BC Geological Survey
COAFILE Report
1055

Page Extracted from CAR 988 - Use for coordinate transformation from minesite grid to UTM

3.2.1 Coordinate transformation from minesite grid to UTM (NAD83 Zone 10)

Minesite grid

Origin east 14652.254 Origin north 14950.671

UTM grid

Transformed east 534954.317 Transformed north 6146860.561

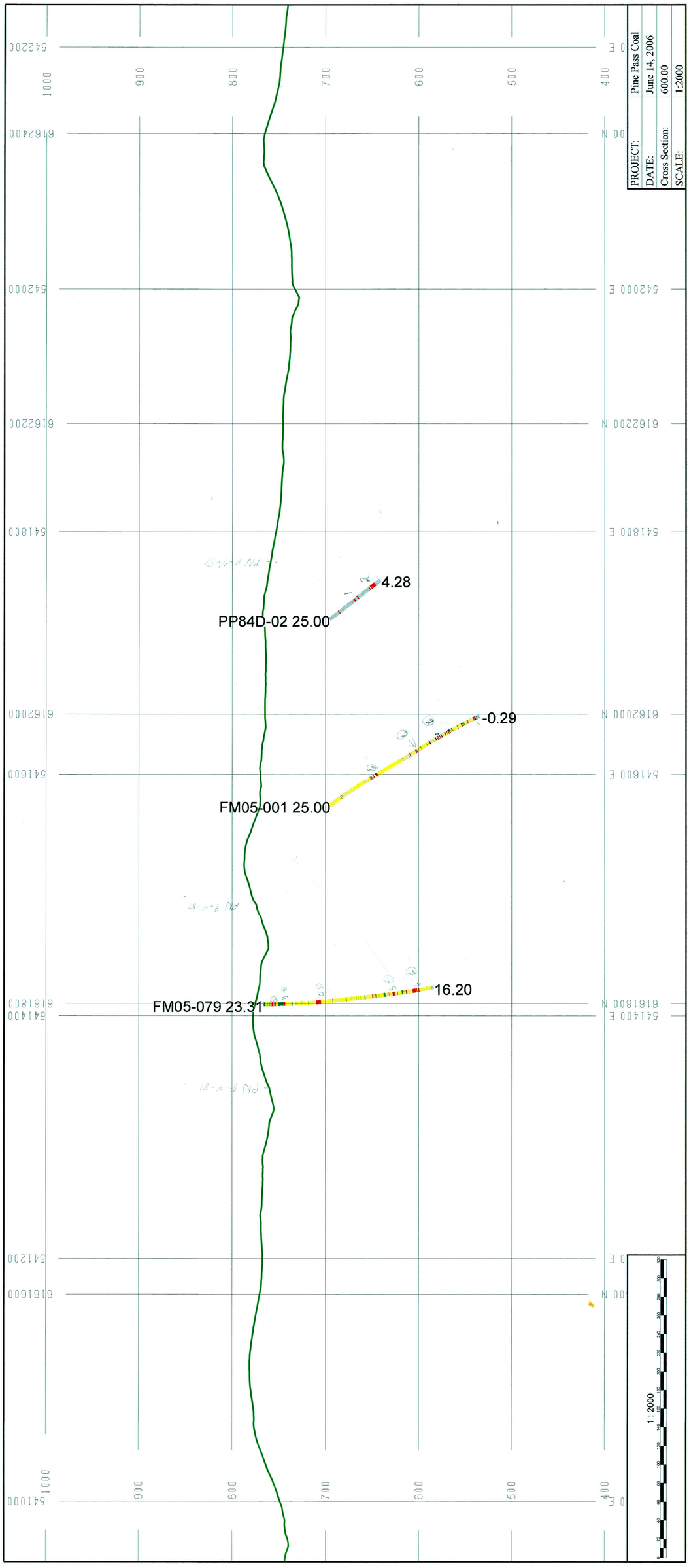
Rotation -46º 55' 52.918088"

Scale factor 0.99946605 Elevation adjustment -2.623 metres

Table 3-1: Statistical summary of historic and current drilling

Year in which drilled	Core drilling		Rotary drilling		All boreholes	
	Total holes	Total metres	Total holes	Total metres	Total holes	Total metres
historic drilling						
1980	3	854.70	0	nil	3	854.70
1981	43	11,240.30	0	nil	43	11,240.30
1994	3	107.91	54	2,694.29	57	2,802.20
1996	55	2,041.76	145	4,781.04	200	6,822.80
1997	73	2,052.30	67	3,119.88	140	5,172.18
1999	16	299.95	24	627.83	40	927.78
2001	5	708.80	15	576.20	20	1,285.00
2005	0	nil	28	1,975.40	28	1,975.40
totals	198 core	17,305.72	333 rotary	13,774.64	531 overall	31,080.36
current drilling						
2007	3	201.16	74	8,079.65	77	8,280.81
2008	3	475.30	50	5,887.68	53	6,362.98
2009	13	380.00	25	1,983.15	38	2,363.15
2010	5	493.05	1	13.00	6	506.05
2011	0		7	1,024.35	6	1,024.35
2013	14	1,083.83	0		14	1,083.83
totals	38 core	2,633.34	157 rotary	16,987.33	195 overall	19,621.17
all years	*236 core*	*19,939.06*	*490 rotary*	*30,762.47*	*726 overall*	*50,701.53*

FM05-001 12.48
-10.47
-25.00
PP84D-02 -3.23
FM05-006C 14.65
-0.13
-25.00
-8.63
PP84D-01 12.59
-20.12
PP89-01 9.17
-9.17
PN-E-2-81
PN-E-14-81
PN-E-1-81
SEAM A
" 4
" 6
FW
4 faults
1 : 2000
PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 550.00
SCALE: 1:2000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DATE: June 14, 2006
Cross Section: 600.00
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4.28
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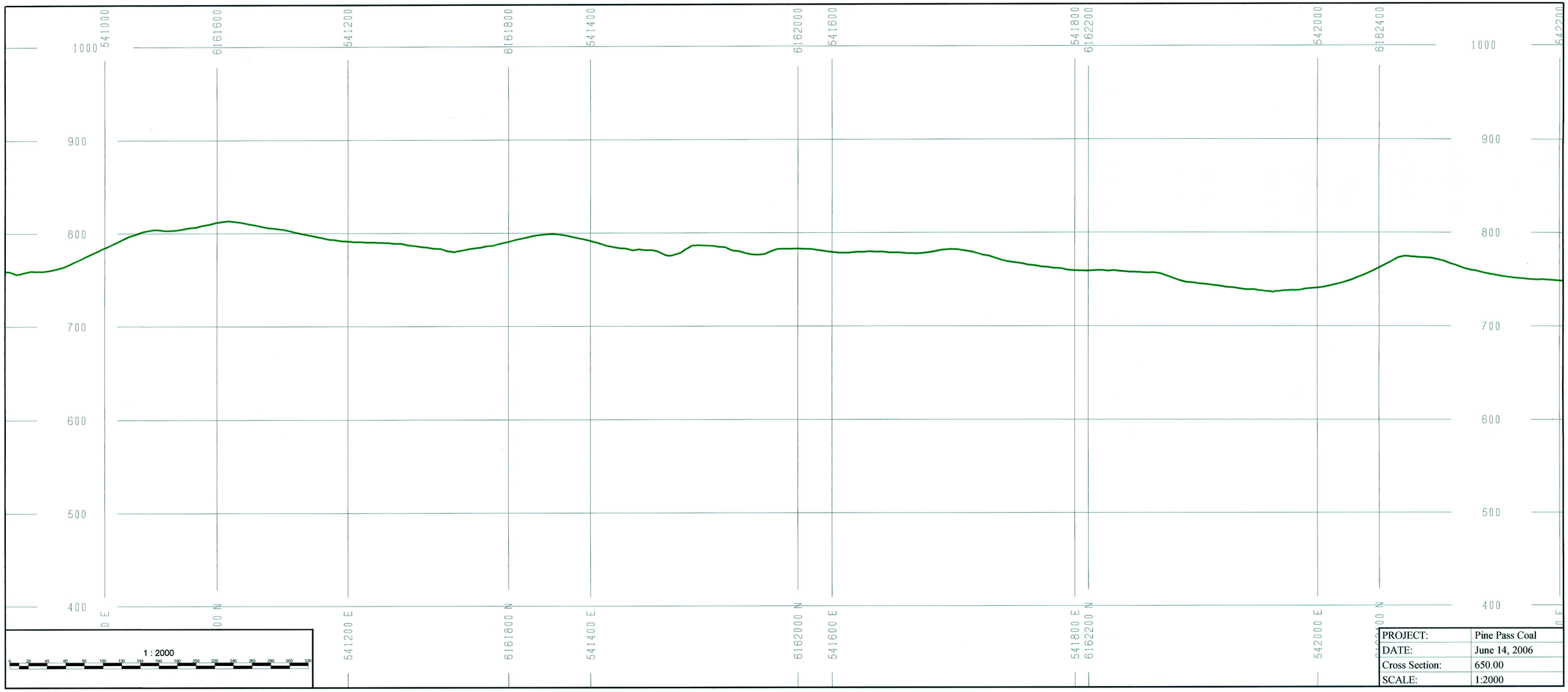
-0.29
FM05-001 25.00
16.20
FM05-079 23.31
1 : 2000


541000
6161600
541200
6161800
541400
6162000
541600
541800
6162200
542000
6162400
542200
1000
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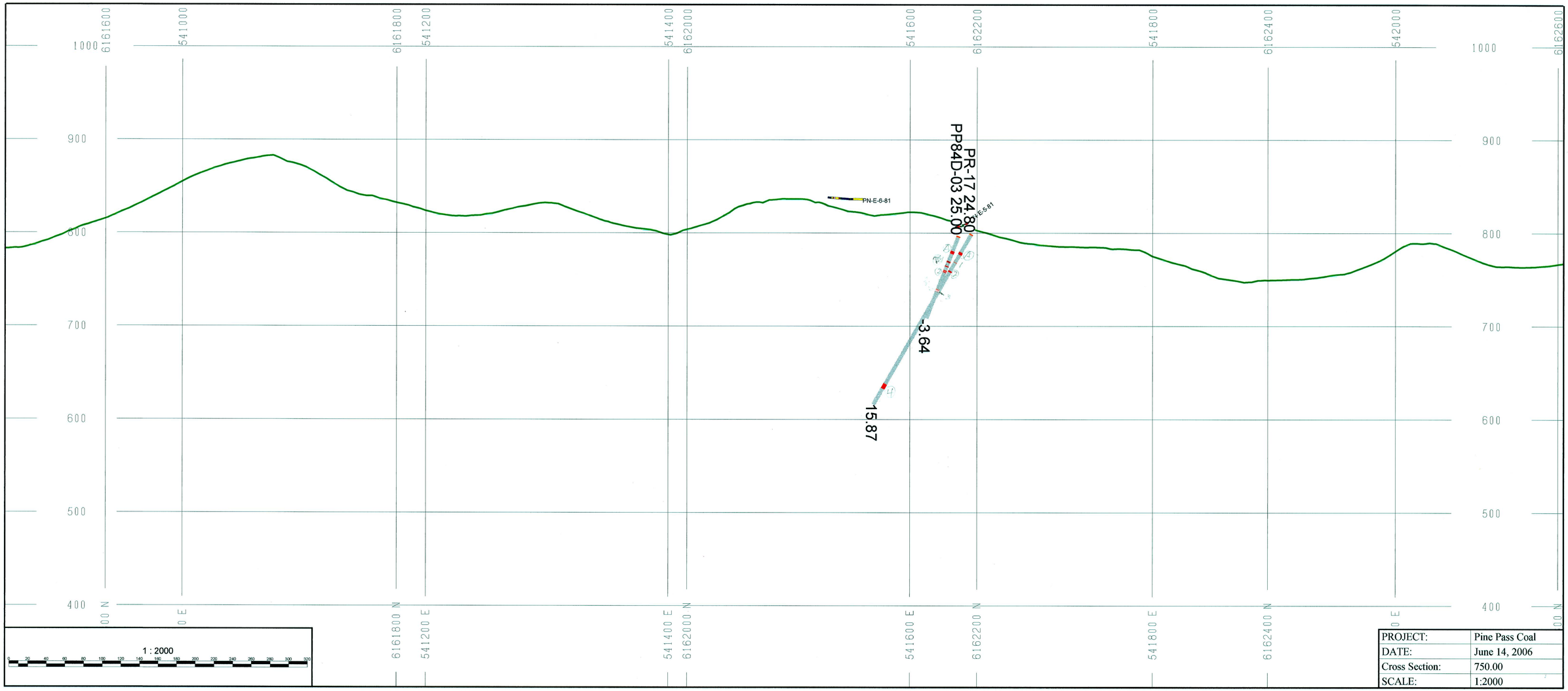
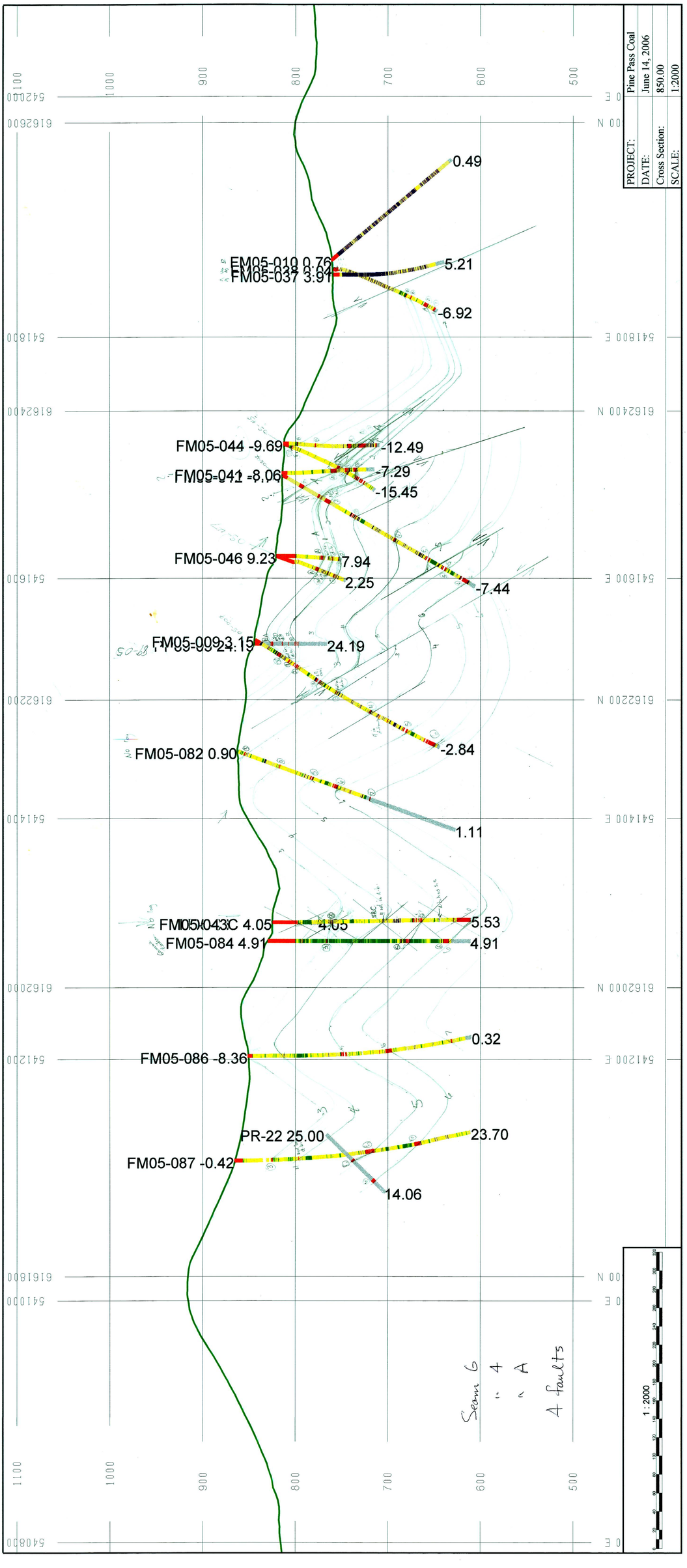
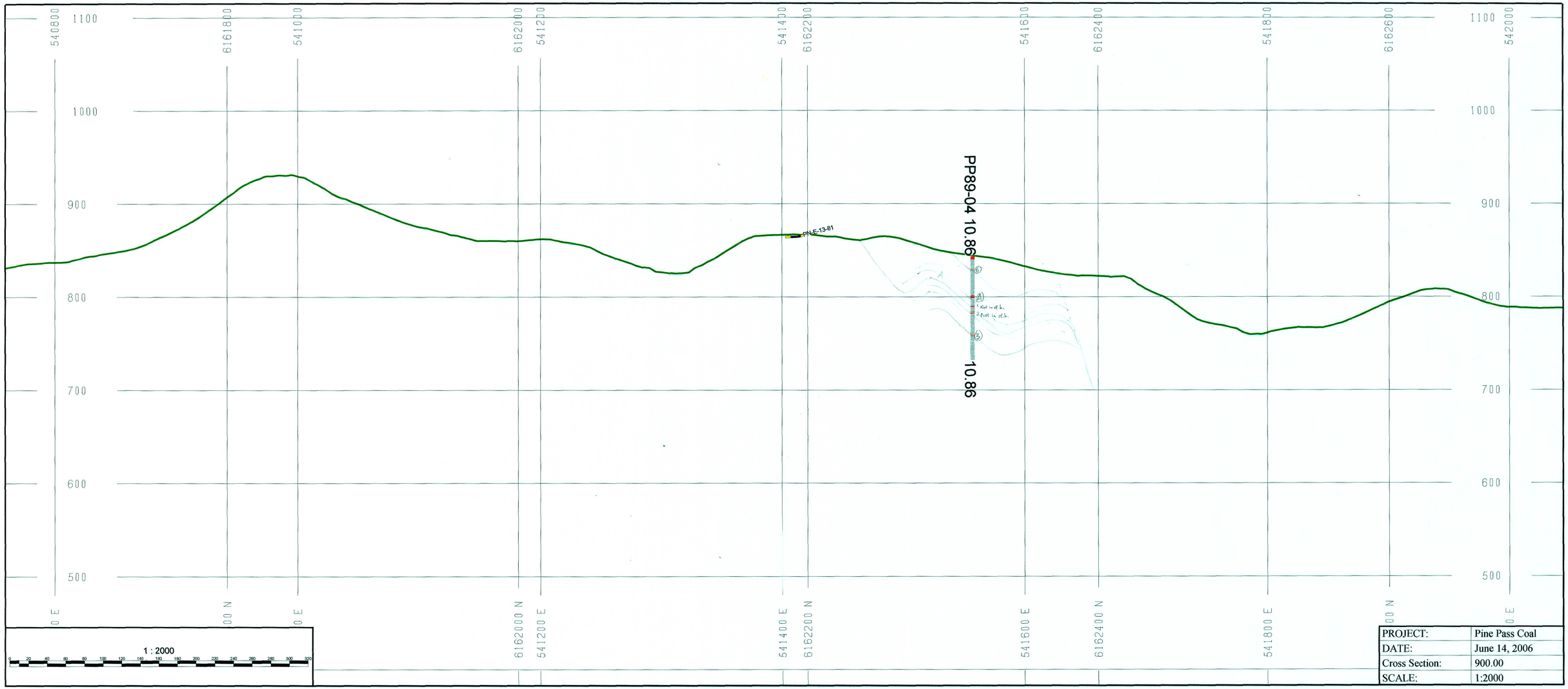
800
700
600
500
400
0 E
00 N
541200 E
6161800 N
541400 E
6162000 N
541600 E
541800 E
6162200 N
542000 E
1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320
PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 650.00
SCALE: 1:2000

1000
900
800
700
600
500
400
541000 E
6161600 N
541200 E
6161800 N
541400 E
6162000 N
541600 E
6162200 N
541800 E
6162400 N
542000 E
FM05-085 8.41
9.02
FM05-078 24.72
4.03
PP89-03 16.43
16.43
PP84D-03 -23.09
-25.00
PP89-06 14.91
14.91
FM05-083 2.83
-16.92
1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320
PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 700.00
SCALE: 1:2000


1000
900
800
700
600
500
400
6161600
541000
6161800
541200
541400
6162000
541600
6162200
541800
6162400
542000
6162600
PN-E-6-81
PR-17 24.80
PP84D-03 25.00
PE-5-81
-3.64
15.87
1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320
6161800 N
541200 E
541400 E
6162000 N
541600 E
6162200 N
541800 E
6162400 N
PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 750.00
SCALE: 1:2000

