anticipated vertical displacement from mining the seam shown on this map. Plate 5-3 shows the cumulative subsidence impacts.

C.O.P. DEVELOPMENT FEDERAL LEASE U-61048

C.O.P. DEVELOPMENT FEDERAL LEASE U-61049

C.O.P. DEVELOPMENT FEDERAL LEASE U-46184

C.O.P. DEVELOPMENT FEDERAL LEASE U-024316

C.O.P. DEVELOPMENT FEDERAL LEASE U-38727

C.O.P.D. FEDERAL LEASE U-61049

C.O.P. DEVELOPMENT FEDERAL LEASE U-020668

C.O.P.D. FEDERAL LEASE U-024318

C.O.P.D. FEDERAL LEASE U-38727

PP 4
2,040 X 1,150 ft
(2017-2018)

C CM 5, 5-Entry Mains (2012)

C CM 4, 5-Entry Mains (2011-2012)

C CM 3, 5-Entry Mains (2013-2014)

C CM 2, 5-Entry Mains (2014-2015)

C CM 1, 5-Entry Mains (2015-2016)

Main Development Entries 2,008 - 2,009

Rock Tunnel (2010)

Rock Slope to Blind Seam 2007-2008

Blind Canyon Fault

Trail Canyon Fault 135'

Fault 60'

Fault 67'

Fault 81'

Pleasant Valley Fault 522'

Bear Canyon Fault 220'

Dostie Fault 6'

POSSIBLE FUTURE PORTALS

HIAWATHA SEAM STRIKE = N 19°45' W

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DIV. OF OIL, GAS & MINING

LICENSED PROFESSIONAL ENGINEER — MARK A. REYNOLDS — 5049079-2202 — STATE OF UTAH

N

# CO-OP MINING CO.

HUNTINGTON, UTAH

## HIAWATHA SEAM WORKINGS

| SCALE: | DRAWN BY: | DATE: |
|---|---|---|
| 1" = 1000' | M. Reynolds | 01/01/07 |

BEAR CANYON | PLATE 5-1B