0013

orig mine file
cc DRN
K. May
L. Braxton
UB

KAISER COAL

KAISER COAL CORPORATION
102 SOUTH TEJON STREET, SUITE 800 ■ P.O. BOX 2679
COLORADO SPRINGS, COLORADO 80901-2679
(303) 475-7005 ■ TELEX 289 909

RECEIVED
DEC 05 1985
DIVISION OF OIL
GAS & MINING

December 2, 1985

Ms. Dianne R. Nielson, Director
Division of Oil, Gas and Mining
355 West North Temple,
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203

Mr. Allen D. Klein, Administrator
Western Technical Center
Office of Surface Mining, Region V
Brooks Towers
1020 15th Street
Denver, CO 80202

RE: Withdrawal of B Canyon Area and South Lease Property Coal Mine Permit Applications

As you know, Kaiser Coal Corporation has undergone major changes in its management and philosophy within the last year. Under new directives, Kaiser Coal is confident that it is now on a prudent path toward development of its coal reserves in the Bookcliffs Formation.

In the last four years, two mine permit applications were prepared by Kaiser under past corporation directives and have been on file with the Utah Division of Oil, Gas and Mining (Utah DOGM) and the Federal Office of Surface Mining (OSM). They are the B Canyon Area application, submitted in May 1985 and the South Lease Property application, submitted April 12, 1982.

Partially as a result of Kaiser's changes in management and philosophy, these applications are no longer viable. Therefore, Kaiser Coal Corporation is formally requesting withdrawal of these applications from further agency review.

Kaiser presented a new permitting strategy for development of additional Sunnyside coal reserves to the Utah DOGM on October 8, 1985 and to OSM on November 5, 1985. From these meetings and some follow-up discussions, Kaiser feels a consensus was reached with Utah DOGM and OSM on a conceptual permitting strategy, summarized as follows:

1. Kaiser Coal will receive final agency approvals for the Sunnyside Mines Permanent Program Permit in early January 1986.

2. Kaiser Coal will receive final agency approvals for the Sunnyside Mines Permit Revision in early January, 1986. This approval will ensure continued operation of the longwall system at Sunnyside and allow approximately 14 to 18 months of development mining (one panel) in the B Canyon area.

3. Kaiser Coal will withdraw the B Canyon Area permit application package (PAP), submitted in May 1985. This action is effective with this letter.

4. Kaiser Coal will prepare a PAP to encompass both the B and C Canyon areas. The B/C Canyon PAP will be a comprehensive document which will address the current Sunnyside surface facilities that will be affected by mining in B/C Canyons. The B/C Canyon PAP is scheduled for submittal in June 1986 and approvals would be needed by June 1987. As part of this effort Kaiser Coal will continue to uphold earlier commitments, including the following:

   a. The B/C Canyon PAP submitted by Kaiser Coal will be a comprehensive stand-alone document. There will be no cross referencing between the B/C Canyon PAP and the Sunnyside Mines permit.

   b. Kaiser Coal will hold frequent meetings with the Utah DOGM staff to discuss all components of the permit application. This should result in a permit document more acceptable to the Division than any document which would be written without consultation with Division staff.

   c. Kaiser Coal will make no more short term requests for mining in the B/C Canyon areas if the Utah DOGM staff will work with Kaiser Coal personnel to establish a schedule for completion of the B/C Canyon PAP and work to meet that schedule.

   d. Kaiser Coal will meet with Utah DOGM staff and OSM staff personnel to agree on a workable timetable for the B/C Canyon PAP.

e. Kaiser Coal is committed to improve its record of on-the-ground compliance at the Sunnyside Mines.

5. Kaiser Coal will withdraw the South Lease Property PAP, submitted in April 1982. This action is effective with this letter.

6. Kaiser Coal will prepare a PAP for the Horse Canyon Mine which will be submitted in 1986. A specific date will be presented once plans are formulated.

Please let me know if your understanding of the items I have outlined differs from ours. If we do not hear from you, we will assume that you concur with this letter and will proceed accordingly.

We will arrange to have someone pick up the withdrawn applications from your respective offices within the next few weeks.

Please contact me if there are any questions.