PP89-09 23.64
PR-21 -12.25
-25.00
23.64
9.77
PNF-5-81
1 : 2000
PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 800.00
SCALE: 1:2000


PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 850.00
SCALE: 1:2000
0.49
FM05-010 0.76
FM05-038 0.64
FM05-037 3.91
5.21
-6.92
FM05-044 -9.69
-12.49
FM05-041 -8.06
-7.29
-15.45
FM05-046 9.23
7.94
2.25
-7.44
FM05-009 3.15
24.19
-2.84
FM05-082 0.90
1.11
FM05-043C 4.05
4.05
5.53
FM05-084 4.91
4.91
0.32
FM05-086 -8.36
PR-22 25.00
23.70
FM05-087 -0.42
14.06
Seam 6
4
A
4 faults
1:2000



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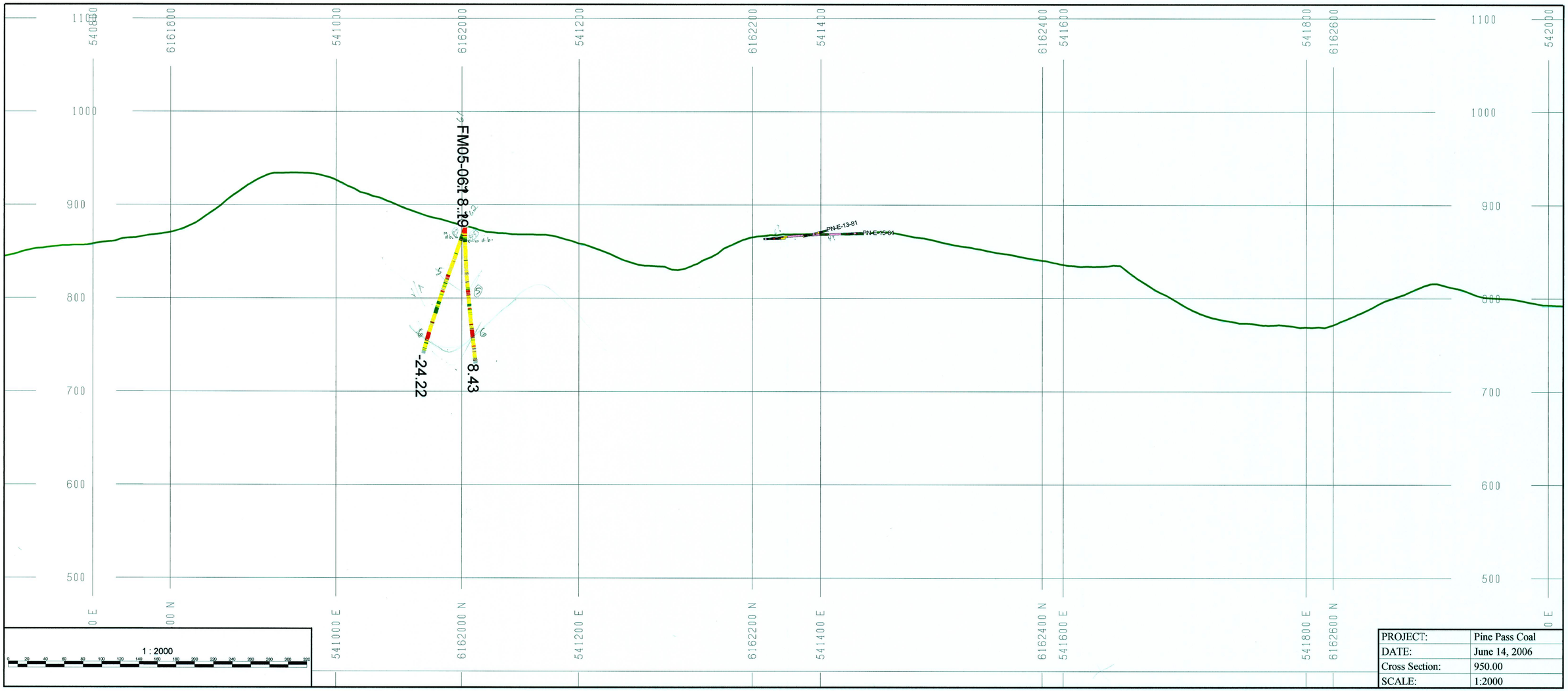
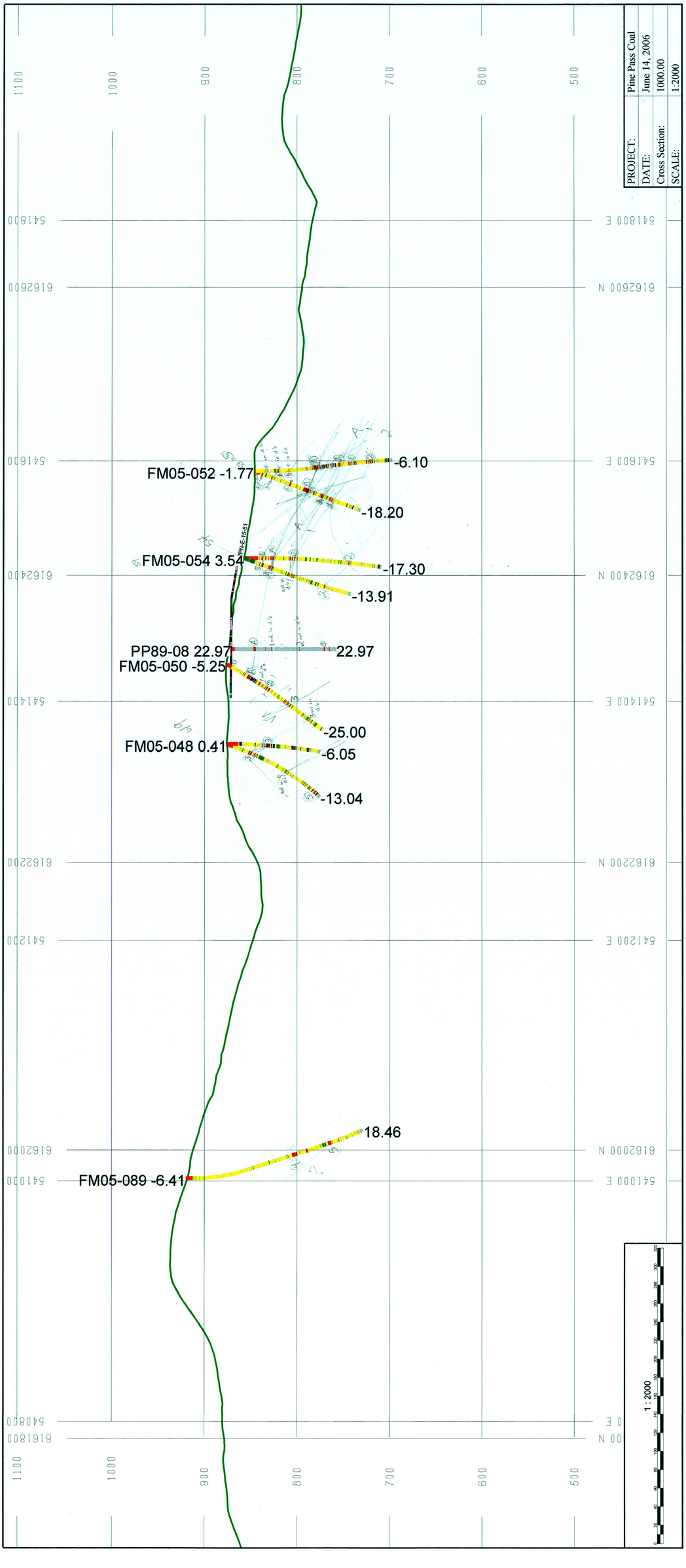
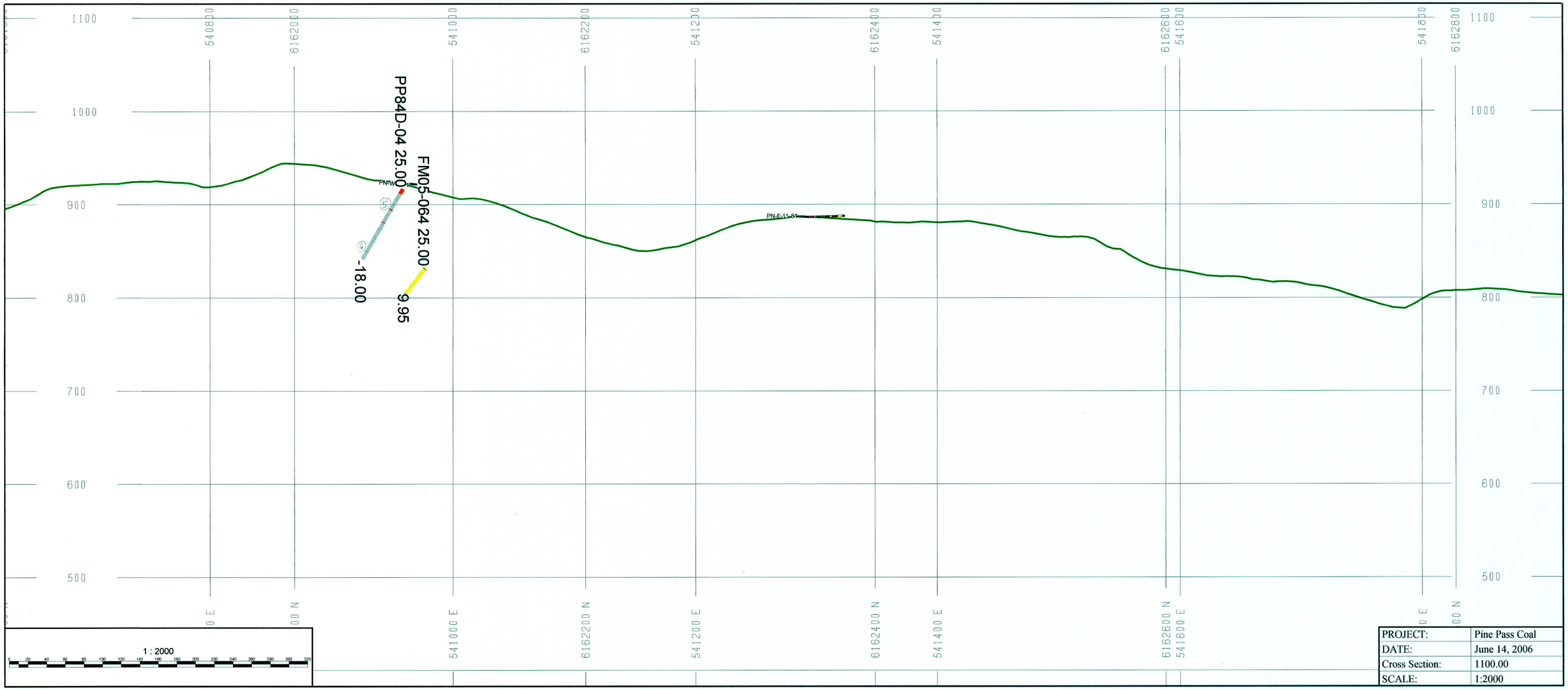
DATE:	June 14, 2006
Cross Section:	900.00
SCALE:	1:2000

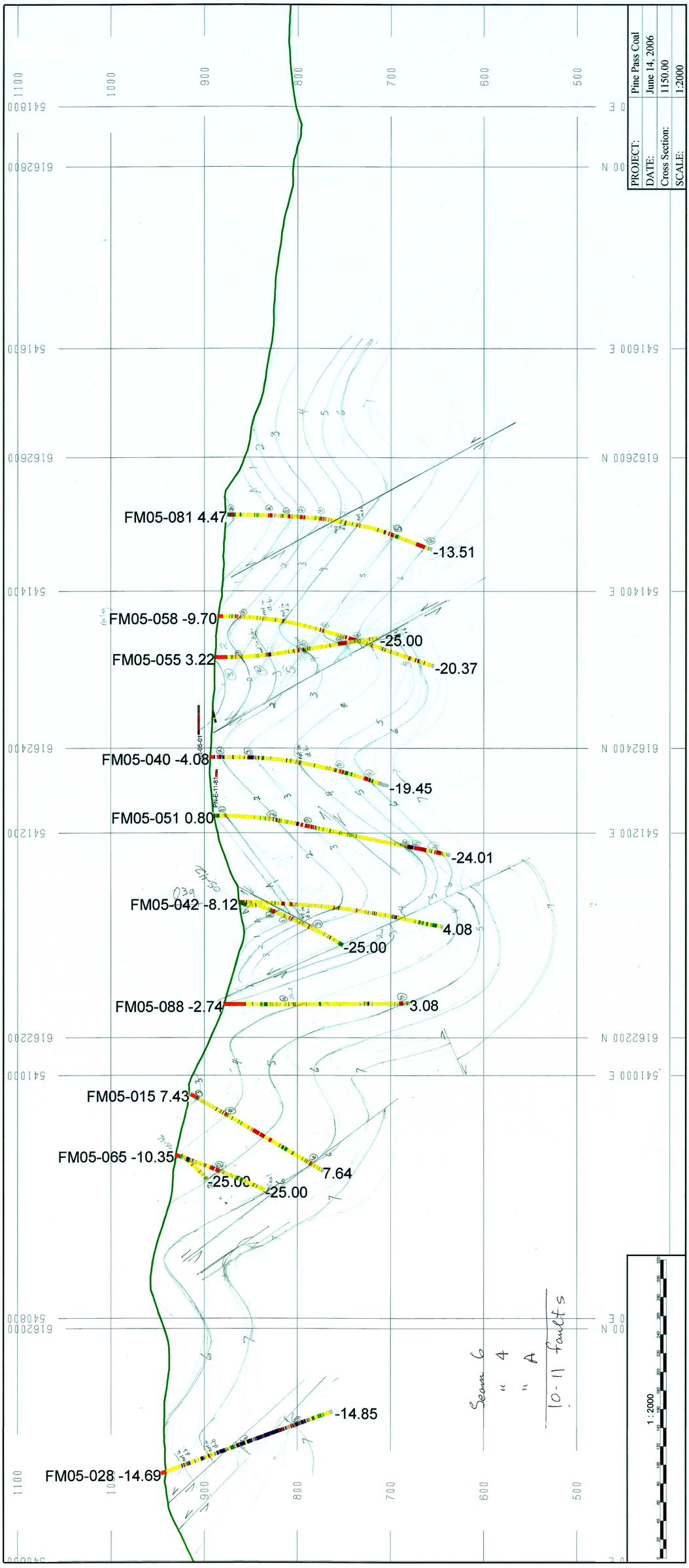

FM05-061
8.19
-24.22
8.43
PN-E-13-81
PN-E-15-81
1100
1000
900
800
700
600
500
540800 E
6161800 N
541000 E
6162000 N
541200 E
6162200 N
541400 E
6162400 N
541600 E
541800 E
6162600 N
542000 E
1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320
PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 950.00
SCALE: 1:2000

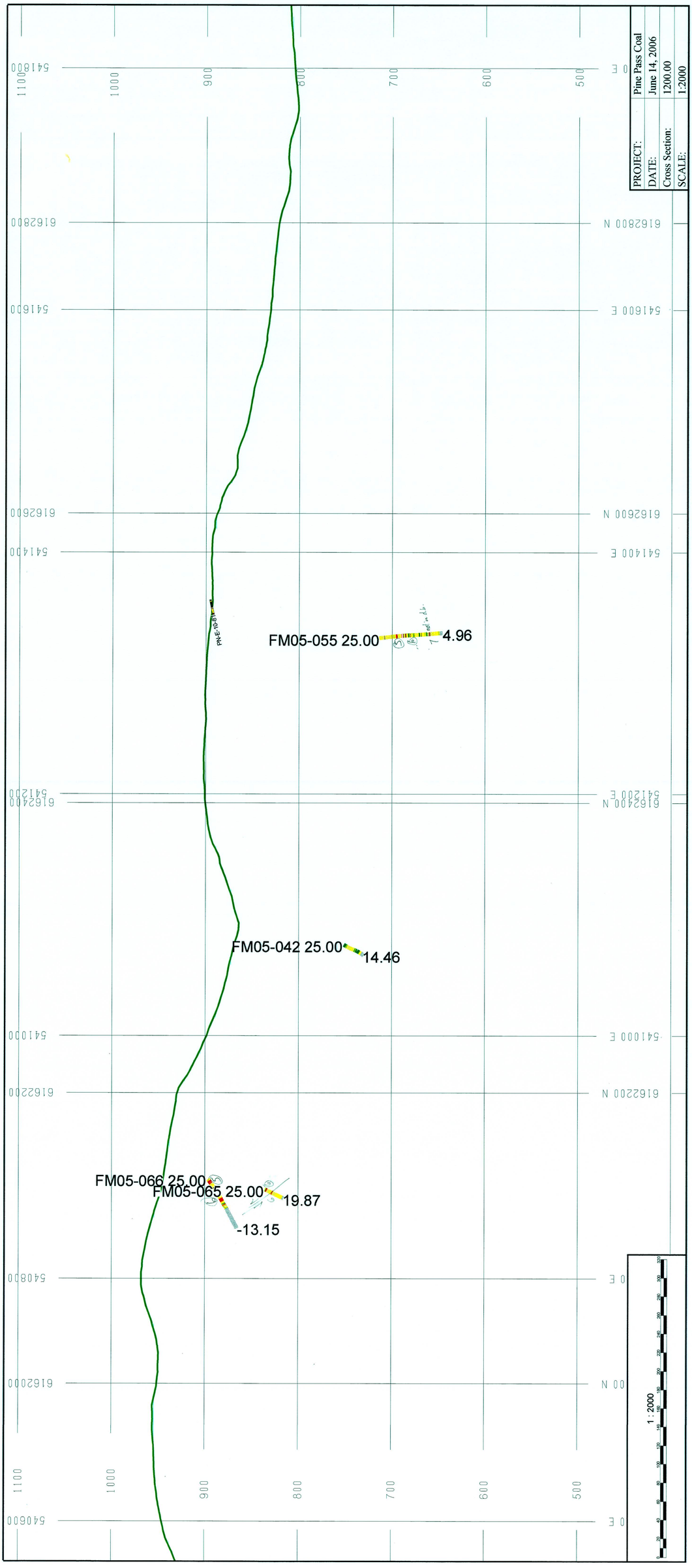

PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 1000.00
SCALE: 1:2000
1100
1000
900
800
700
600
500
5418000 E
6162600 N
5416000 E
6162400 N
5414000 E
6162200 N
5412000 E
6162000 N
5410000 E
5408000 E
6161800 N
FM05-052 -1.77
-6.10
-18.20
FM05-054 3.54
-17.30
-13.91
PP89-08 22.97
22.97
FM05-050 -5.25
-25.00
FM05-048 0.41
-6.05
-13.04
18.46
FM05-089 -6.41
1 : 2000

