
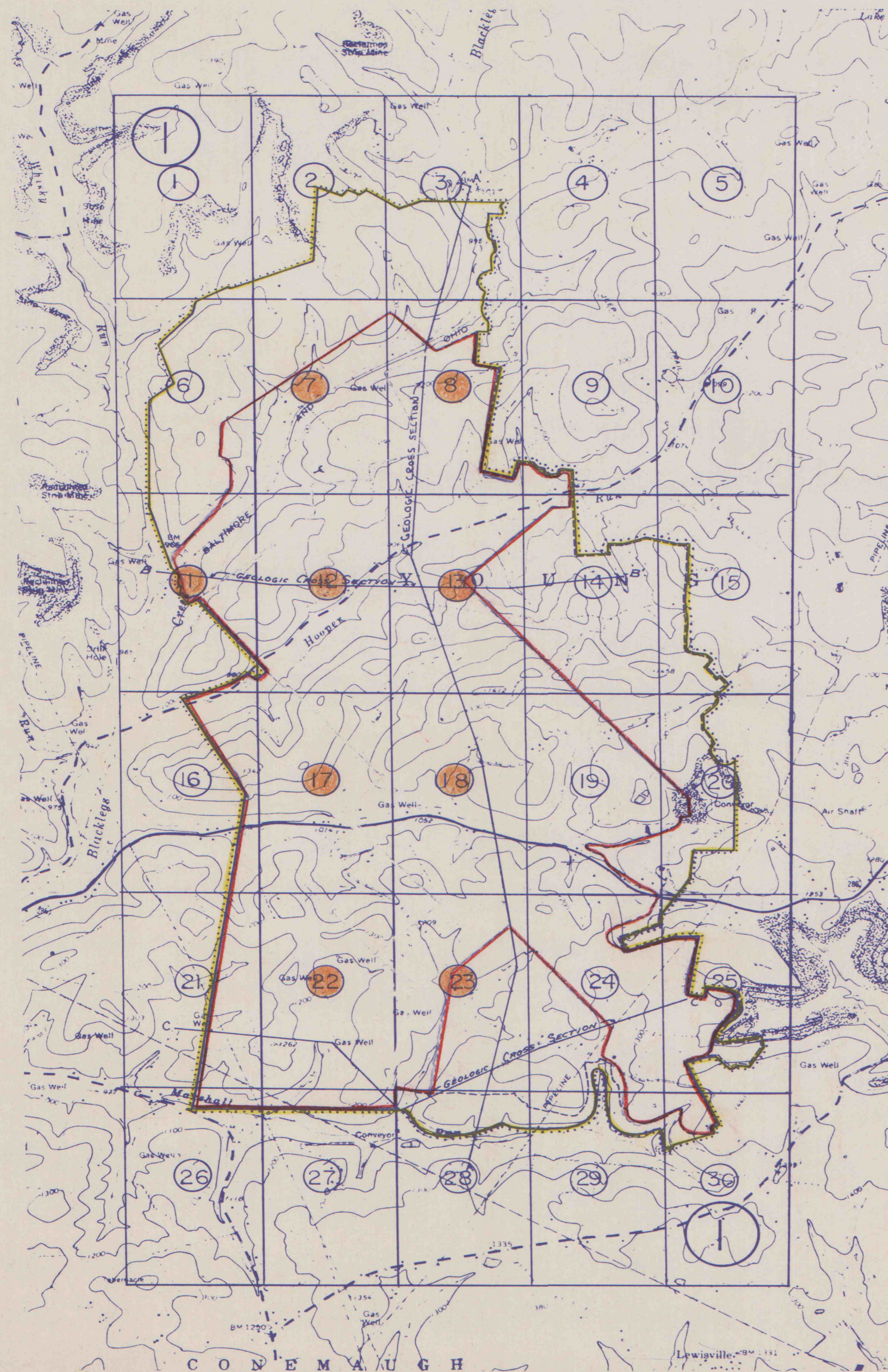


SUBSIDENCE PERMIT BOUNDARY INDEX FOR 1" = 100' MAPS

McINTYRE
U S G S QUADANGLE

 = MAPS SUBMITTED
SCALE 1" = 2000'



HELVETIA COAL COMPANY

LUCERNE NO.8 MINE

PERMIT NO. 32841320

UPPER FREEPORT (E SEAM)

YOUNG TOWNSHIP

INDIANA COUNTY, PENNA.