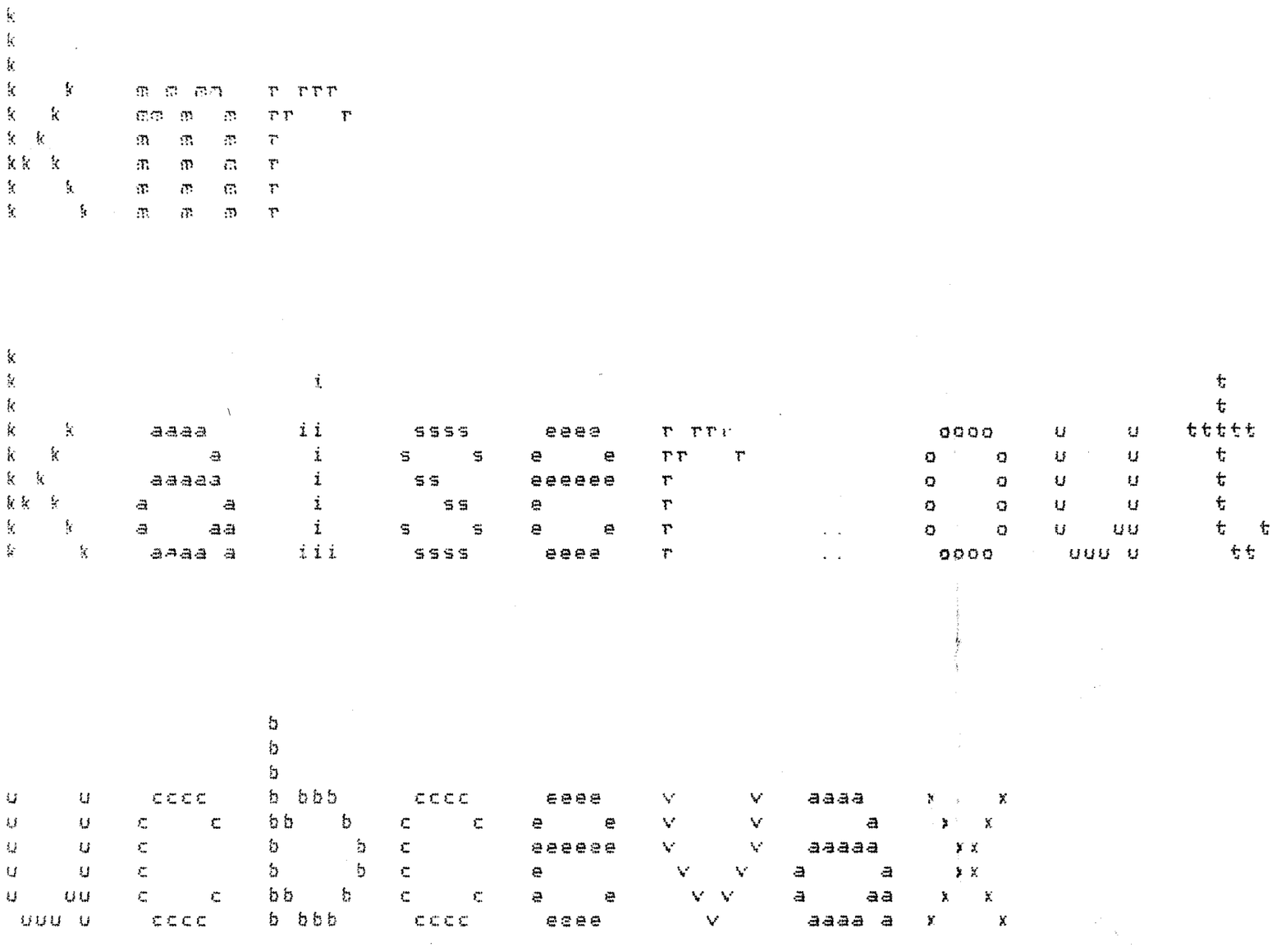
Sincerely,

Martin P. Holmes

Martin P. Holmes
Manager Permits and
Regulatory Compliance

MPH/klk
cc: Charles McNeil
Clyde Borrell
Charles McGlothlin
Jeff Desautels
Tom Hopkins
Allen Czarnowsky

Kaiser Steel /Sunny Side Mine
East Slurry Cell
Downstream Slope 3:1 & 2.75:1
F.S. = 2.2