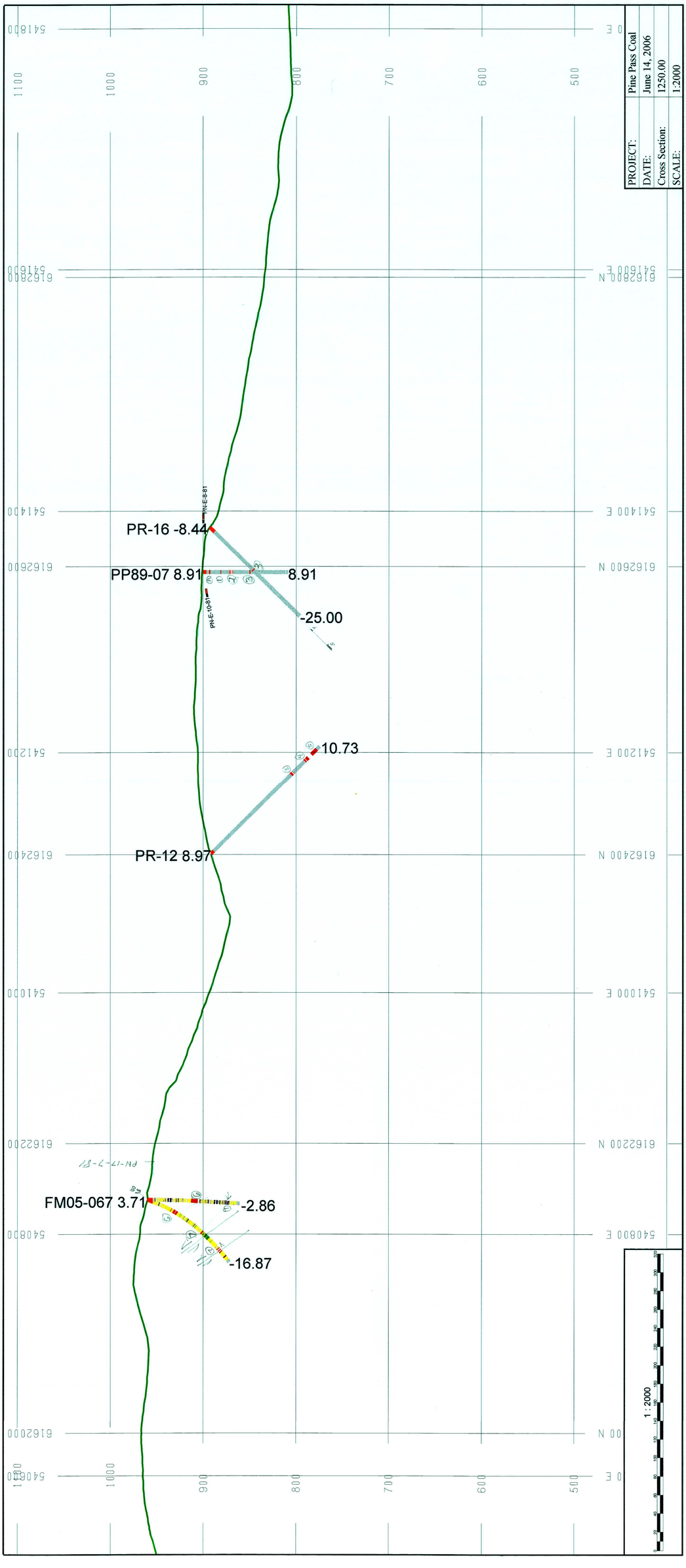
PP84D-04 -24.06/-25.00
FM05-063 -8.90
-25.00
-20.93
FM05-050 25.00
20.81
1100
1000
900
800
700
600
500
6161800
540800
6162000
541000
6162200
541200
541400
6162400
541600
6162600
541800
6162800
1 : 2000
PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 1050.00
SCALE: 1:2000

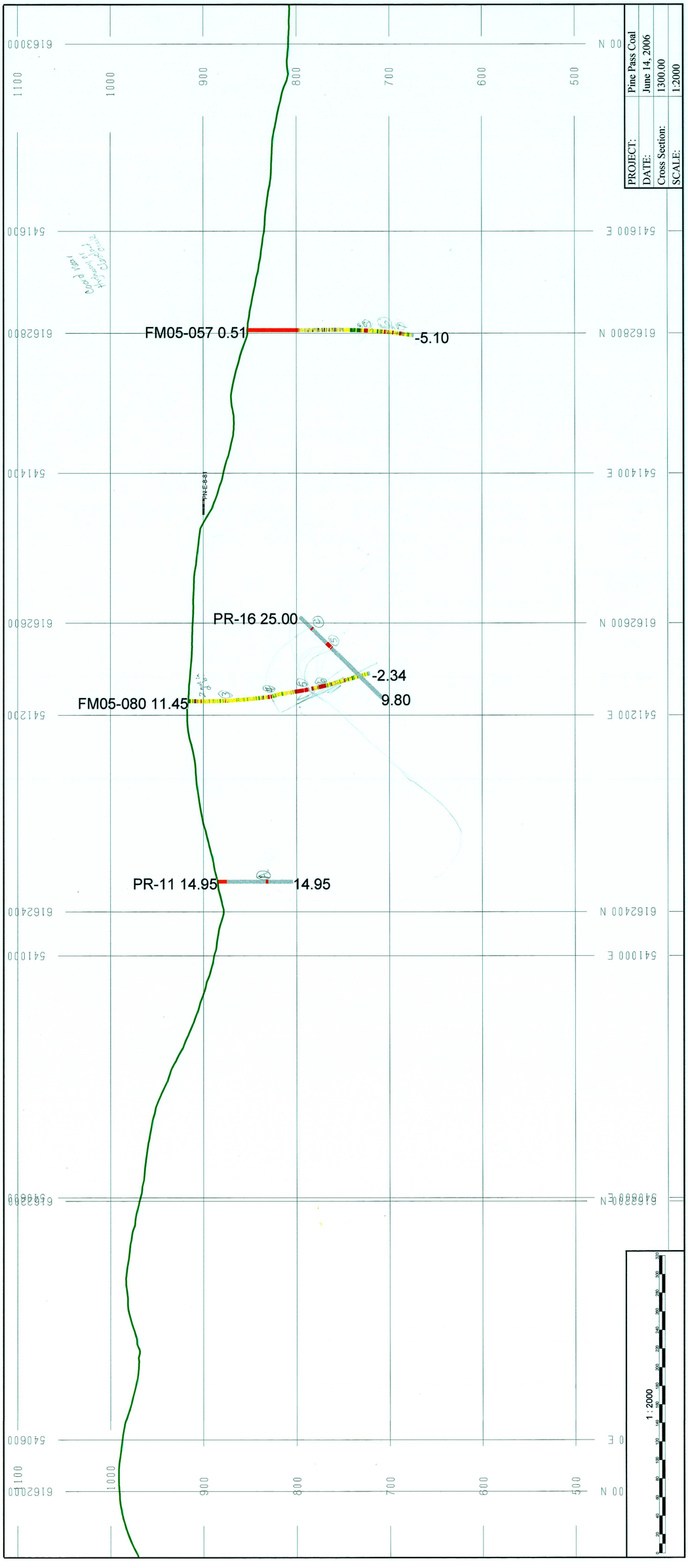


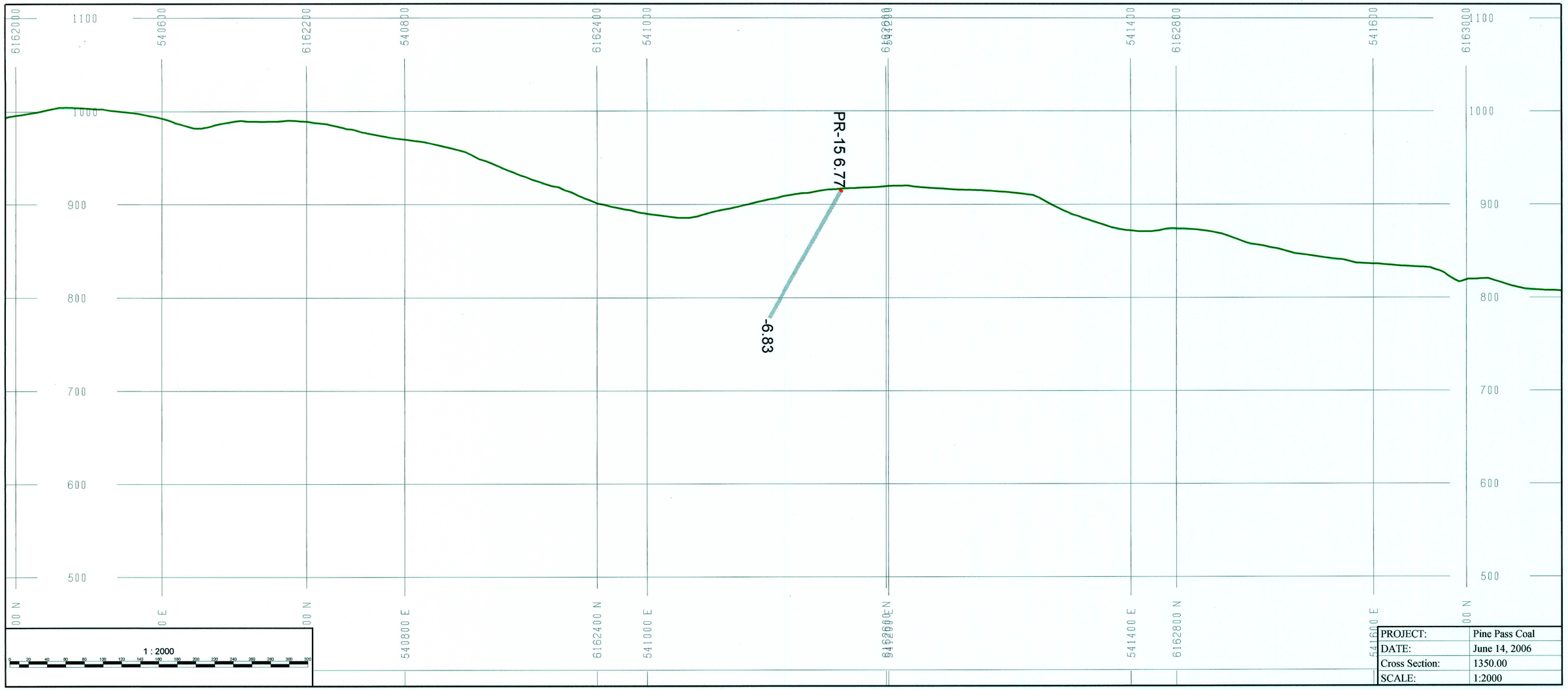
PROJECT:	Pine Pass Coal
DATE:	June 14, 2006
Cross Section:	1100.00
SCALE:	1:2000

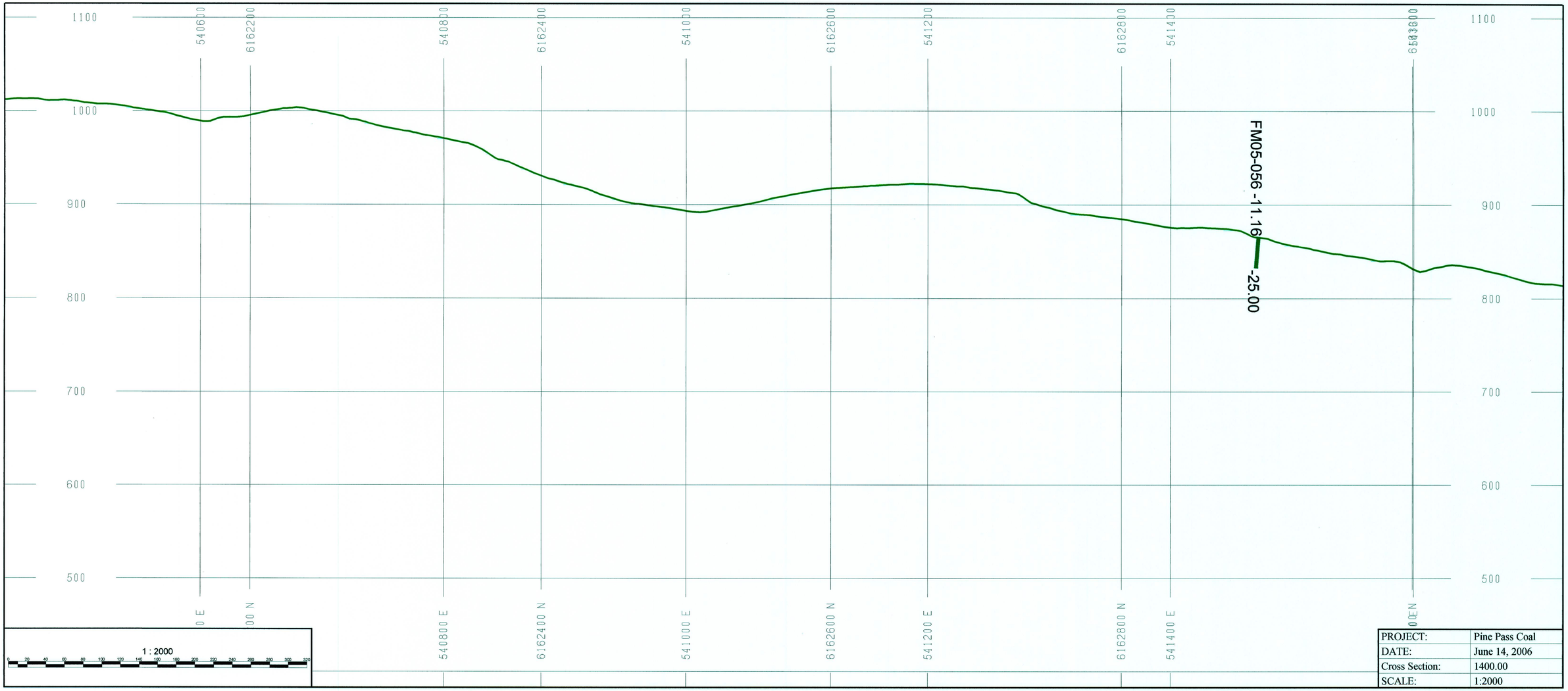

PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 1150.00
SCALE: 1:2000
FM05-081 4.47
-13.51
FM05-058 -9.70
-25.00
FM05-055 3.22
-20.37
FM05-040 -4.08
-19.45
FM05-051 0.80
-24.01
FM05-042 -8.12
4.08
-25.00
FM05-088 -2.74
3.08
FM05-015 7.43
7.64
FM05-065 -10.35
-25.00
-25.00
-14.85
FM05-028 -14.69
Seam 6
" 4
" A
10-11 faults
1:2000


PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 1200.00
SCALE: 1:2000
PM-E-10-BH
FM05-055 25.00
4.96
FM05-042 25.00
14.46
FM05-066 25.00
FM05-065 25.00
19.87
-13.15
1 : 2000

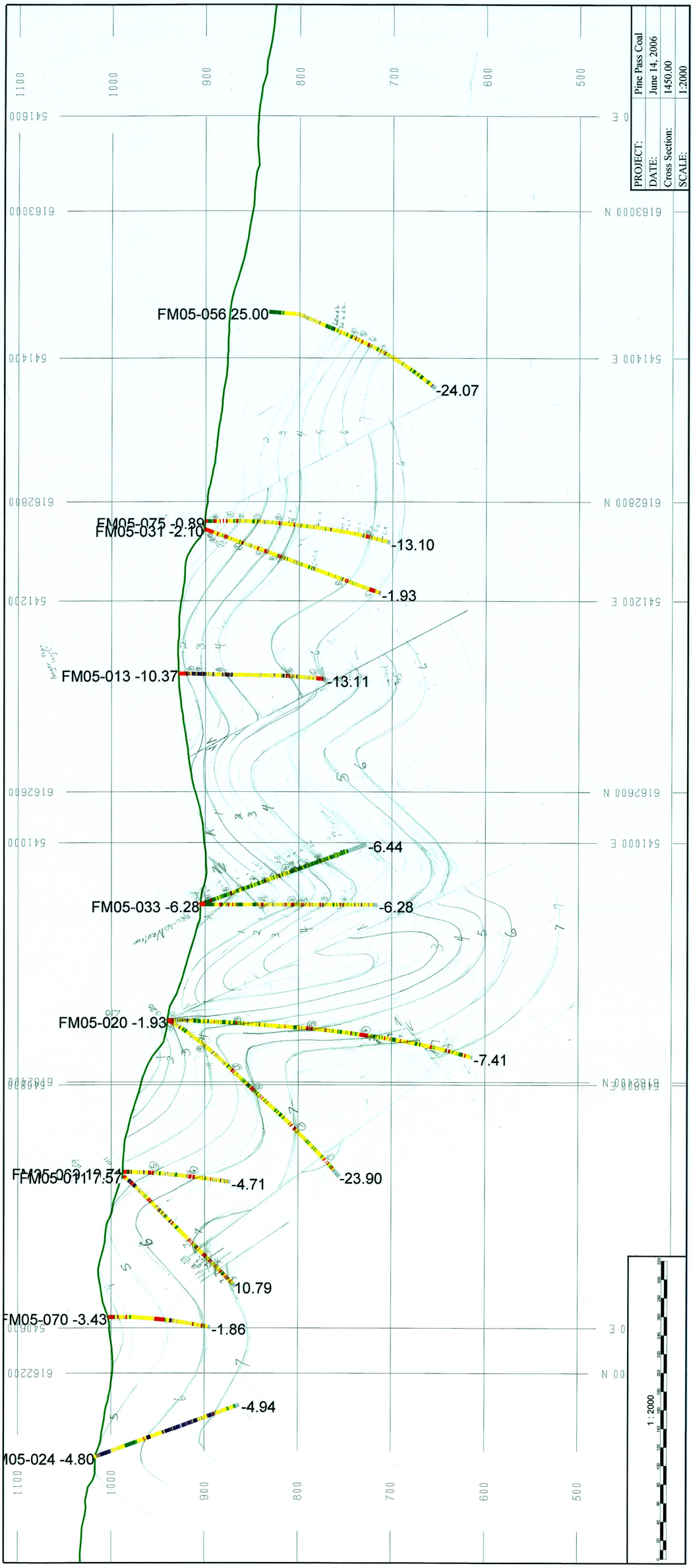

PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 1250.00
SCALE: 1:2000
PR-16 -8.44
PP89-07 8.91
8.91
-25.00
10.73
PR-12 8.97
FM05-067 3.71
-2.86
-16.87
1:2000


PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 1300.00
SCALE: 1:2000
FM05-057 0.51
-5.10
PR-16 25.00
-2.34
9.80
FM05-080 11.45
PR-11 14.95
14.95
1 : 2000


1100
1000
900
800
700
600
500
6162000
5406000
6162200
5408000
6162400
5410000
6162600
5412000
6162800
5414000
6163000
5416000
PR-15 6.77
-6.83
1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320
PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 1350.00
SCALE: 1:2000

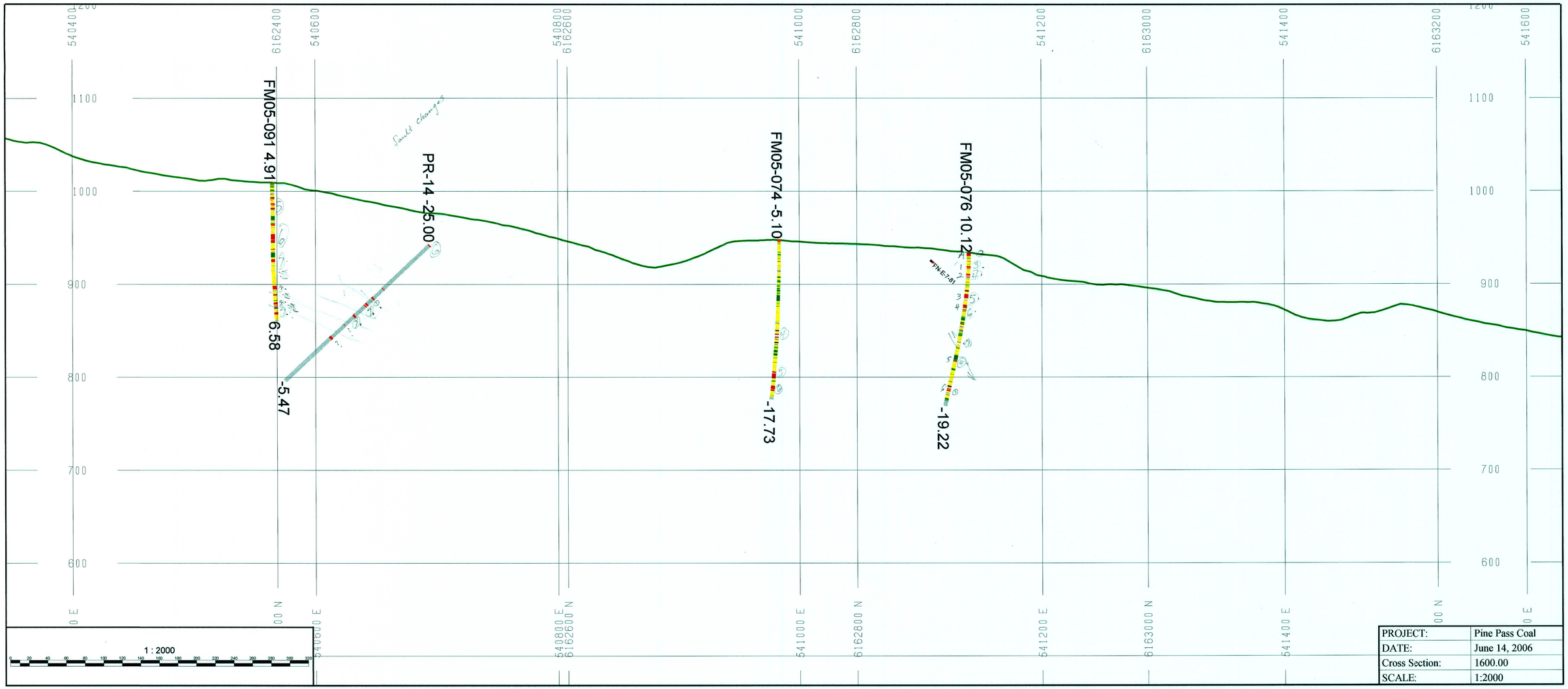


PROJECT:	Pine Pass Coal
DATE:	June 14, 2006
Cross Section:	1400.00
SCALE:	1:2000


PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 1450.00
SCALE: 1:2000
FM05-056 25.00
-24.07
FM05-075 -0.89
FM05-031 -2.10
-13.10
-1.93
FM05-013 -10.37
-13.11
-6.44
FM05-033 -6.28
-6.28
FM05-020 -1.93
-7.41
-23.90
FM05-011 7.57
-4.71
10.79
FM05-070 -3.43
-1.86
-4.94
-4.80
1 : 2000

