1 CANTERRA COAL, INC.	CANTERRA COAL, INC.
2 DAVID ORR	CANTERRA COAL, INC.
3 MICHAEL LINK	CANTERRA COAL, INC.
4 MICHAEL LINK	CANTERRA COAL, INC.
5 DONALD HOLTZ	CANTERRA COAL, INC.
6 JOSEPH E. LECUE	K & J COAL CO.
7 DENNIS JOHNSON	K & J COAL CO.
8 RICHARD KUTRUFF	CLEARFIELD BIT. COAL CORP.
9 PAUL WARNER & BERTILLE STANOVICH	CLEARFIELD BIT. COAL CORP.
10 DENNIS JOHNSON	K & J COAL CO.
11 LEON LECHENE	LEON LECHENE
12 K & J COAL CO.	K & J COAL CO.
13 HENRY R. LEIDEN	HENRY R. LEIDEN
14 JOSEPH A. LONG	JOSEPH A. LONG
15 JOSEPH A. LONG	JOSEPH A. LONG
16 CHARLES STROHMIER	CHARLES STROHMIER
17 CLEMENT B. HOLTZ	CLEMENT B. HOLTZ
18 JOHN TIRPAK	JOHN TIRPAK
19 CLEMENT HOLTZ	K & J COAL CO.
20 JACOB LEIDEN ESTATE	JACOB LEIDEN ESTATE
21 GERALD F. LEIDEN	GERALD F. LEIDEN
22 JOSEPH DRASS	K & J COAL CO.
23 JOSEPH F. LEIDEN	JOSEPH F. LEIDEN
24 ST. LAWRENCE CHURCH	ST. LAWRENCE CHURCH
25 VIOLET LEIDEN	VIOLET LEIDEN
26 HOWARD SNYDER JR.	HOWARD SNYDER JR.
27 HARRY A. KRAMER	HARRY A. KRAMER
28 JOHN E. LINK	JOHN E. LINK
29 GARY MIHALOW	GARY MIHALOW
30 CHEST TWP. SUPERVISORS	CHEST TWP. SUPERVISORS
31 ROBERT J. LINK	ROBERT J. LINK
32 ROBERT J. LINK	ROBERT J. LINK
33 BERNARD NIEBAUER	BERNARD NIEBAUER
34 ROBERT J. LINK	ROBERT J. LINK
35 JEROME R. KUTRUFF	JEROME R. KUTRUFF
36 ST. LAWRENCE CHURCH HALL	ST. LAWRENCE CHURCH HALL
37 DAVID M. FEDOR	DAVID M. FEDOR
38 EDWARD D. DONAHUE	ST. LAWRENCE CATHOLIC CHURCH
39 JOSEPH LEIDEN	JOSEPH LEIDEN
40 ROBERT LEIDEN	ROBERT LEIDEN
41 JAMES V. MASCI	CLEARFIELD BIT. COAL CORP.
42 RAY CRONAUER	RAY CRONAUER
43 MICHAEL FEDOR	CLEARFIELD BIT. COAL CORP.
44 MICHAEL FEDOR	CLEARFIELD BIT. COAL CORP.
45 ADRIAN CRONAUER	CLEARFIELD BIT. COAL CORP.
46 JOHN E. LINK	JOSEPH F. LEIDEN
47 K & J COAL CO.	K & J COAL CO.
48 K & J COAL CO.	K & J COAL CO.
49 JOSEPH GABER	JOSEPH GABER
50 K & J COAL CO.	CLEARFIELD BIT. COAL CORP.
51 PAUL NOVELLA	CLEARFIELD BIT. COAL CORP.
52 RUDY J. BECKER	CLEARFIELD BIT. COAL CORP.
53 DENNIS T. MCNULTY	CLEARFIELD BIT. COAL CORP.