Job: kaiser.out
Date: Wed Dec 4 15:42:43 1985

1

```
*****************************************************************
*                                                               *
*       this computer program was developed primarily for research  *
*                                                               *
*   purposes. the program should not be applied for design analyses  *
*                                                               *
*   unless extreme caution is exercised in evaluating the results   *
*                                                               *
*   and the results of independent analyses are available to sup-   *
*                                                               *
*   port any design conclusions. the user is assumed to be fully    *
*                                                               *
*   aware of all algorithms and analytical procedures employed in   *
*                                                               *
*   the program and is responsible for any results or conclusions   *
*                                                               *
*   drawn from its use. neither the university of texas nor stephen  *
*                                                               *
*   g. wright make or assume liability for any warranties, expres-  *
*                                                               *
*   sed or implied, concerning the accuracy, reliability, useful-   *
*                                                               *
*   ness or adaptability of this computer program.                  *
*                                                               *
*****************************************************************
```

1

program sstab1 - coded by s. g. wright

coded november, 1970 - revised 6/ 4/74

number of soil profiles analyzed = 1

1 kaiser steel east slurry cell cross-section

p r o f i l e l i n e n o. 1 material type 3

coordinates *****	x	y
	219.00	149.00
	275.00	147.00
	363.00	115.00
	446.00	87.00
	490.00	84.00

p r o f i l e l i n e n o. 2 material type 2

coordinates ***** x y

100.00	100.00
186.00	100.00
261.00	99.00
363.00	87.00
478.00	80.00
522.00	77.00
700.00	77.00

p r o f i l e l i n e n o 3 material type 1

coordinates *****

x	y
186.00	100.00
211.00	139.00
219.00	149.00
275.00	143.00
363.00	111.00
446.00	83.00
490.00	84.00
522.00	77.00

1 kaiser steel east slurry cell cross-section

m a t e r i a l d a t a - t y p e 1

cohesion (undrained strength) - isotropic

	c	c/z	ref. ht.
0.	20.00	0.	0

phi - - - - - - - - - - - - - - 35.00 degrees

unit weight - - - - - - - - - - 105.00 pcf

pore pressure - - - - - - - - - 0. psf

m a t e r i a l d a t a - t y p e 2

cohesion (undrained strength) - isotropic

	c	c/z	ref. ht.
0	0.	0.	0.

phi - - - - - - - - - - - - - - 36.00 degrees

unit weight - - - - - - - - - - 125.00 pcf

pore pressures determined from piezometric line

```
     unit weight of water  - - - -   62.40 pcf

         m a t e r i a l   d a t a   -   t y p e  3

     cohesion (undrained strength)   -   isotropic

                              c        c/z    ref. ht.

           0.              100.00    0.          0.

     phi - - - - - - - - - - - - - -   35.00 degrees

     unit weight - - - - - - - - - -  105.00 pcf

     pore pressure - - - - - - - - -    0    psf
1    kaiser steel east slurry cell cross-section

   piezometric elevation data - npiez =  4

                x          y
     1       100.00     100.00
     2       186.00     100.00
     3       261.00      97.00
     4       363.00      83.00
     5       478.00      70.00
     6       522.00      65.00
     7       700.00      65.00
1


                  1 slope(s) analyzed for soil profile titled -

    kaiser steel east slurry cell cross-section


    keep1 =  0     keep2 =  0     keep3 =  0
1  slope designation -

    'downstream slope stability analysis'

         slope points        x              y


                           219.00         149.00

                           275.00         147.00
```

363.00	115.00
416.00	87.00
490.00	84.00
522.00	77.00
700.00	77.00

1 shear surface(s) or search(es) considered
'downstream slope stability analysis'

*** initial search information ***

x coordinate for center of first grid - - - - - - - - - - -	363.00 ft
y coordinate for center of first grid - - - - - - - - - - -	325.00 ft
all circles tangent to a rockline at elevation, y - - - -	110.00 ft
overall critical circle located	
no circle allowed to pass below elevation, y - - - - - -	90.00 ft
required accuracy in critical center location - - - - - -	5.00 ft
time limit -	120.00 secs.
constant subtended angle specified as - - - - - - - - - - -	5.00 degrees
assumed depth of tension crack - - - - - - - - - - - - - -	0. ft
assumed depth of water in tension crack - - - - - - - - - -	0. ft
unit weight of water - - - - - - - - - - - - - - - - - - -	62.40 pcf
initial assumed value for factor of safety - - - - - - - -	1.50
initial assumed value for side force inclination - - - -	10.00 degrees
iteration limit -	20
allowed force inbalance specified - - - - - - - - - - - - -	100.00 lbs.
allowed moment inbalance specified - - - - - - - - - - - -	100.00 ft-lbs.