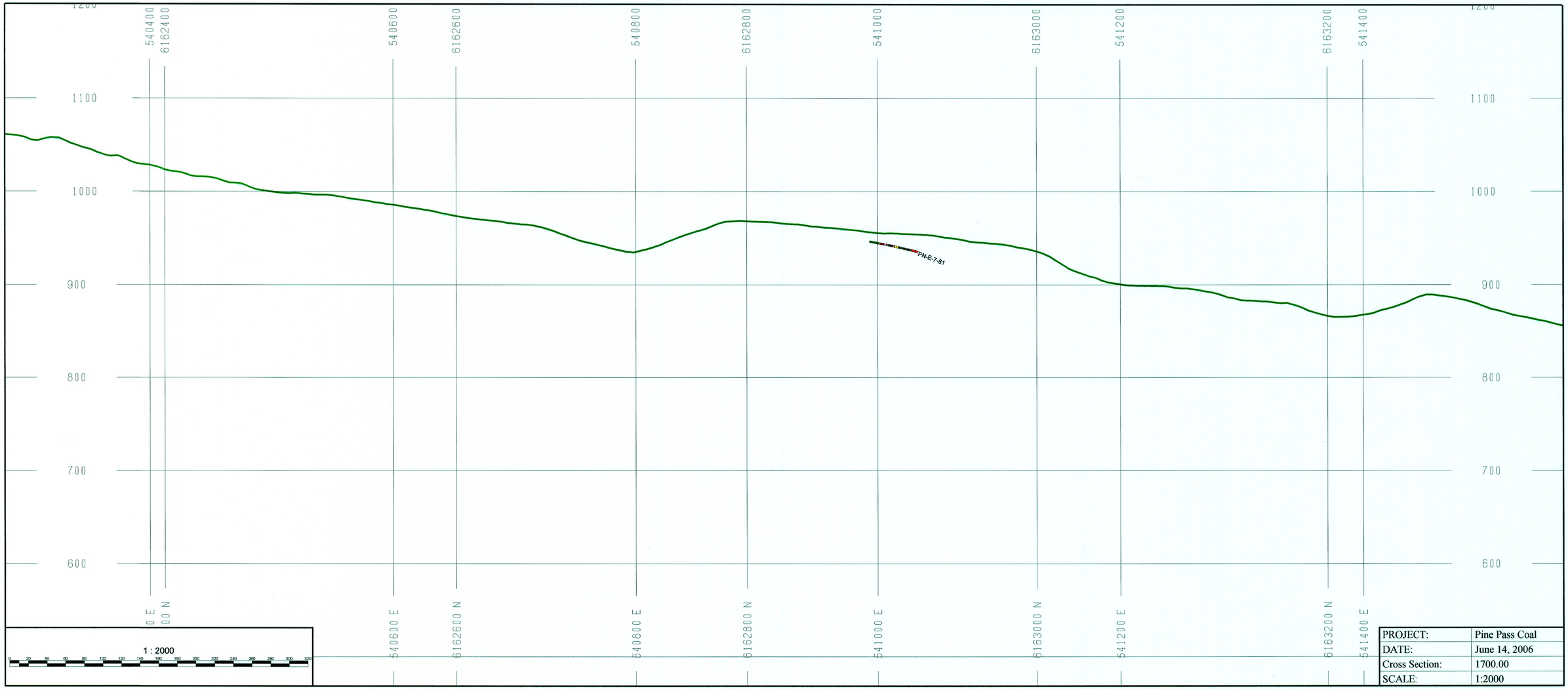
PROJECT:	Pine Pass Coal
DATE:	June 14, 2006
Cross Section:	1500.00
SCALE:	1:2000

PROJECT:	Pine Pass Coal
DATE:	June 14, 2006
Cross Section:	1550.00
SCALE:	1:2000



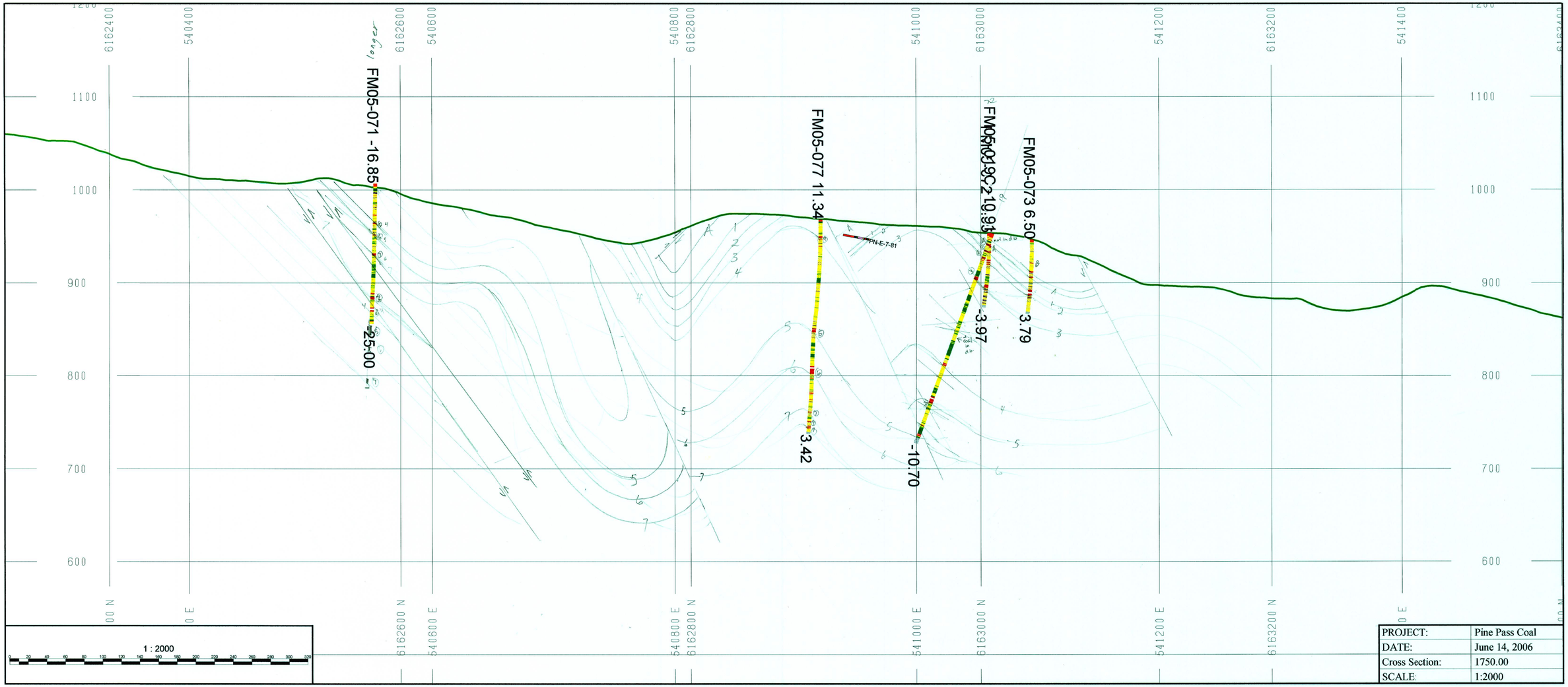
PROJECT:	Pine Pass Coal
DATE:	June 14, 2006
Cross Section:	1600.00
SCALE:	1:2000

PROJECT:	Pine Pass Coal
DATE:	June 14, 2006
Cross Section:	1650.00
SCALE:	1:2000


1200
1100
1000
900
800
700
600
540400
6162400
540600
6162600
540800
6162800
541000
6163000
541200
6163200
541400
FN-E-7-91
0 E
00 N
540600 E
6162600 N
540800 E
6162800 N
541000 E
6163000 N
541200 E
6163200 N
541400 E
1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320
PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 1700.00
SCALE: 1:2000

Section changed

changed L of fault



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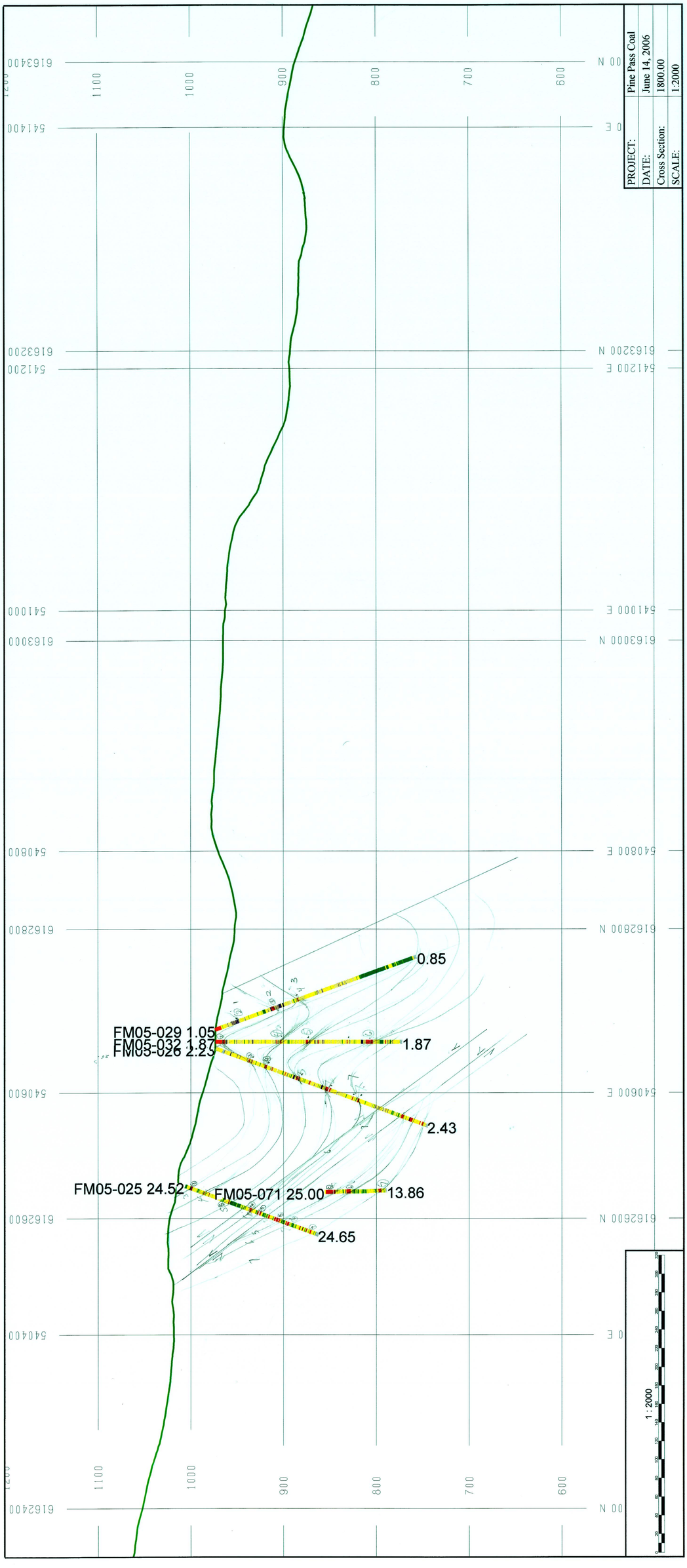
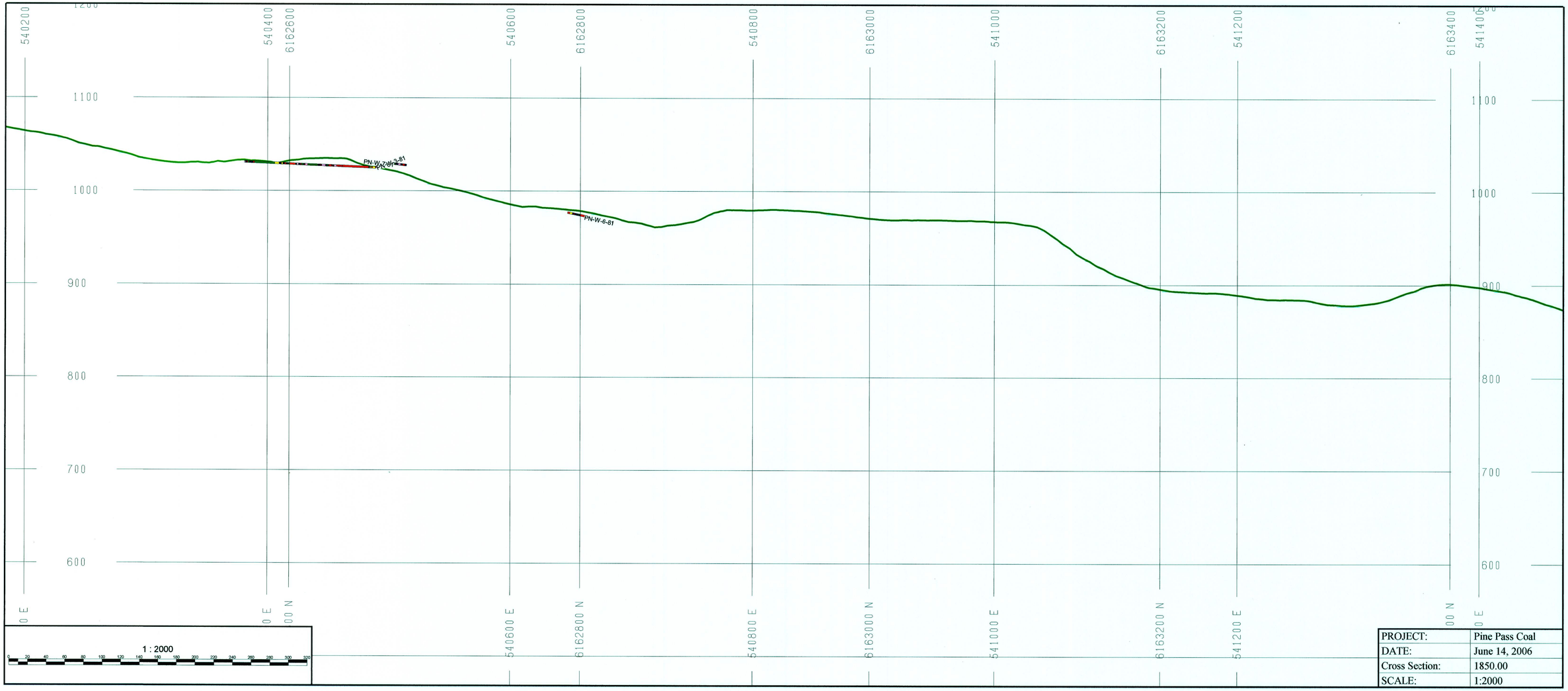
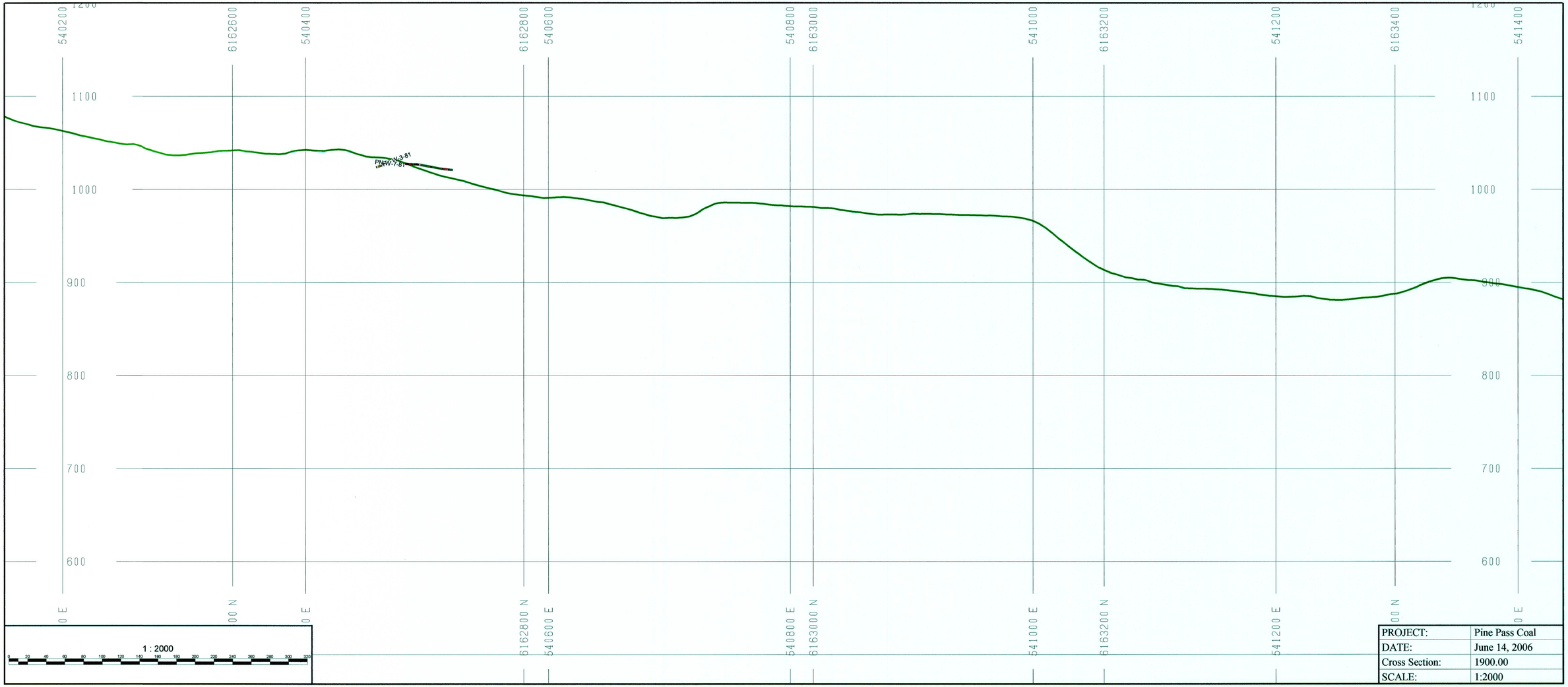
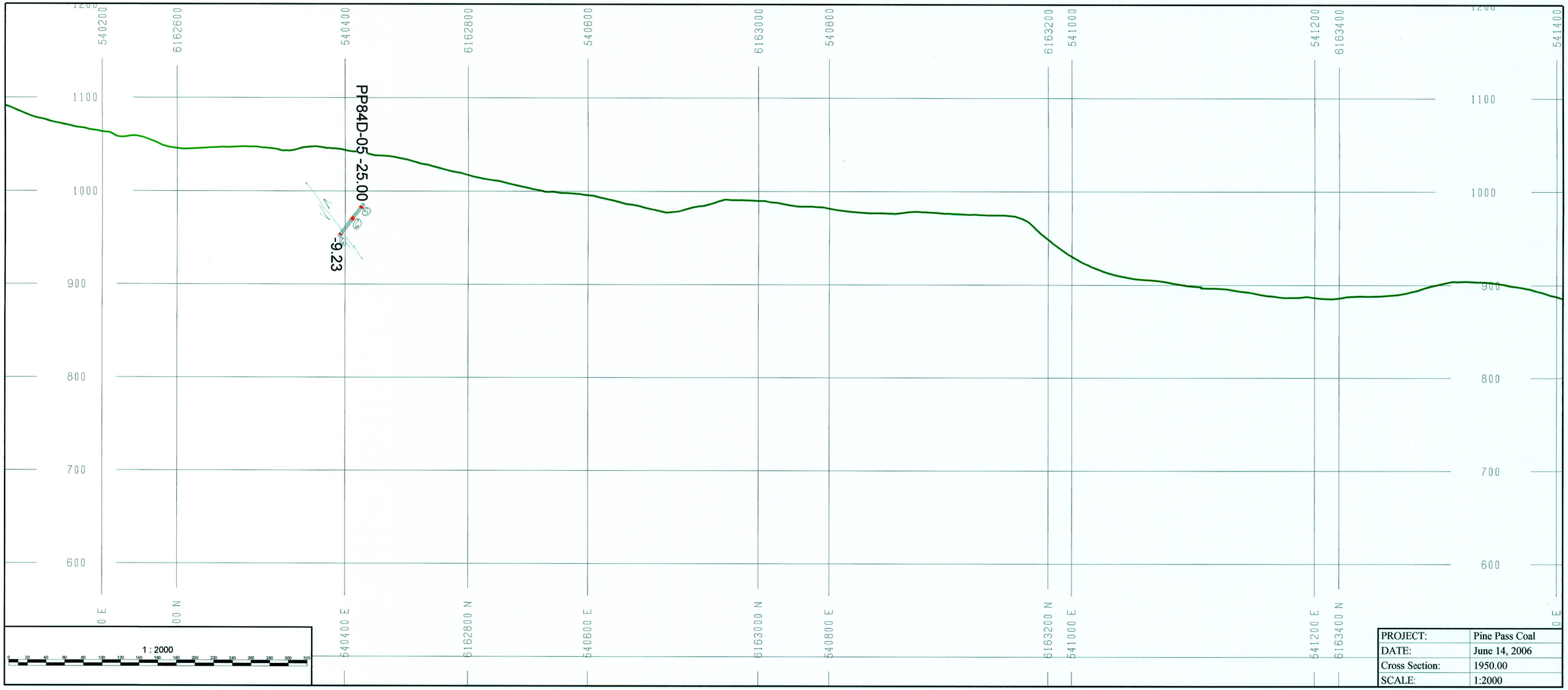
DATE:	June 14, 2006
Cross Section:	1750.00
SCALE:	1:2000

