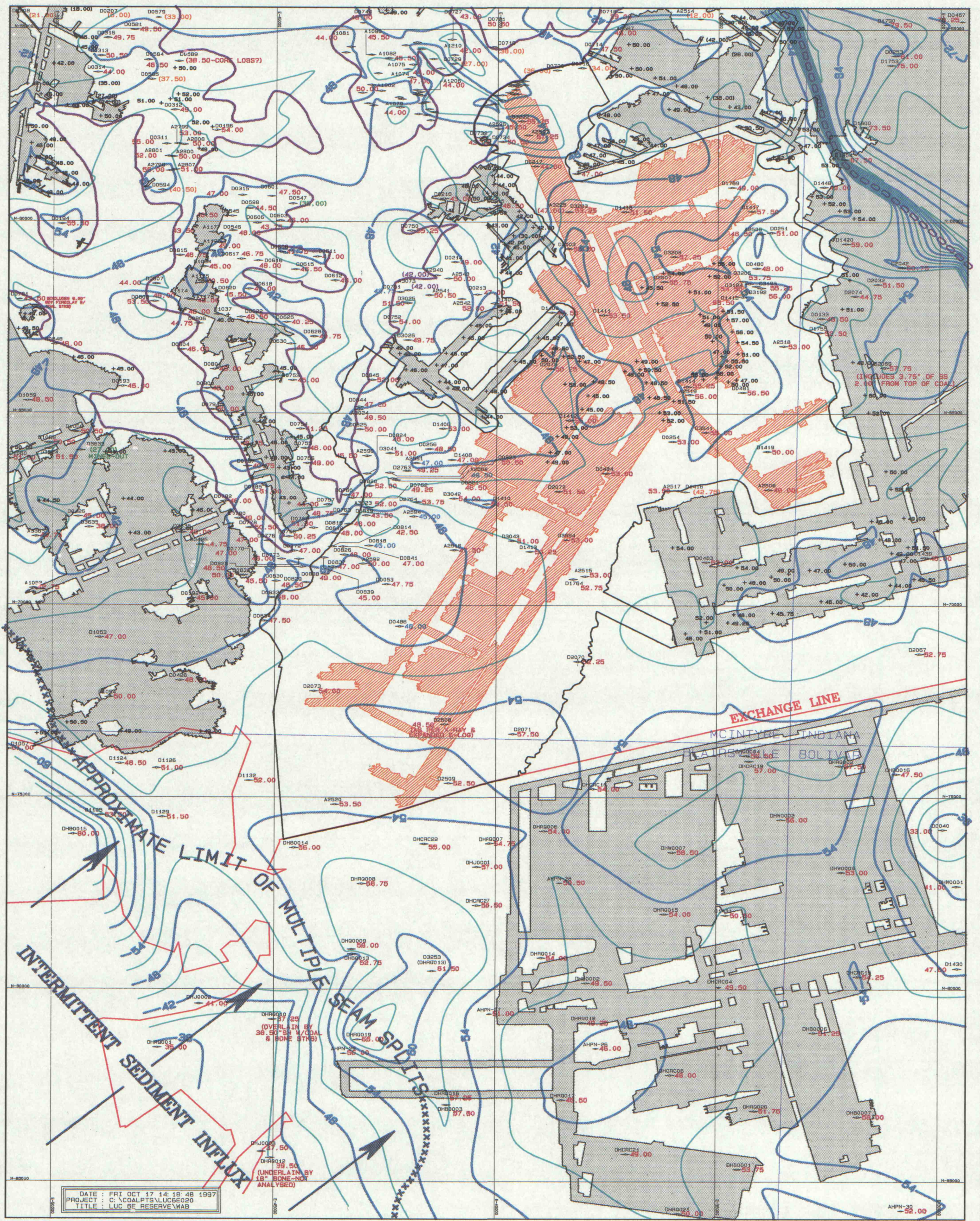




HELVETIA COAL CO. LUCERNE NO.6E UPPER FREEPORT SEAM MINEABLE COAL THICKNESS INCLUDING BOTTOM "RASH"

CONTOUR INTERVAL = 3 IN.

51.00 MINEABLE SEAM HEIGHT(IN) + 44.00 IN-MINE MEASUREMENT(IN)

VALUES IN BLUE HAVE RELATIVELY LOW ASH VALUES. IT IS THEREFORE ASSUMED THE BOTTOM "RASH" IS NOT INCLUDED IN THE ANALYSES NOR IN THE MINEABLE SEAM HEIGHT. CONSEQUENTLY, THESE SEAM HEIGHT VALUES ARE ASSUMED TO BE ARTIFICIALLY LOW, BUT ARE CONTOURED.

NUMBERS IN PARENTHESES NOT CONTOURED
(35.00) THICKNESS ASSUMED REDUCED BY POST-DEPOSITIONAL SANDSTONE CHANNELING
(42.00) THICKNESS ASSUMED TO EXCLUDE BOTTOM "RASH"
(27.00) ASSUMED THINNING DUE TO NEARNESS TO CROP

PERMIT BOUNDARY
TRANSITION ZONE (SPLIT LINE)
UPPER FREEPORT CROPLINE

GRAPHIC SCALE 1"=2000'
0 2000 4000 6000

IMAPS#09420