1

'downstream slope stability analysis'

for rockline elevation = 110. feet
****

```
*** c i r c l e   d a t a **** soln. data   **** m e s s a g e s

  xc        yc      radius    f     theta    i

**********

263.00   225.00   115.00                    circle does not intersect slope
363.00   225.00   115.00  2.260  17.95    4
463.00   225.00   115.00                    circle does not intersect slope
263.00   325.00   215.00                    circle does not intersect slope
363.00   325.00   215.00  2.552  15.26    4
463.00   325.00   215.00                    circle does not intersect slope
263.00   425.00   315.00                    circle does not intersect slope
363.00   425.00   315.00                    circle does not intersect slope
463.00   425.00   315.00                    circle does not intersect slope
                                            ***** specified starting point
                                                  for grid is not optimum
                                                  - reset by program

**********

263.00   125.00    15.00                    circle does not intersect slope

iteration  3 slices with low denominator - 20,21,22,

iteration  4 slices with low denominator - 20,21,

iteration  5 slices with low denominator - 20,

iteration  6 slices with low denominator - 20,

iteration  7 slices with low denominator - 20,
363.00   125.00    15.00                    solution did not converge
463.00   125.00    15.00                    circle does not intersect slope
**********

338.00   200.00    90.00  2.472  16.77    3
363.00   200.00    90.00  2.318  17.60    3
388.00   200.00    90.00  4.882  16.46    5
338.00   225.00   115.00  2.558  15.67    3
388.00   225.00   115.00  3.457  17.19    4
338.00   250.00   140.00  2.690  14.73    4
363.00   250.00   140.00  2.243  17.87    2
388.00   250.00   140.00  2.649  16.62    3
**********

338.00   275.00   165.00  2.832  14.00    4
363.00   275.00   165.00  2.321  16.98    3
388.00   275.00   165.00  2.378  17.22    3
**********

348.00   235.00   125.00  2.400  16.65    3
363.00   235.00   125.00  2.241  18.07    2
378.00   235.00   125.00  2.334  17.38    3
348.00   250.00   140.00  2.467  16.00    3
378.00   250.00   140.00  2.280  17.67    3
```

```
     348.00   265.00   155.00  2.542  15.47   3
1
     'downstream slope stability analysis'

     *** c i r c l e   d a t a **** soln. data   **** m e s s a g e s

       xc        yc      radius     f     theta   i

     363.00   265.00   155.00  2.289  17.33   3
     378.00   265.00   155.00  2.241  17.89   2
     **********

     348.00   220.00   110.00  2.350  17.30   3
     363.00   220.00   110.00  2.269  17.89   2
     378.00   220.00   110.00  2.414  17.00   3
     **********

     358.00   230.00   120.00  2.259  18.01   2
     363.00   230.00   120.00  2.250  18.01   2
     368.00   230.00   120.00  2.259  17.92   2
     358.00   235.00   125.00  2.262  17.88   2
     368.00   235.00   125.00  2.218  17.99   2
     358.00   240.00   130.00  2.271  17.70   2
     363.00   240.00   130.00  2.234  18.09   2
     368.00   240.00   130.00  2.239  18.05   2
     **********

     358.00   245.00   135.00  2.223  17.53   3
     363.00   245.00   135.00  2.235  18.03   2
     368.00   245.00   135.00  2.230  18.11   2
     **********

     373.00   240.00   130.00  2.260  17.89   2
     373.00   245.00   135.00  2.249  17.97   2
     368.00   250.00   140.00  2.270  18.16   2
     373.00   250.00   140.00  2.239  18.03   2
     **********

     363.00   255.00   145.00  2.254  17.70   2
     368.00   255.00   145.00  2.217  18.15   2
     373.00   255.00   145.00  2.229  18.09   2
     **********

     363.00   260.00   150.00  2.268  17.51   3
     368.00   260.00   150.00  2.221  18.06   2
     373.00   260.00   150.00  2.219  18.16   2
     **********

1
     'downstream slope stability analysis'

     for fixed radius =     145.00 feet
     ***********************************

     *** c i r c l e   d a t a **** soln. data   **** m e s s a g e s
```

```
  xc        yc      radius    f     theta    i

**********

268.00   155.00   145.00                    circle does not intersect slope

iteration  3 slices with low denominator - 31,32,33,34,

iteration  4 slices with low denominator - 31,32,33,34,

iteration  5 slices with low denominator - 31,32,33,34,

iteration  6 slices with low denominator - 31,32,33,34,

iteration  7 slices with low denominator - 30,31,32,