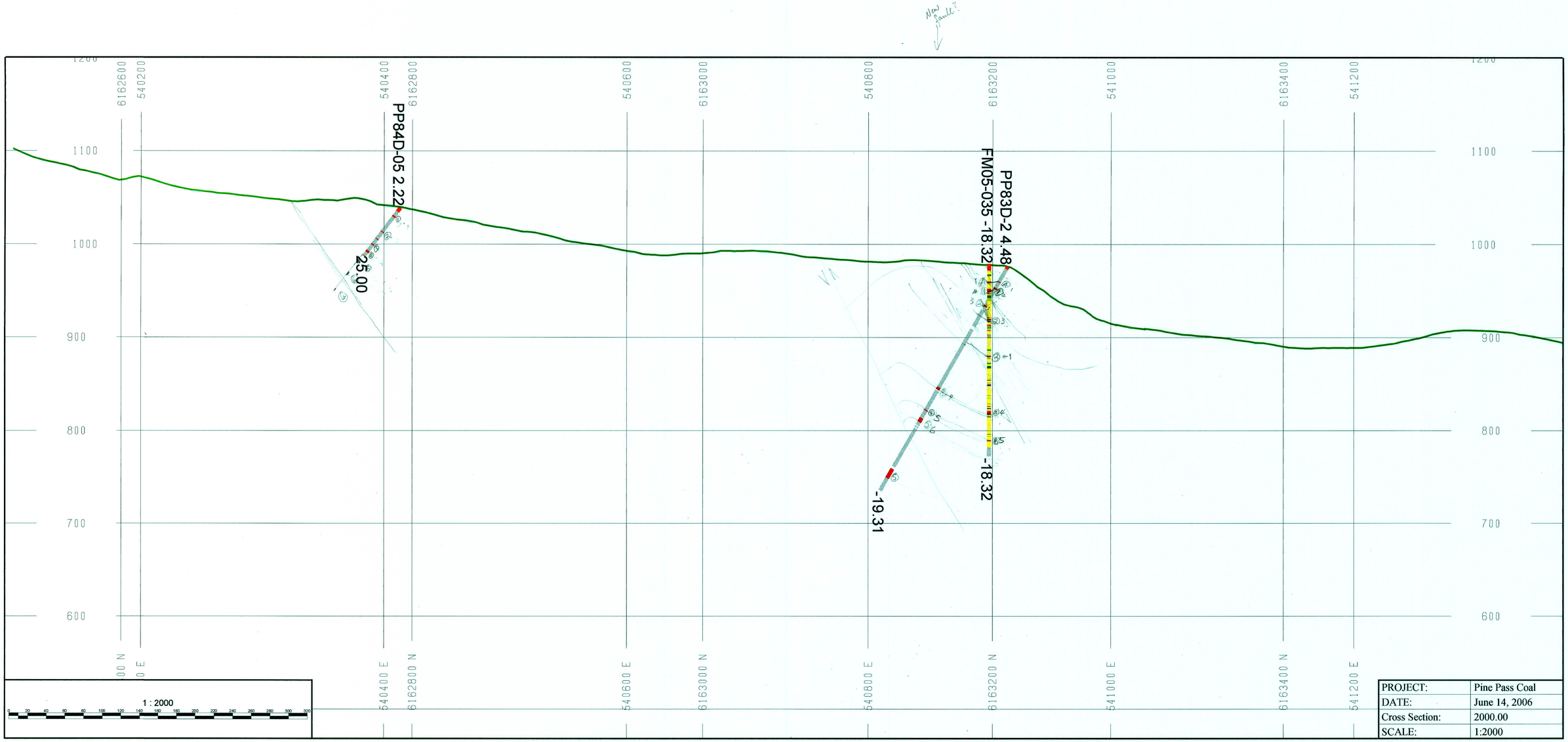

PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 1800.00
SCALE: 1:2000
0.85
FM05-029 1.05
FM05-032 1.87
1.87
FM05-026 2.25
2.43
FM05-025 24.52
FM05-071 25.00
13.86
24.65
1 : 2000

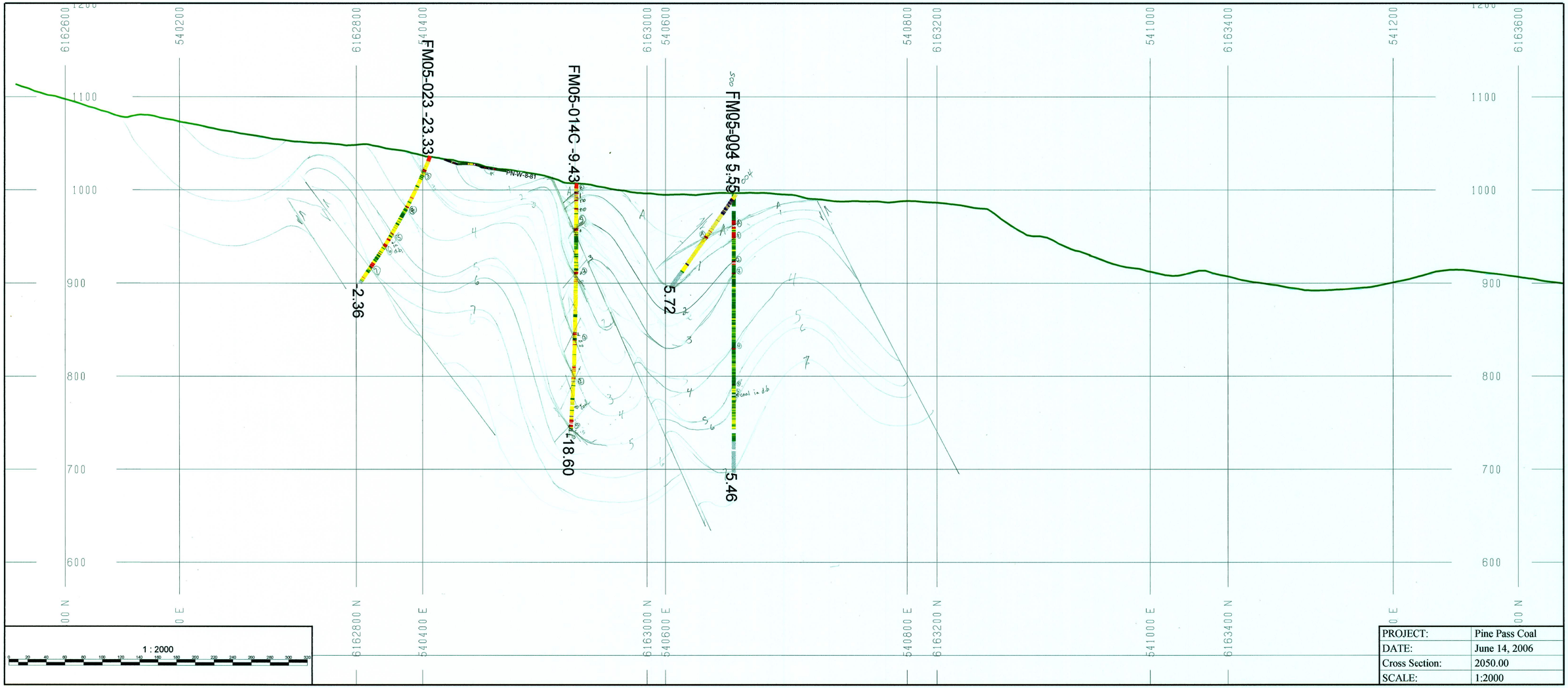

540200
540400
6162600
540600
6162800
540800
6163000
541000
6163200
541200
6163400
1200
1100
1000
900
800
700
600
PN-W-7-81
PN-W-6-81
1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320
PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 1850.00
SCALE: 1:2000

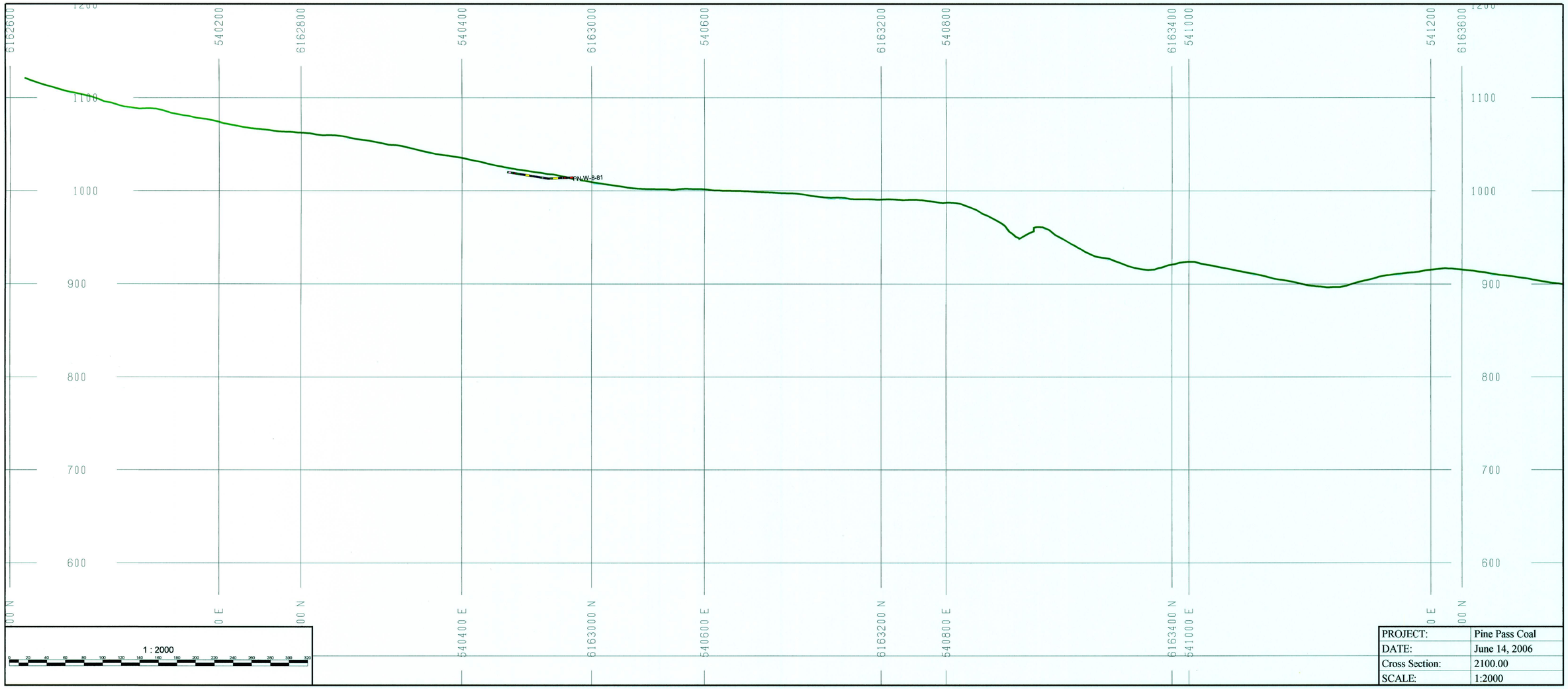


PROJECT:	Pine Pass Coal
DATE:	June 14, 2006
Cross Section:	1900.00
SCALE:	1:2000


PP84D-05 -25.00
-9.23
1100
1000
900
800
700
600
540200 E
6162600 N
540400 E
6162800 N
540600 E
6163000 N
540800 E
6163200 N
541000 E
541200 E
6163400 N
541400 E
1 : 2000
PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 1950.00
SCALE: 1:2000


New fault?
PP84D-05 2.22
-25.00
PP83D-2 4.48
FM05-035 -18.32
-18.32
-19.31
1200
1100
1000
900
800
700
600
6162600 N
540200 E
540400 E
6162800 N
540600 E
6163000 N
540800 E
6163200 N
541000 E
6163400 N
541200 E
1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320
PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 2000.00
SCALE: 1:2000


FM05-023 -23.33
FM05-014C -9.43
FM05-004 5.55
-2.36
5.72
18.60
5.46
FN-W-8-81
1 : 2000
PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 2050.00
SCALE: 1:2000

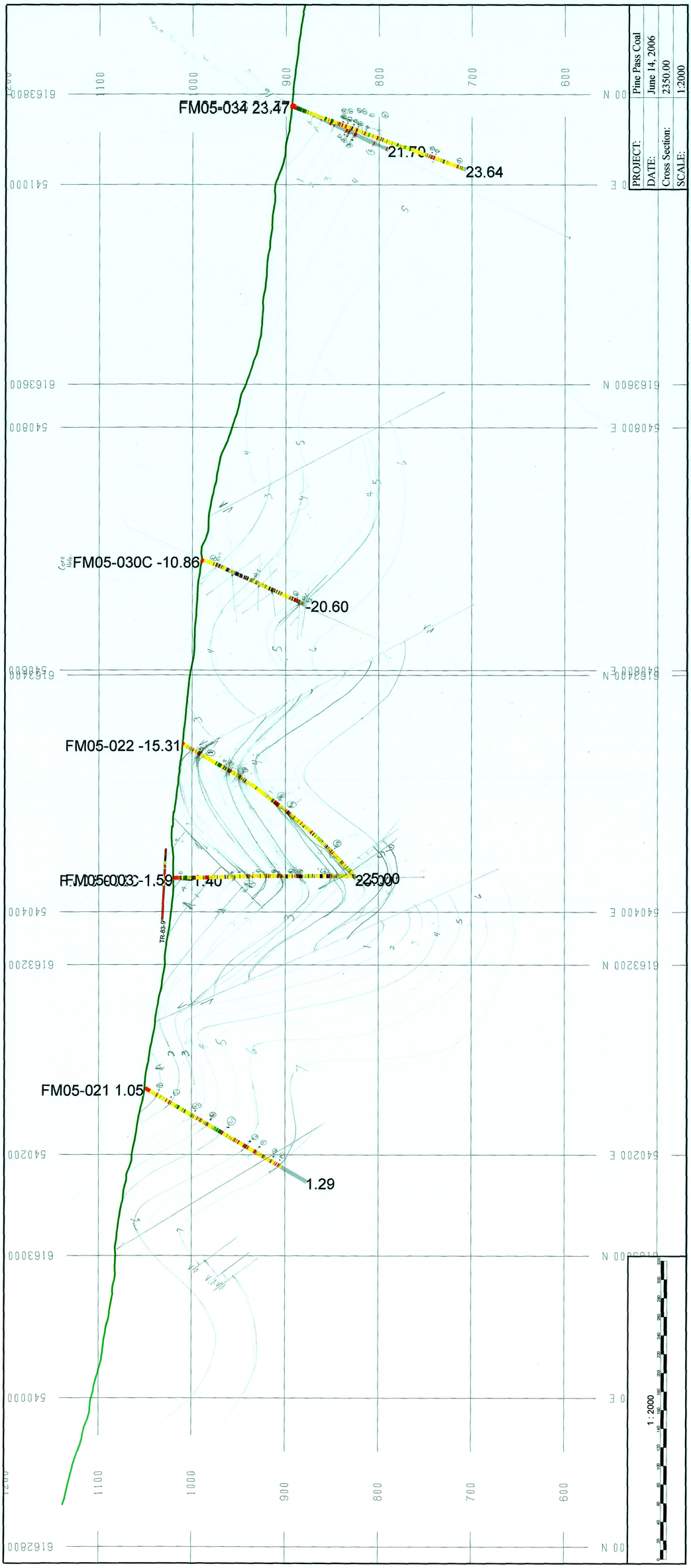

6162600
5402000
6162800
5404000
6163000
5406000
6163200
5408000
6163400
5410000
5412000
6163600
1200
1100
1000
900
800
700
600
PNW-8-81
1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320
PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 2100.00
SCALE: 1:2000

1200
1100
1000
900
800
700
600
5400000
6162800
542000
540400
6163000
540600
6163200
540800
6163400
541000
6163600
541200
PP83D-17.61
-25.00
1 : 2000
PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 2150.00
SCALE: 1:2000

540000
6162800
540200
6163000
540400
6163200
540600
540800
6163400
541000
6163600
541200
1100
1000
900
800
700
600
PP83D-1 25.00
-25.00
0 E
00 N
0 E
6163000 N
540400 E
6163200 N
540600 E
540800 E
6163400 N
541000 E
6163600 N
0 E
1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320
PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 2200.00
SCALE: 1:2000

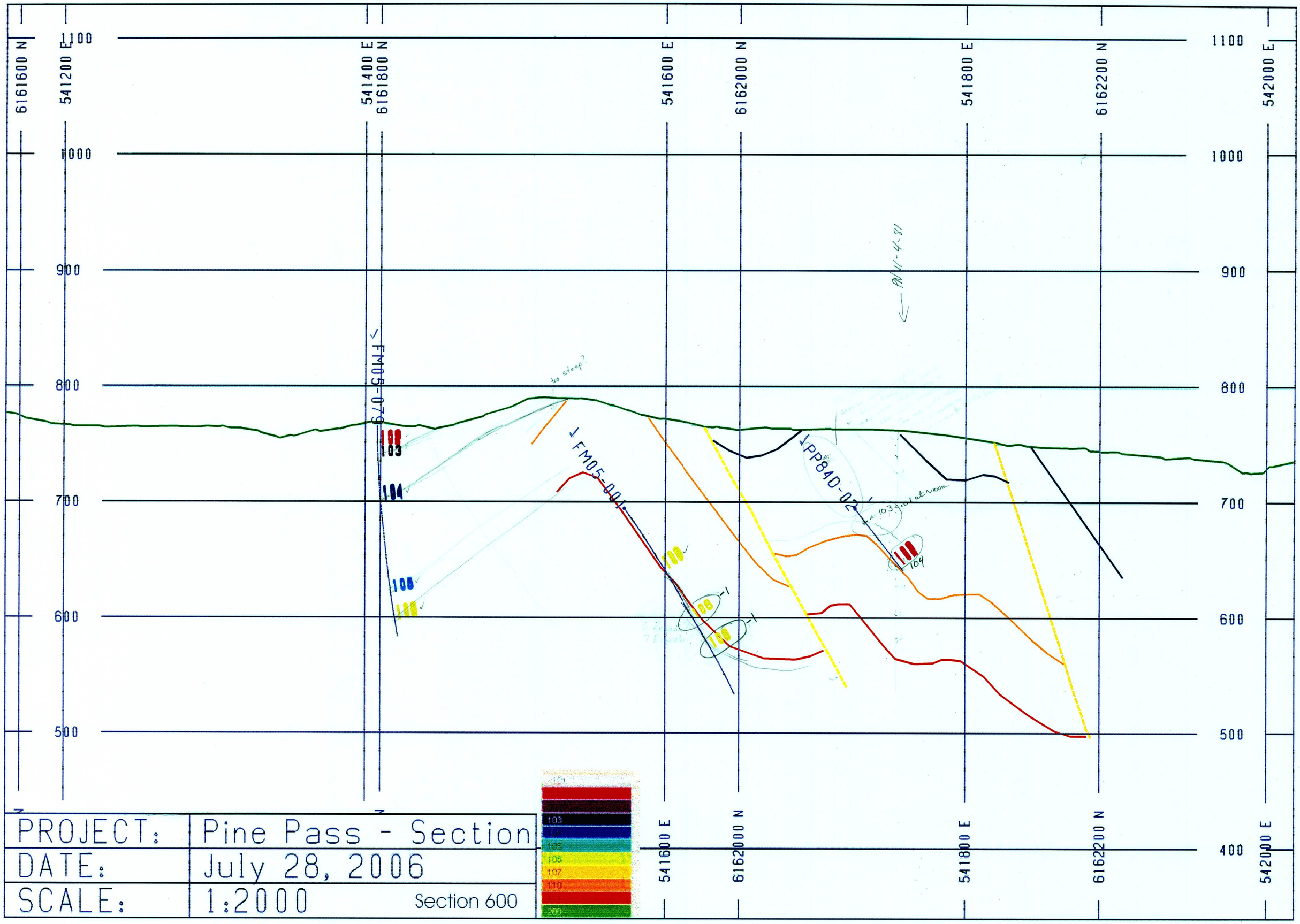
PP89-11 9.53
9.53
PP83D-1 25.00
11.35
1100
1000
900
800
700
600
1 : 2000
PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 2250.00
SCALE: 1:2000