MSHA-ID 36-04597

POSTING DATE 5-25-93

SEAL —



SIGNATURE

David E. Yingling


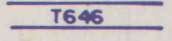


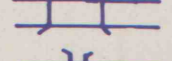


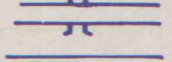
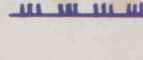

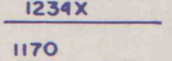
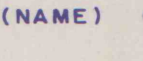

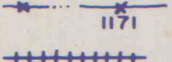


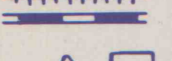


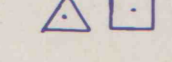
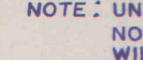

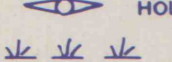


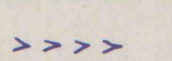
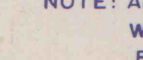

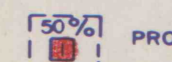


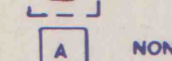

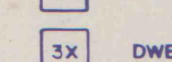

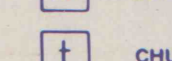

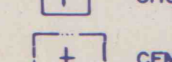

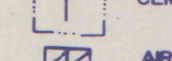

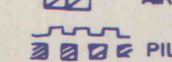

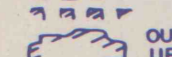

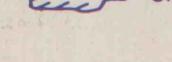



PREPARED BY MICHAEL P. KEITH

MAPS DEPICT CONTEMPLATED MINING

FROM 7-1, 1993

TO 1-1, 1994

LEGEND FOR MAP SYMBOLS

	ACTIVE GAS WELL		TOWNSHIP ROAD		MINING COMPLETED
	INACTIVE GAS WELL		BRIDGE		CONSTRUCTED DIKE OR EMBANKMENT
	WATER WELL		CULVERT		TOE OF EXISTING SPOIL, MINE ROCK OR COAL REFUSE PILE
	SPRING		ELEVATIONS-ROAD		(NAME) ORIGINAL COAL OWNER, SHOWN FOR REFERENCE ONLY
	POND		ELEVATIONS-STREAM		(NOTE) ALL COAL OWNED BY R&P COAL CO., UNLESS NOTED ON THE MAPS, & LEASED TO HELVETIA COAL CO.
	FLOW MEASUREMENT POINT		RAILROAD TRACKS		MINE EXAMINERS POINT
	STREAM-PERENNIAL		HORIZONTAL OR VERTICAL CONTROL, SURVEY STATIONS		(NOTE) UNLESS OTHERWISE INDICATED ON THE MAPS, NOMINAL ENTRY AND CROSSCUT WIDTHS WILL BE 20' AND NOMINAL BELT-TRACK ENTRY WIDTHS WILL BE 22'.
	STREAM-INTERMITTENT		DIAMOND (DDH) OR AIR DRILL (ADH) HOLE AS LABELED		CALCULATED SUPPORT AREA
	PIPELINE OR UNDERGROUND CABLE (SIZE, OIL, OR GAS AS LABELED)		SWAMP OR MARSH		(NOTE) ANY PILLAR WITHIN OR PARTIALLY WITHIN 50% SUPPORT AREA SHALL BE LEFT TOTALLY INTACT.
	PROPERTY LINE		DITCH		(NOTE) FIRST MINING INDICATES NO PILLAR REMOVAL
	POWER LINE		PROTECTED STRUCTURE		
	COAL CONTOUR LINE		NONPROTECTED STRUCTURE		
	NO COAL ZONE		DWELLING-BUILT AFTER APRIL 1966		
	CROPLINE		CHURCH		
	100' COVER LINE		CEMETARY		
	6 MONTH SUBSIDENCE LINE (CONTEMPLATED MINING & DATE)		AIR SHAFT (DOUBLE COMPARTMENT)		
	BOUNDARY OF OPERATION		PILLARED		
	MINE SUBSIDENCE PERMIT		OUTLINE OF PILLARED AREA UPPER OR LOWER SEAM		
	DONT OWN				
	STATE ROAD				
	UNIMPROVED ROAD				