LEGEND

- MINE PERMIT BOUNDARY, 5 YEAR MINING AREA & SUBSIDENCE CONTROL PLAN BOUNDARY
- 1990
- 1991
- 1992 — MINING FORECAST YEAR
- 1993
- 1994
- 1000' ADJACENT AREA BOUNDARY
- 50% MINING AREA (1ST EXTRACTION ONLY) LESS THAN 100' COVER
- PROPERTY BOUNDARY
- lk — OUTCROP - LOWER KITTANNING SEAM
- mk — OUTCROP - MIDDLE KITTANNING SEAM
- uk — OUTCROP - UPPER KITTANNING SEAM
- lf — OUTCROP - LOWER FREEPORT SEAM
- uf — OUTCROP - UPPER FREEPORT SEAM
- gl — OUTCROP - GALLITZIN SEAM
- 1900 — STRUCTURE CONTOURS - UPPER KITTANNING SEAM
- EXISTING DEEP MINES - KEY NOS. TO OPERATIONS PLAN - MINE WORKINGS
- EXISTING SURFACE MINES - KEY NOS. TO OPERATIONS PLAN - MINE WORKINGS
- COAL BARRIERS - NO MINING AREAS WITHIN PERMIT BOUNDARY
- DOMESTIC WATER WELL
- GAS WELL
- DRILL HOLE LOCATION
- GROUND & SURFACE WATER INVENTORY POINTS (THOSE MARKED WITH * PROP MONITORING POINT)
- STRUCTURES
  - KEY TO ABBREVIATIONS:
  - D - DWELLING
  - B - BARN
  - O - OUTBUILDING
  - T - TRAILER
  - A - ABANDONED
  - * - DENOTES PRE-1966 STRUCTURE
- SPRING
- VARIANCE AREA
- POWER LINE
- SURFACE SUPPORT AREA TO BE BONDED
- PERIMETER BARRIERS OUTSIDE PERMIT AREA

NOTES:

1. ST. LAWRENCE COAL CO. RESERVES THE RIGHT TO CHANGE MINING PLANS AT ANY TIME DUE TO TECHNOLOGICAL CHANGES, COAL PROPERTY ACQUISITIONS, COAL MARKET FLUCTUATIONS GEOLOGICAL CONDITIONS, ETC.
2. LINE PROJECTIONS SHOW THE GENERAL ORIENTATION OF ENTRIES. THE ACTUAL NUMBER OF ENTRIES MINED MAY BE MORE OR LESS THAN SHOWN BASED ON GROUND CONDITIONS AND COAL PRODUCTION OPTIMIZATION.

COAL OWNERSHIP WITHIN PERMIT AREA

PROP. NO.

1, 9, 10, 22 - ST. LAWRENCE COAL CO/K & J COAL CO. CONTROLLED
8, 41, 43, 44, 52, 49, 53 - CLEARFIELD BIT. COAL CORP. (PENN CENTRAL PROPS. INC.) CONTROLLED
23 - JOE LEIDEN (NOTE: PROP 46 COAL CONTROLLED BY JOE LEIDEN)
42 - CONTESTED - OWNER TO BE DETERMINED
13 - HENRY R. LEIDEN
33 - BERNARD NIEBAUER
37 - DAVID M. FEDOR

NOTE:

3. NO MINING WILL BE CONDUCTED WITHIN 50' OF ANY STRUCTURE WHERE THE DEPTH OF OVERBURDEN IS LESS THAN 100' UNTIL A SITE SPECIFIC VARIANCE IS APPROVED BY THE DEPARTMENT.
4. TRACT NO. 38 INCLUDED IN PERMIT AREA TO PROVIDE ACCESS TO TRACTS 22, 42, RIGHT TO MINE THIS TRACT TO BE NEGOTIATED WITH MINERAL OWNER AT A FUTURE DATE.
5. COAL IN PORTION OF DEEP MINE PERMIT WHICH OVERLAP K & J COAL CO. SMP 11693000 MAY BE SURFACE MINED; IF SO A 100' MINIMUM COAL BARRIER WILL BE LEFT BETWEEN THE FINAL HIGHWALL AND THE LIMITS OF DEEP MINE EXTRACTION AS PER SIGNED AGREEMENT ON FILE WITH D.E.R. BETWEEN ST. LAWRENCE COAL CO. & K & J COAL CO.

EXHIBIT A

K & J MINING CO., INC.
SOUTHERN RESERVE AREA DEEP MINE
SITUATE
CHEST TOWNSHIP CAMBRIA COUNTY
PENNSYLVANIA

SCALE	MINE TECH ENGINEERS	DATE
1" = 400'	ALTOONA PENNSYLVANIA	REV. 6-88