PROJECT:	Pine Pass Coal
DATE:	June 14, 2006
Cross Section:	2300.00
SCALE:	1:2000

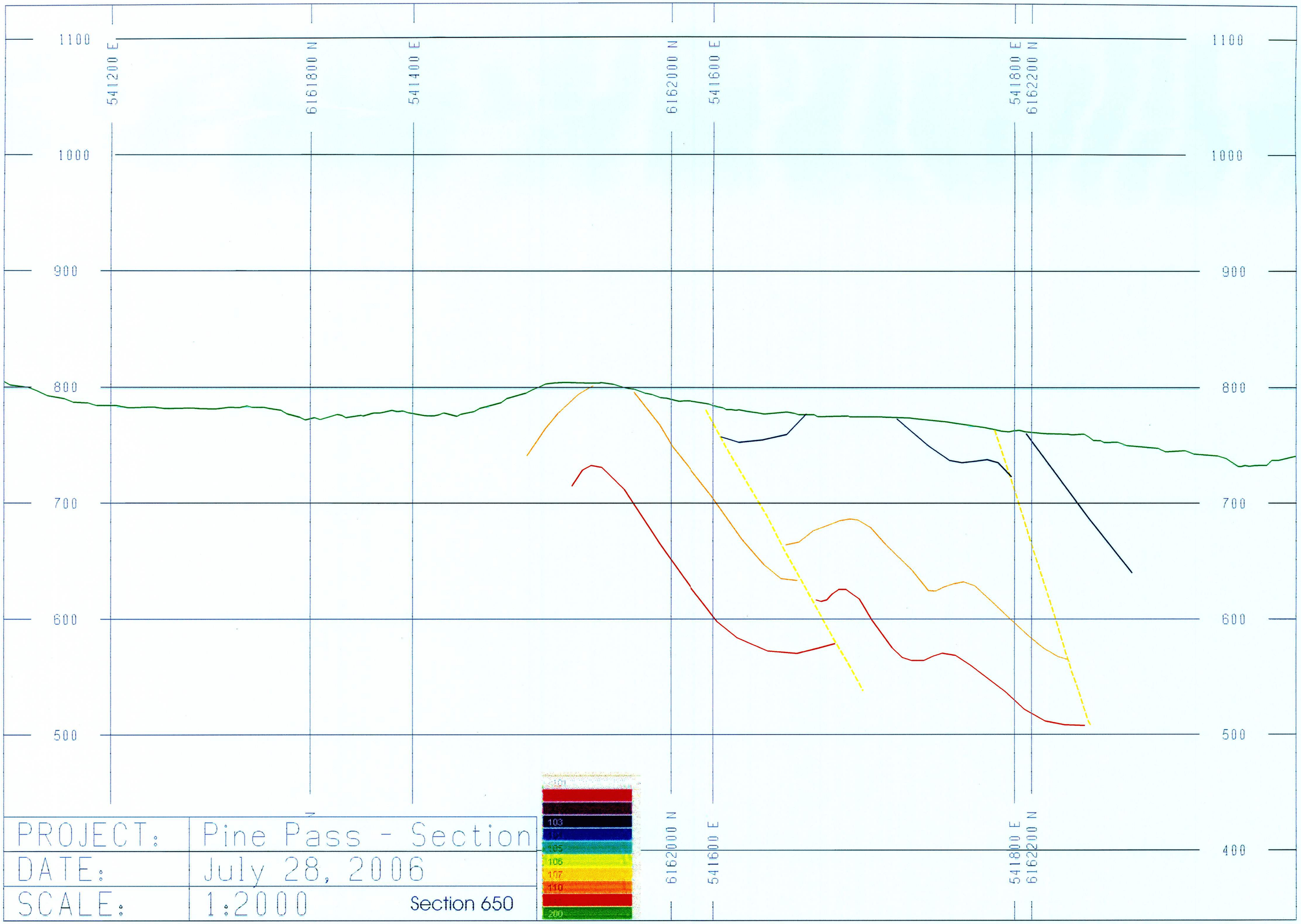

PROJECT: Pine Pass Coal
DATE: June 14, 2006
Cross Section: 2350.00
SCALE: 1:2000
FM05-034 23.47
21.70
23.64
FM05-030C -10.86
-20.60
FM05-022 -15.31
FM05-003 -1.59
1.40
25.00
FM05-021 1.05
1.29
1 : 2000

PROJECT:	Pine Pass Coal
DATE:	June 14, 2006
Cross Section:	2400.00
SCALE:	1:2000

PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 550

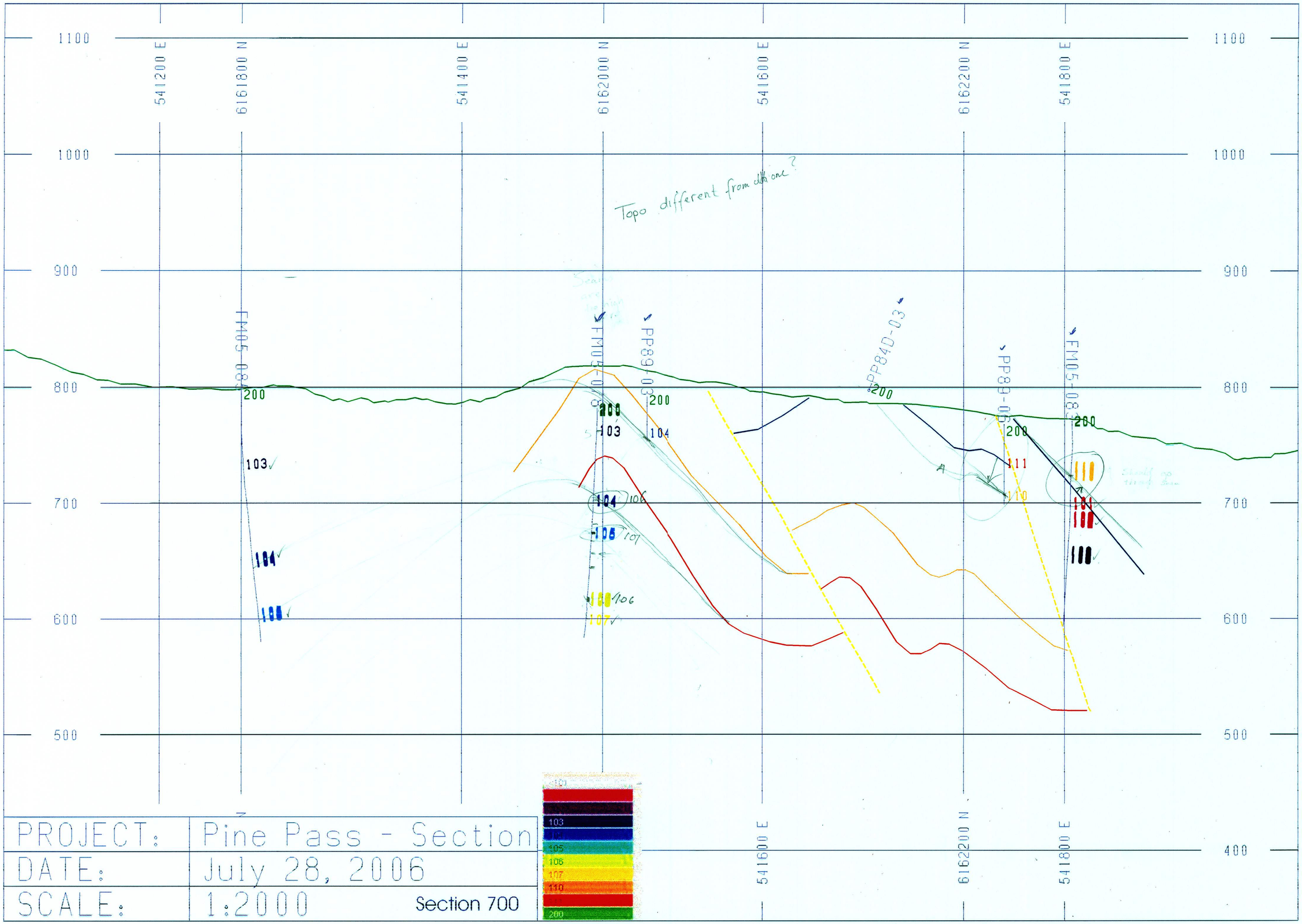


6161600 N
541200 E
541400 E
6161800 N
541600 E
6162000 N
541800 E
6162200 N
542000 E
1100
1000
900
800
700
600
500
400
FM05-079
FM05-001
PP84D-02
too steep?
103
104
105
106
107
110
200
PROJECT: Pine Pass - Section
DATE: July 28, 2006
SCALE: 1:2000
Section 600

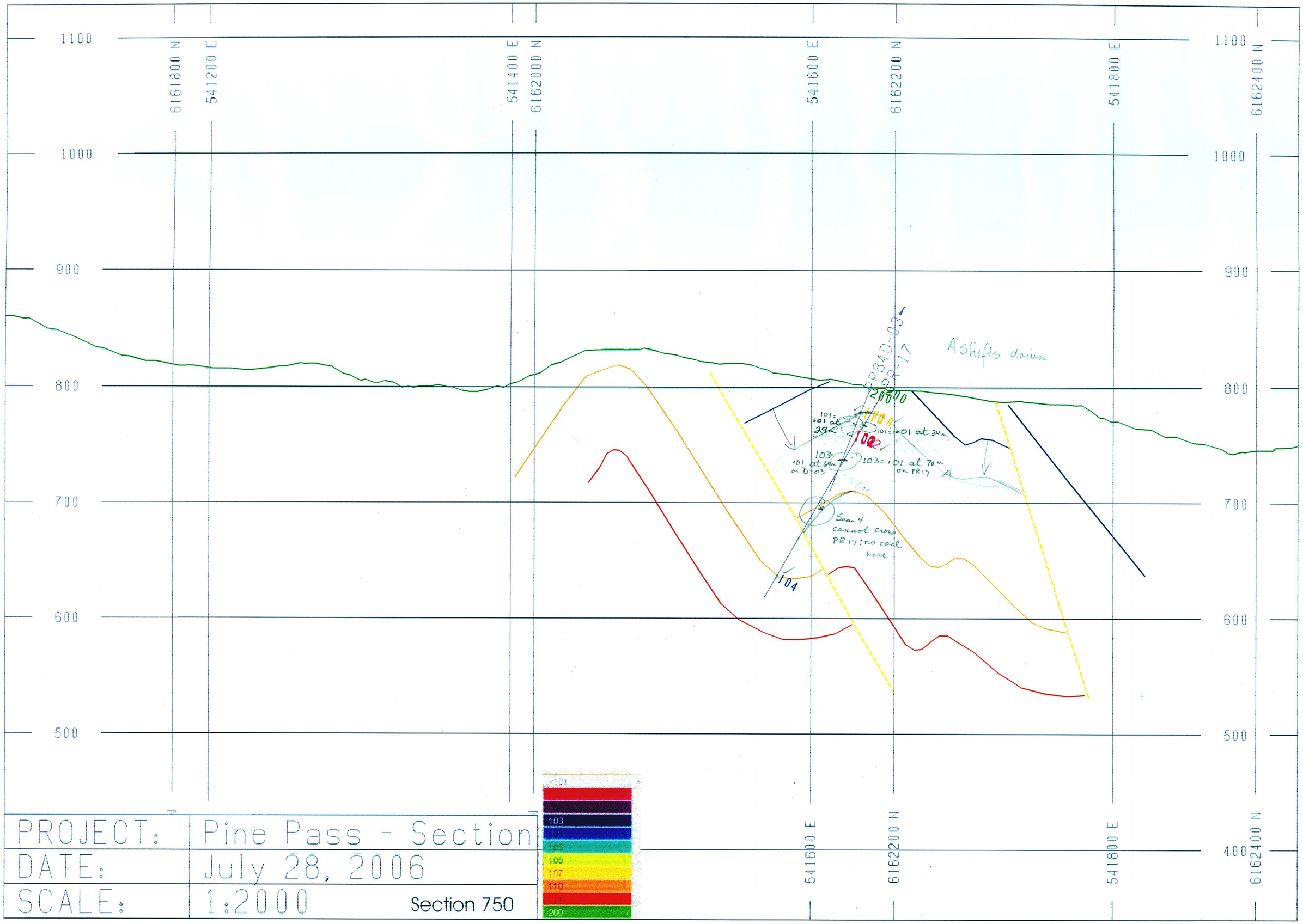


PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000

Section 650



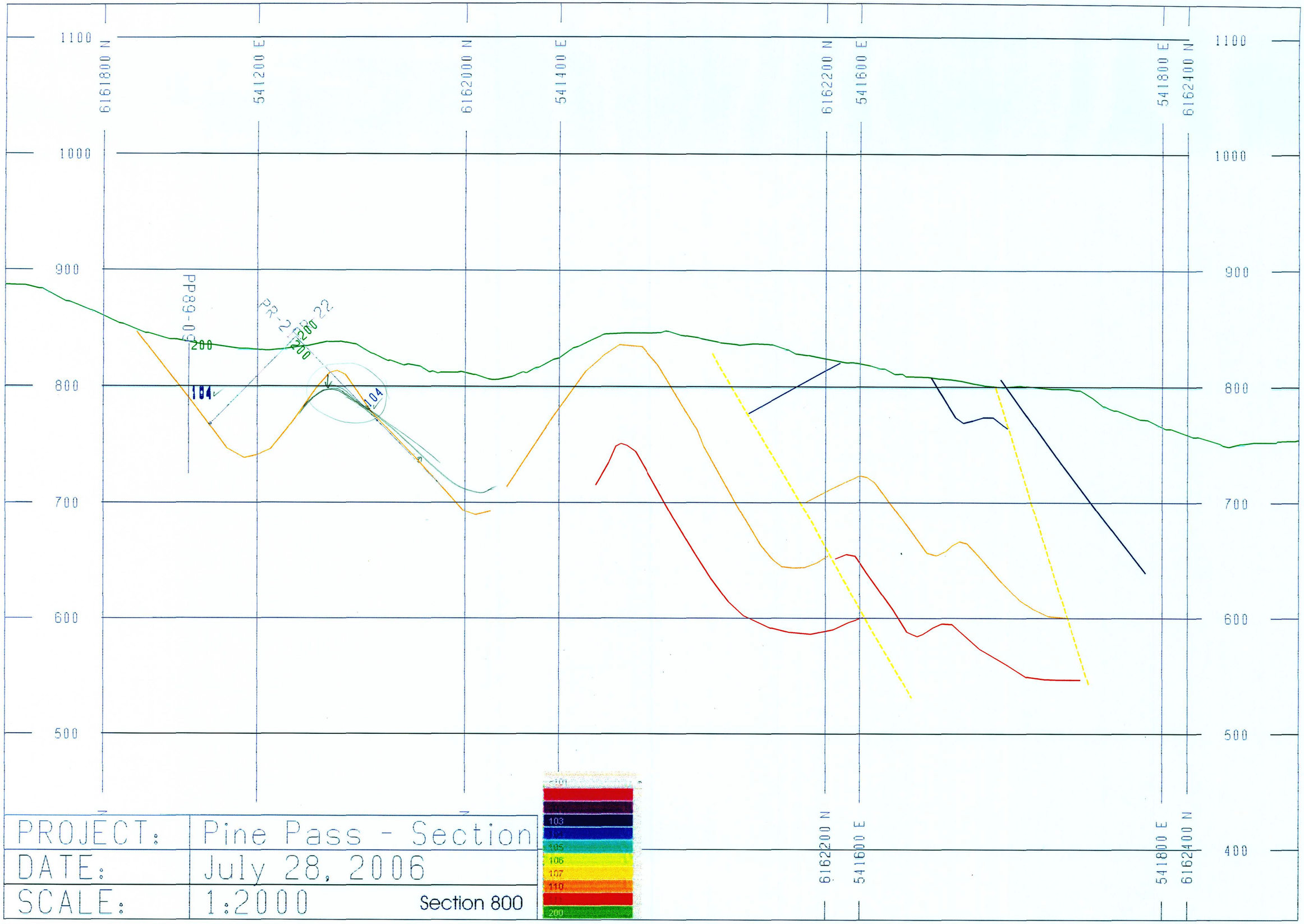
1100
1000
900
800
700
600
500
400
541200 E
6161800 N
541400 E
6162000 N
541600 E
6162200 N
541800 E
Topo different from old one?
FM05-083
FM05-078
PP89-03
PP84D-03
PP89-06
FM05-083
200
103
104
105
106
107
110
111
PROJECT: Pine Pass - Section
DATE: July 28, 2006
SCALE: 1:2000
Section 700



PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000

Section 750

topo



1100
1000
900
800
700
600
500
400
6161800 N
541200 E
6162000 N
541400 E
6162200 N
541600 E
541800 E
6162400 N
PP89-09
PR-2
PR-22
200
104
103
105
106
107
110
200
PROJECT: Pine Pass - Section
DATE: July 28, 2006
SCALE: 1:2000
Section 800

PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000

Section 850

PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000

Section 850

1100
1000
900
800
700
600
500
400

541000 E
6162000 N
541200 E
541400 E
6162200 N
541600 E
6162400 N
541800 E

PP89-04

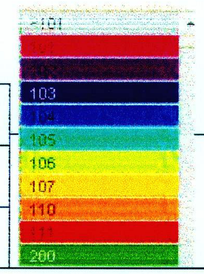
?