368.00   155.00   145.00                    solution did not converge

iteration  3 slices with low denominator - 30,31,32,33,

iteration  4 slices with low denominator - 30,31,32,33,

iteration  5 slices with low denominator - 30,31,32,33,

iteration  6 slices with low denominator - 30,31,32,33,

iteration  7 slices with low denominator - 30,31,32,33,
468.00   155.00   145.00                    solution did not converge
268.00   255.00   145.00                    circle does not intersect slope
468.00   255.00   145.00                    circle does not intersect slope
268.00   355.00   145.00                    circle does not intersect slope
368.00   355.00   145.00                    circle does not intersect slope
468.00   355.00   145.00                    circle does not intersect slope
**********

343.00   230.00   145.00  3.159  13.26   4
368.00   230.00   145.00  2.688  15.58   4
393.00   230.00   145.00  2.423  17.40   3
343.00   255.00   145.00  2.598  15.20   4
393.00   255.00   145.00  3.400  17.40   4
343.00   280.00   145.00                    circle does not intersect slope
368.00   280.00   145.00                    circle does not intersect slope
393.00   280.00   145.00                    circle does not intersect slope
**********

353.00   240.00   145.00  2.694  14.95   4
368.00   240.00   145.00  2.453  16.51   3
383.00   240.00   145.00  2.313  17.78   3
353.00   255.00   145.00  2.397  16.48   3
383.00   255.00   145.00  2.348  17.32   3
353.00   270.00   145.00  3.578  17.52   4
368.00   270.00   145.00                    circle does not intersect slope
383.00   270.00   145.00                    circle does not intersect slope
**********

363.00   250.00   145.00  2.333  17.13   3
368.00   250.00   145.00  2.275  17.65   3
```

```
     373.00   250.00   145.00  2.236  18.08   2
     363.00   255.00   145.00  2.254  17.70   2
     373.00   255.00   145.00  2.229  18.09   2
     363.00   260.00   145.00  2.235  17.93   2
     368.00   260.00   145.00  2.301  17.61   3
     373.00   260.00   145.00  2.463  17.04   4
     **********

1

     'downstream slope stability analysis'

     ***** critical circle information *****

     x coordinate of center - - - - - - -    368.00
     y coordinate of center - - - - - - -    255.00
     radius - - - - - - - - - - - - - - -    145.00
     factor of safety - - - - - - - - - -      2.217
     side force inclination (degrees) - -     18.15
     seconds required to locate circle  -      0.
1
     iteration information


 iter    f          theta          delf     delt   force inbal  moment inbal
              (radians degrees)           (radian)    (lbs.)      (ft.lbs.)

   1  2.2173  0.31686    18.155
                                  0.0000  0.00000          0.          0.
1          s o l u t i o n    i n f o r m a t i o n

             factor of safety = 2.217 (  1 iterations)

             side force inclination = 18.15 degrees

 slice   xavg    normal    shear   *  l i n e  o f  t h r u s t  * e-force
  no.            stress    stress  ***********************************  (lbs)
                 (psf)     (psf)   *                                 *
                                   *      x      yt(tot) fraction   *
                                   *                                 *
   0                               *    271.1     147.1   0.        *      0.
   1    273.0      101.       77.  *    275.0     144.8   0.3242    *     40.
   2    275.8      251.      124.  *    276.6     143.1   0.1851    *    175
   3    281.7      450.      151   *    286.8     137.2   0.2993    *   2029.
   4    292.2      745.      244.  *    297.6     131.6   0.3194    *   4328.
   5    303.2      974.      316.  *    308.9     126.6   0.3291    *   6253.
   6    314.8     1119.      362.  *    320.7     122.1   0.3370    *   7190.
   7    326.7     1163.      376.  *    332.8     118.4   0.3471    *   6820.
   8    339.0     1090.      353.  *    345.2     115.3   0.3649    *   5205.
   9    351.5      880       287.  *    357.7     113.0   0.4024    *   2871.
  10    360.4      650.      214.  *    363.0     112.2   0.4329    *   1925.
  11    364.5      516.      172.  *    365.9     111.8   0.4444    *   1460.
  12    367.0      442.      185   *    368.0     111.6   0.4872    *   1082.
  13    372.5      217.      114.  *    377.0      33.0   0.        *     -0.
```

```
search completed          f1 =    2.217311          theta1 =   18.154659
```