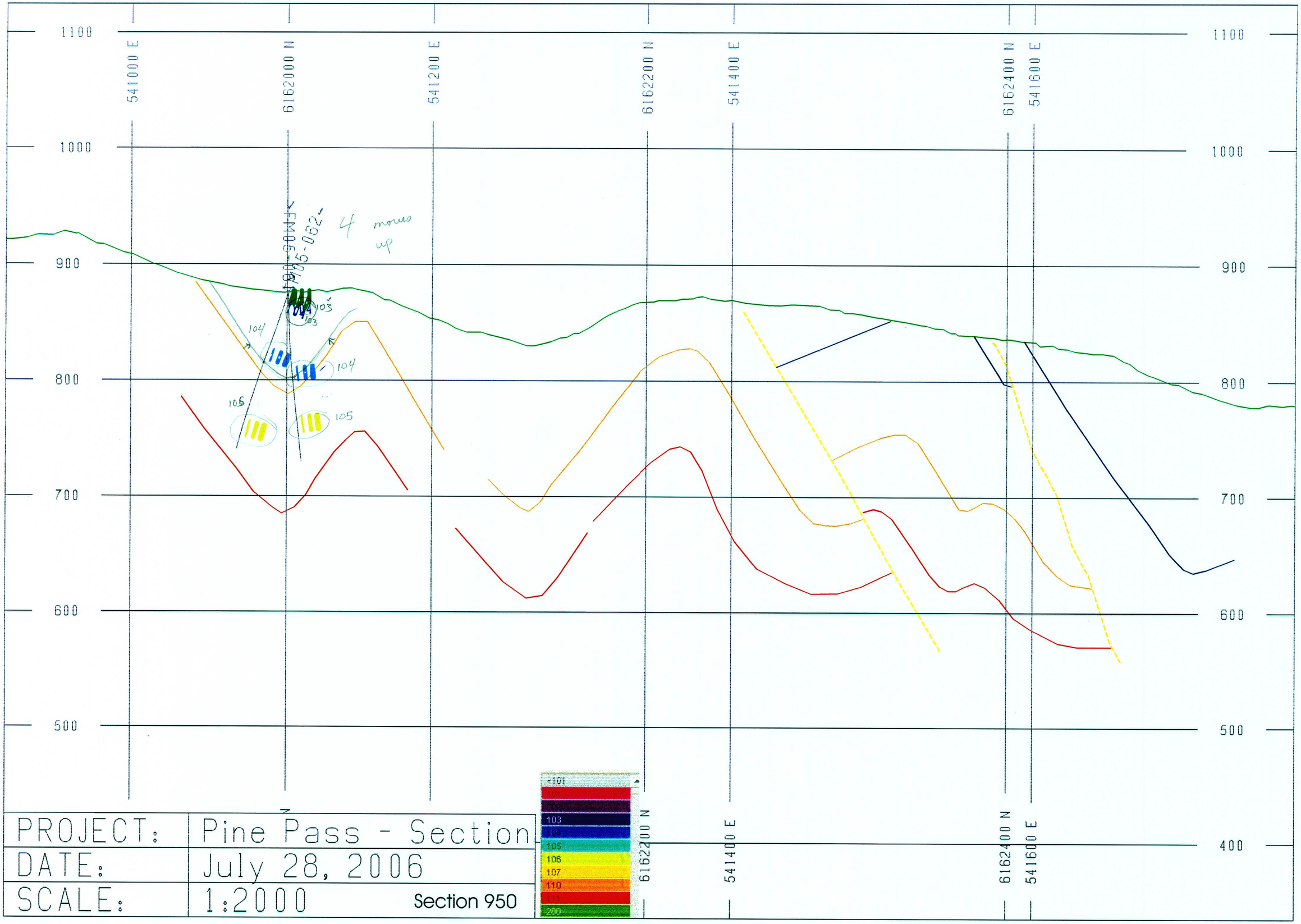
110 moves down

200
111
110
101 = .101 at 53m
102 = .102 at 61m
103

PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000

Section 900





1100
1000
900
800
700
600
500
400
541000 E
6162000 N
541200 E
6162200 N
541400 E
6162400 N
541600 E
FM05-062
4 moves up
103
104
105
106
107
110
111
200
PROJECT: Pine Pass - Section
DATE: July 28, 2006
SCALE: 1:2000
Section 950

topo

1100
1000
900
800
700
600
500
400

541000 E
6162000 N
541200 E
6162200 N
541400 E
6162400 N
541600 E

FM05-089
FM05-049
FM05-050
FM05-054
FM05-053

Can this fault move over to the E to go through FM05-053

fault needs to shift W

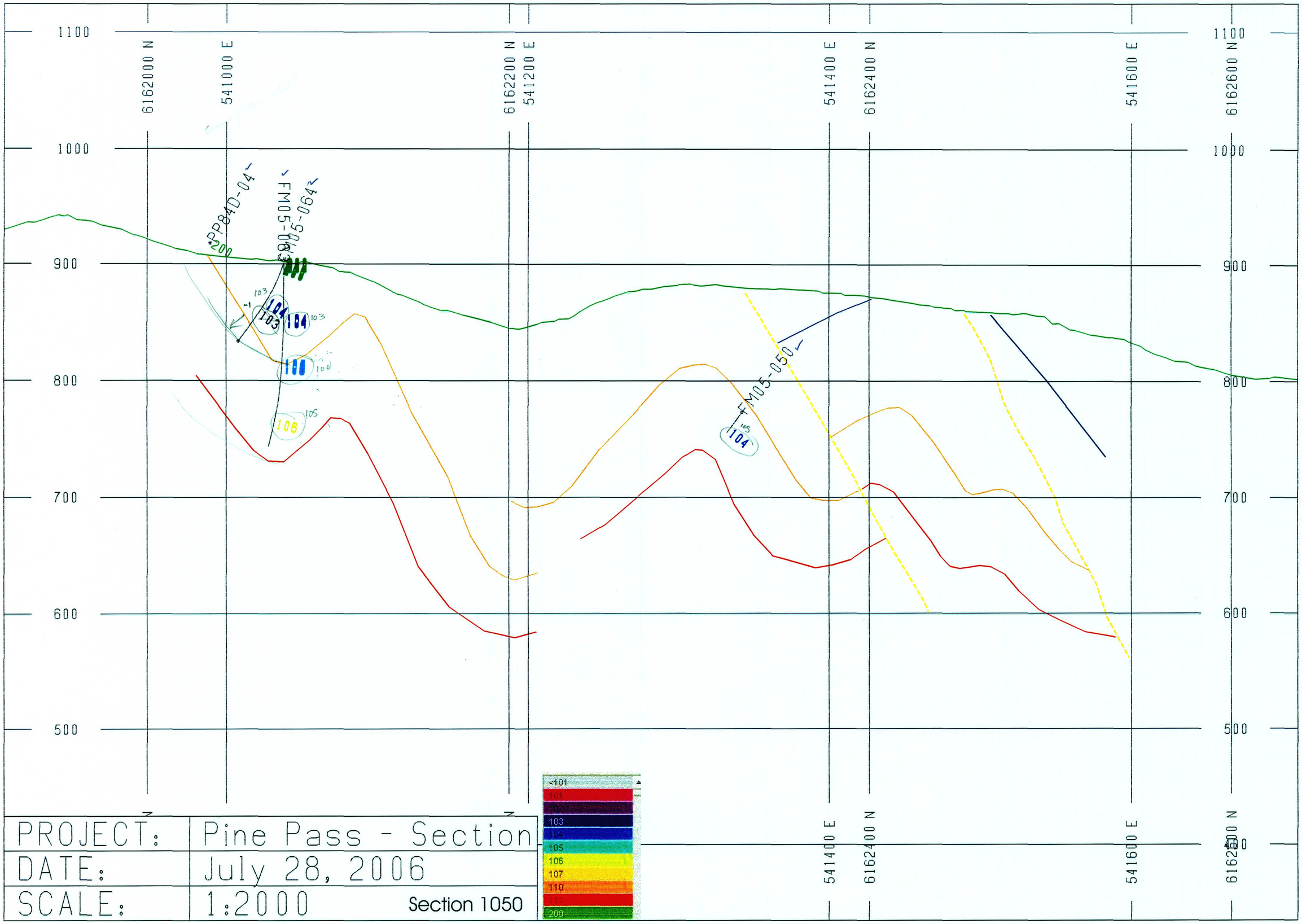
Angle of 110 needs to change between dh's

B Zone

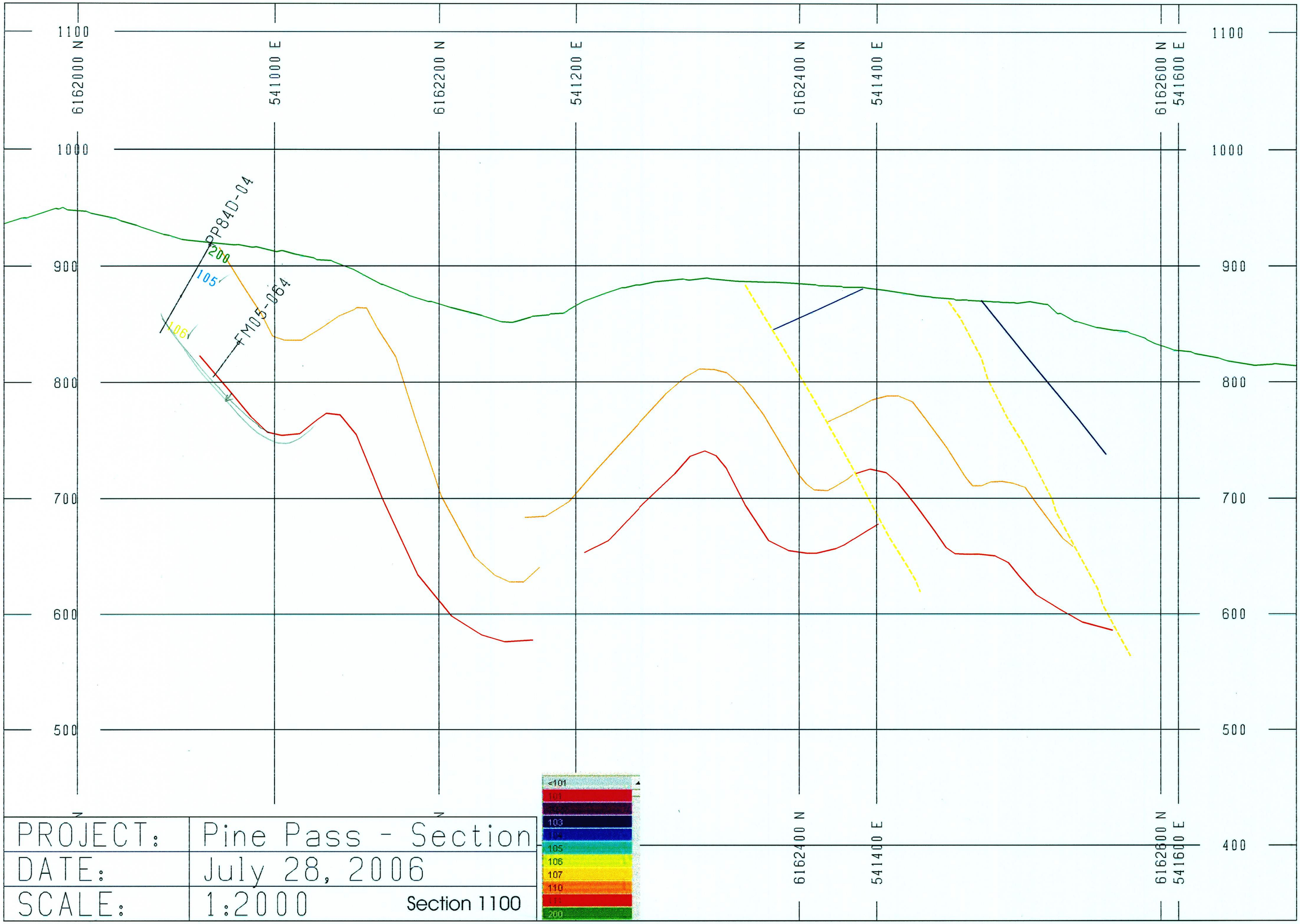
A

PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 1000

<101
101
102
103
104
105
106
107
110
111
200

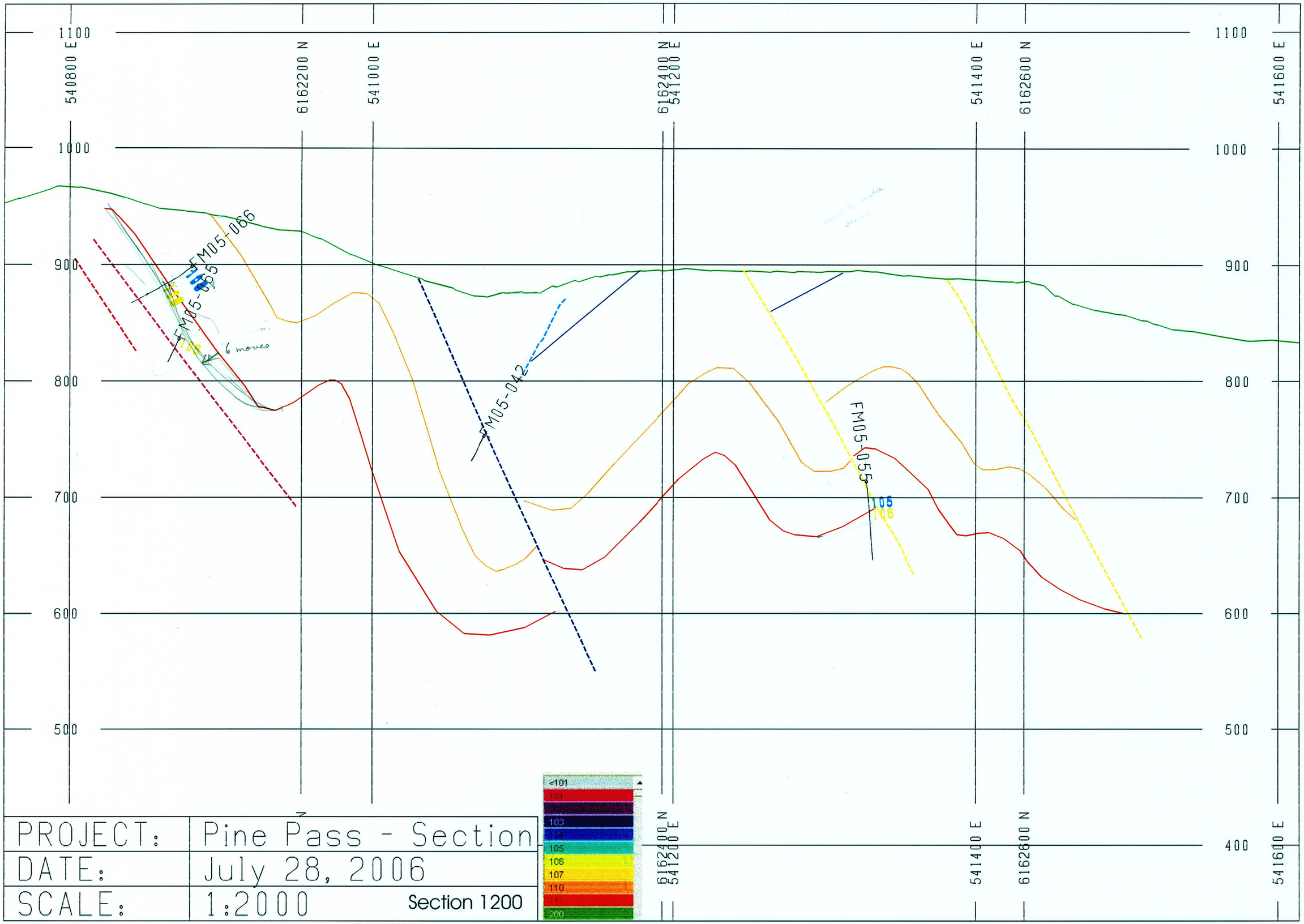


PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 1050



PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 1100

PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 1150



PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 1200

topo

1100
1000
900
800
700
600
500
400

540800 E
6162200 N
541000 E
6162400 N
541200 E
6162600 N
541400 E

FM05-068

PR-12

PR-16

PP89-01

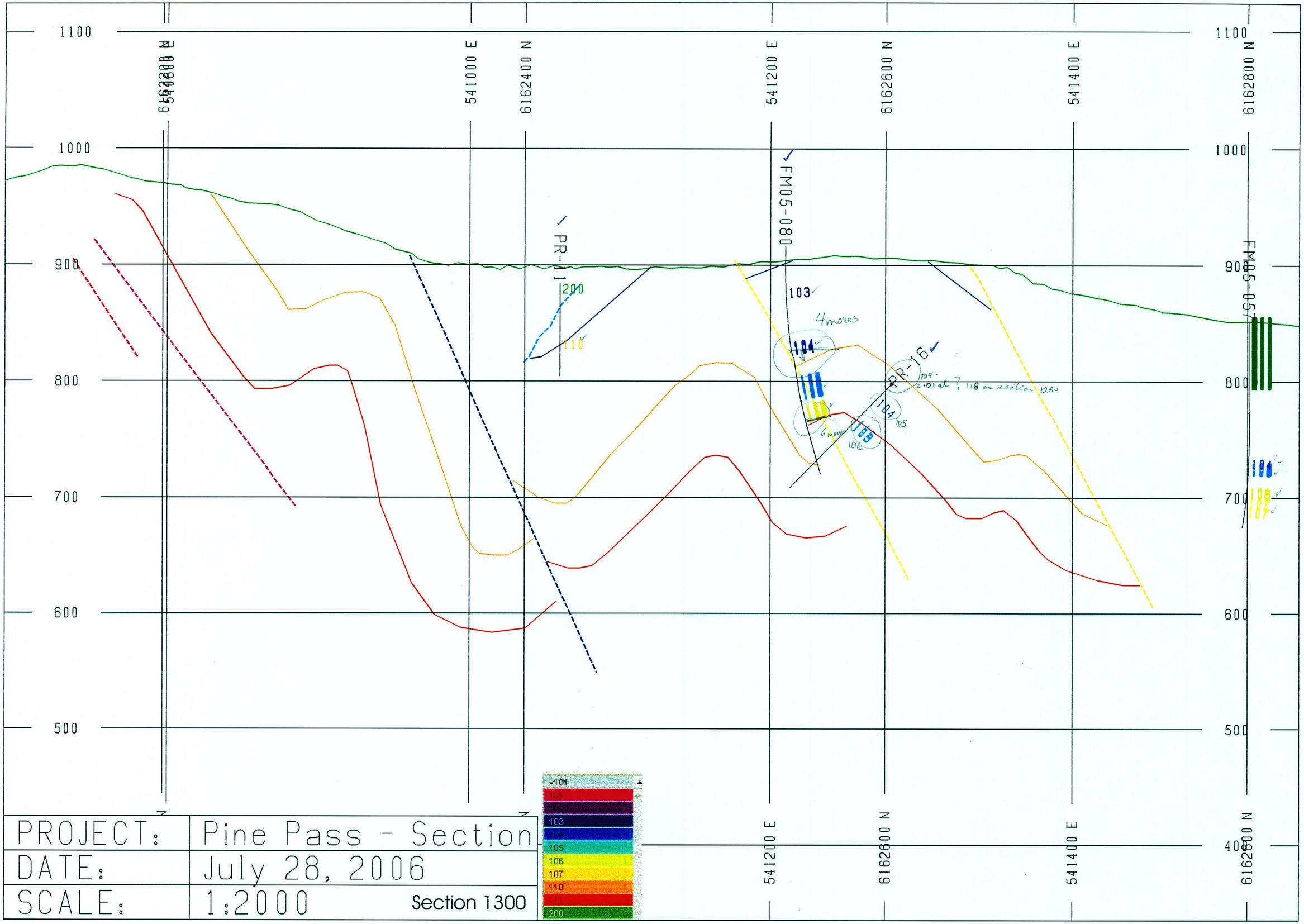
110=.01 at 25m
101=.01 at 46m
102=.01 at 65m

101=.01 at 35m
102=.01 at 49m
104 =.01 at 118m

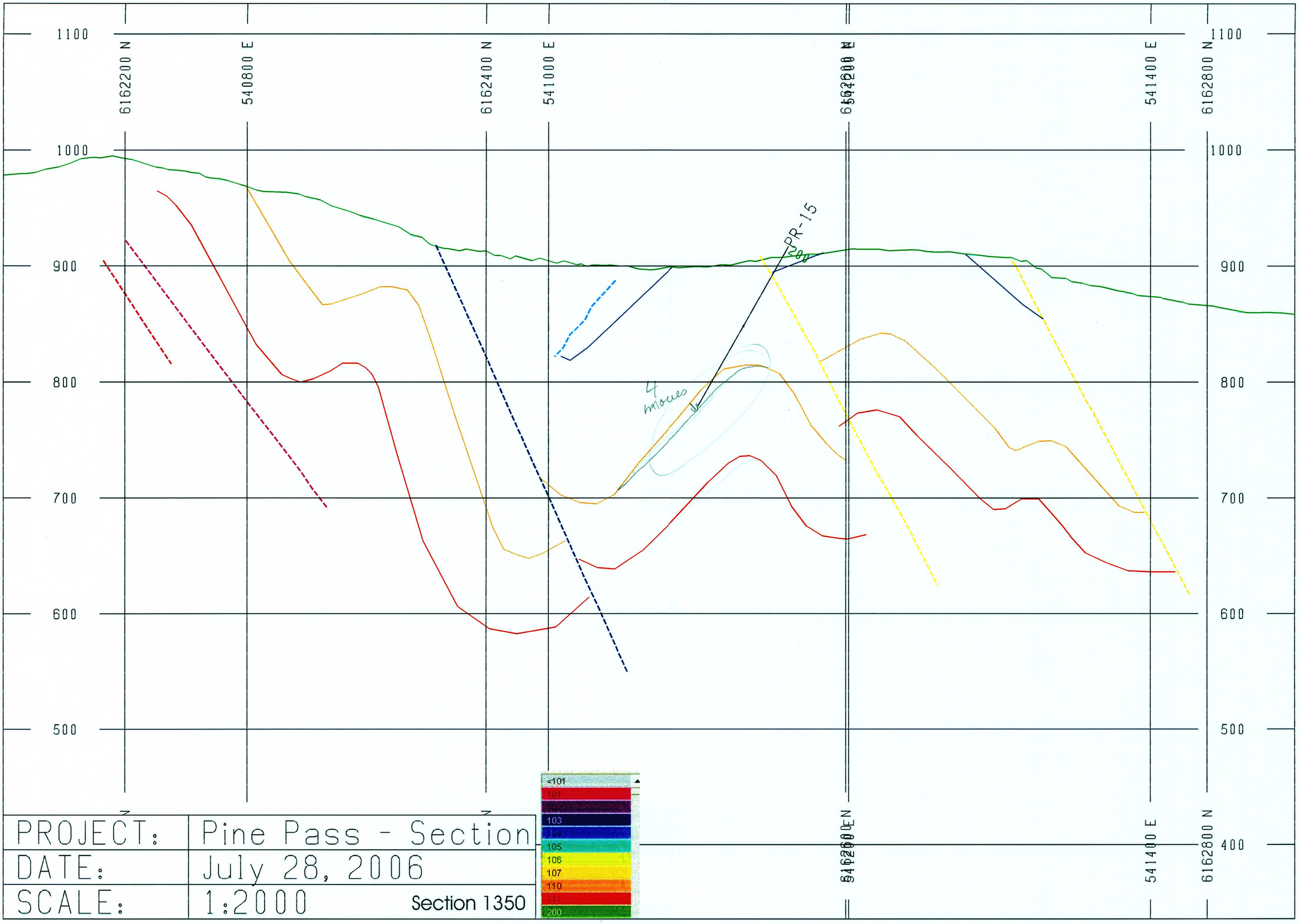
4 moves
6 moves

<101
101
102
103
104
105
106
107
110
200

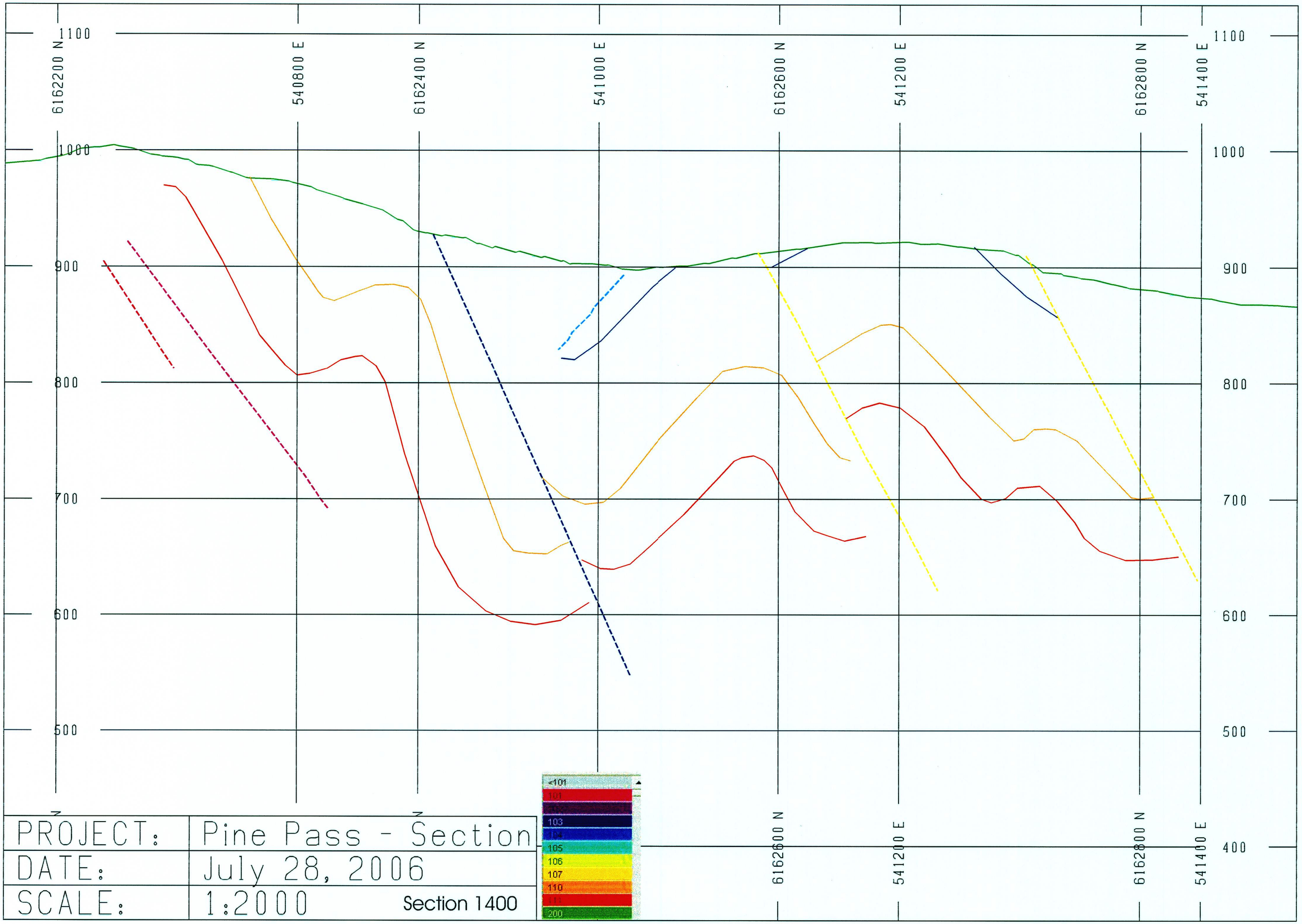
PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 1250

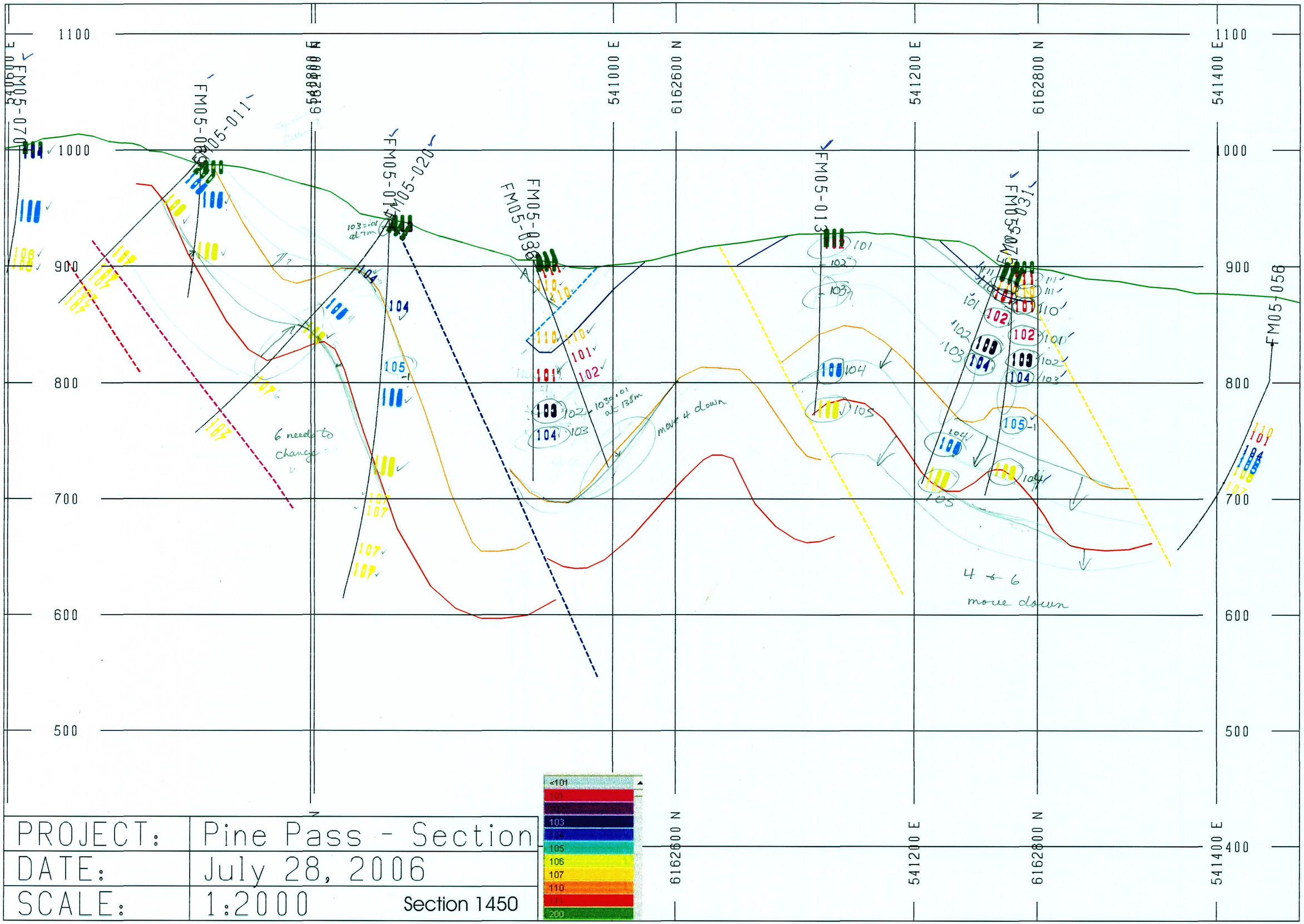


PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 1300

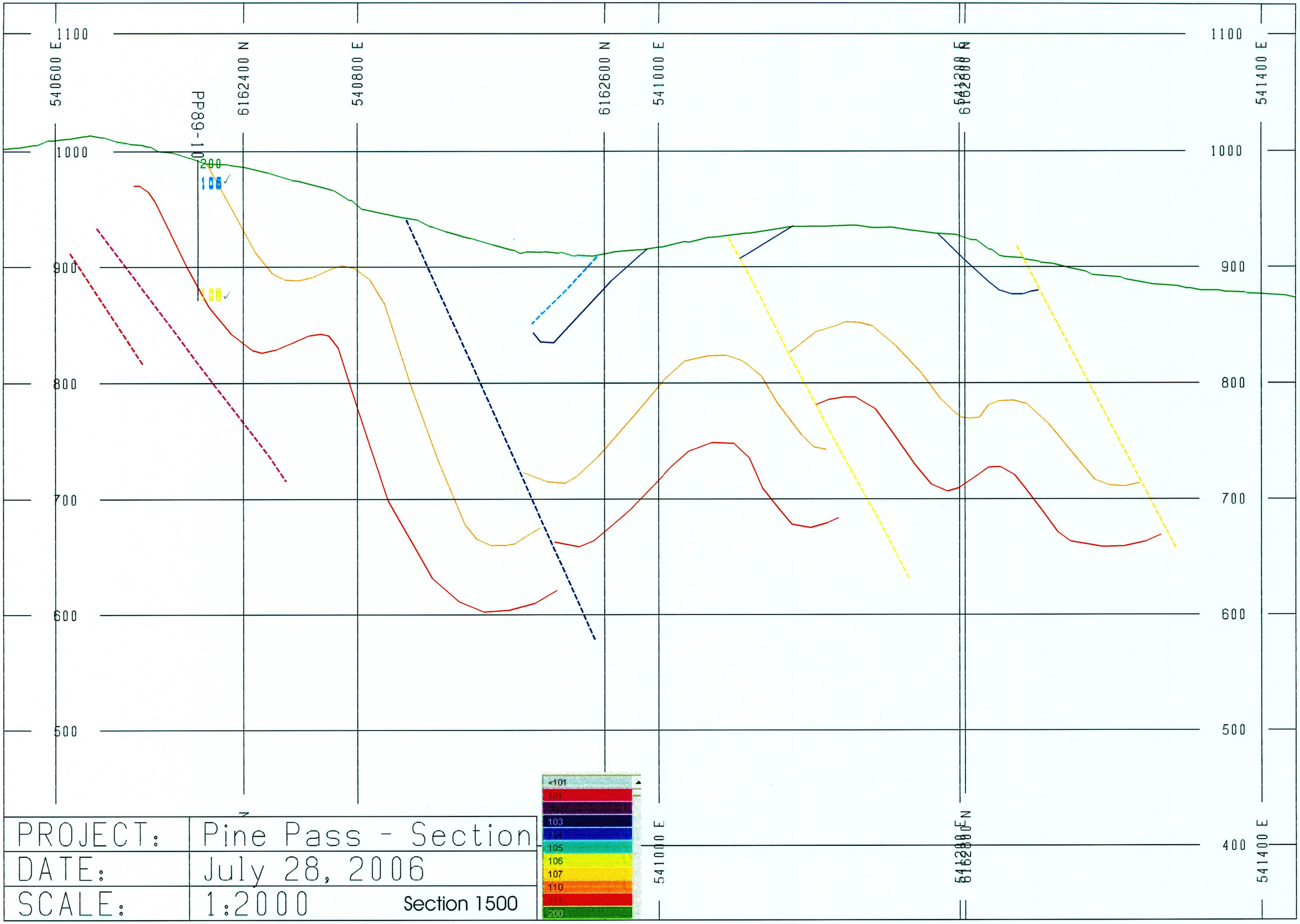


PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 1350

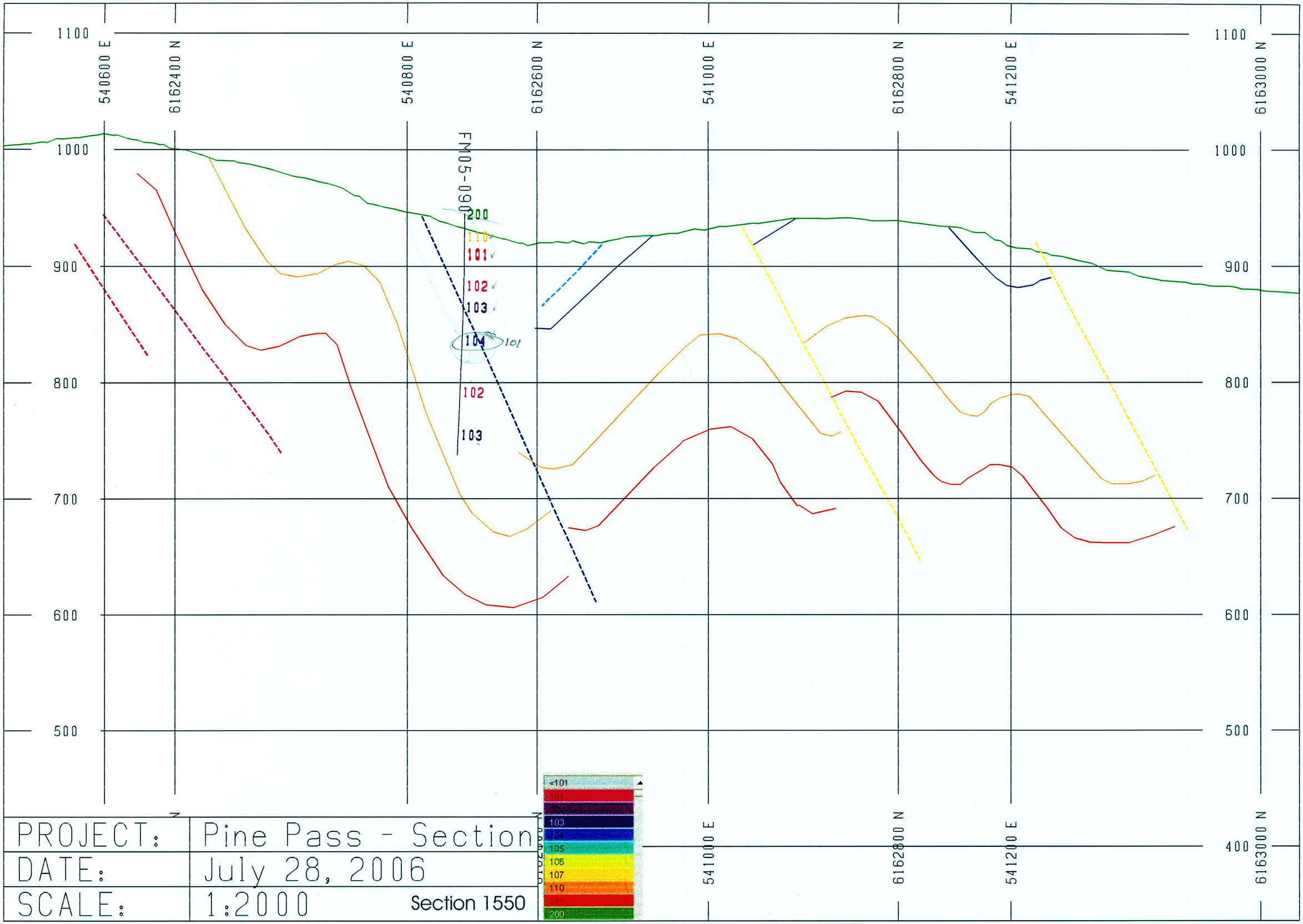

6162200 N
540800 E
6162400 N
541000 E
6162600 N
541200 E
6162800 N
541400 E
1100
1000
900
800
700
600
500
400
<101
101
103
104
105
106
107
110
200
PROJECT: Pine Pass - Section
DATE: July 28, 2006
SCALE: 1:2000
Section 1400



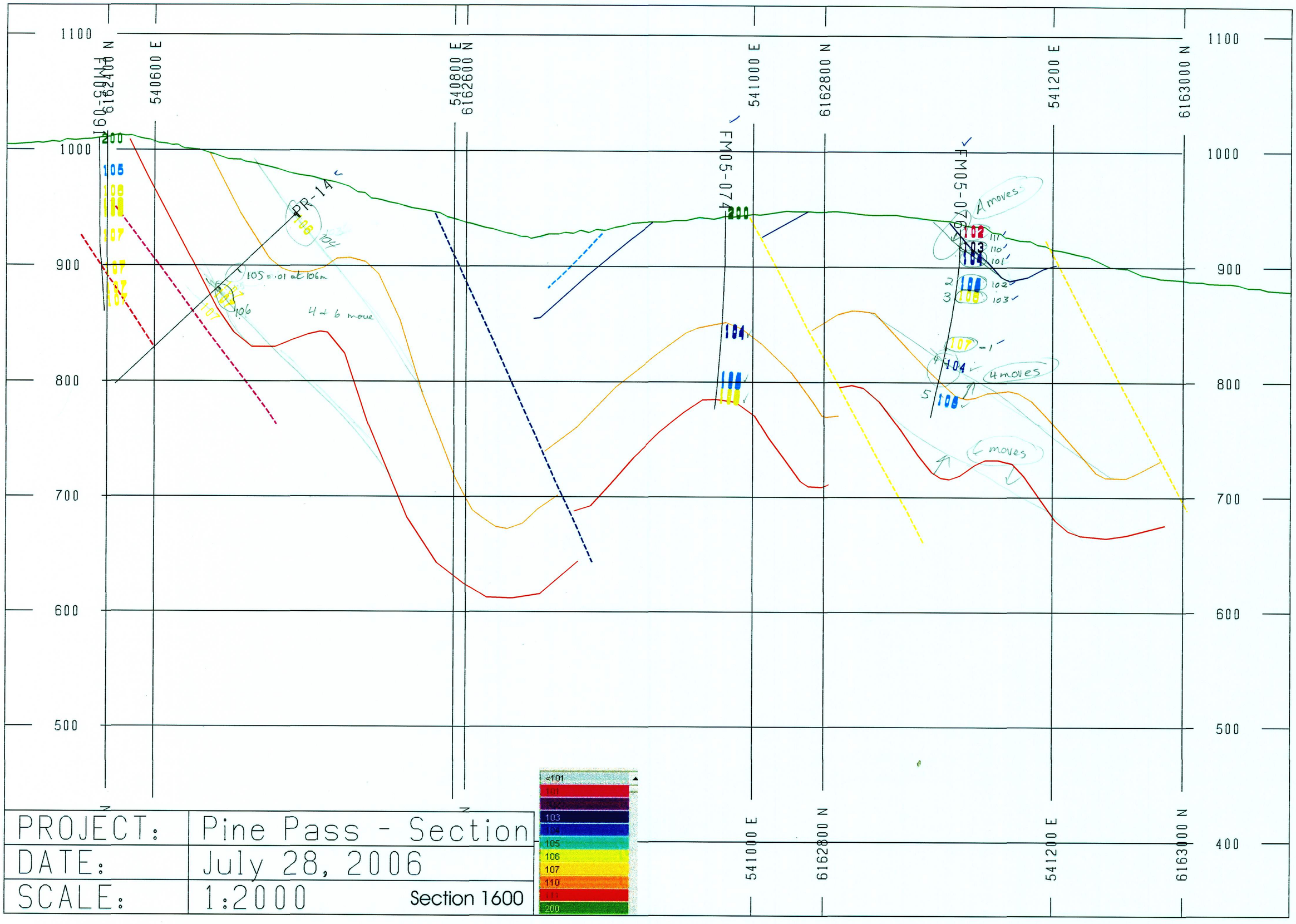
PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 1450



PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 1500

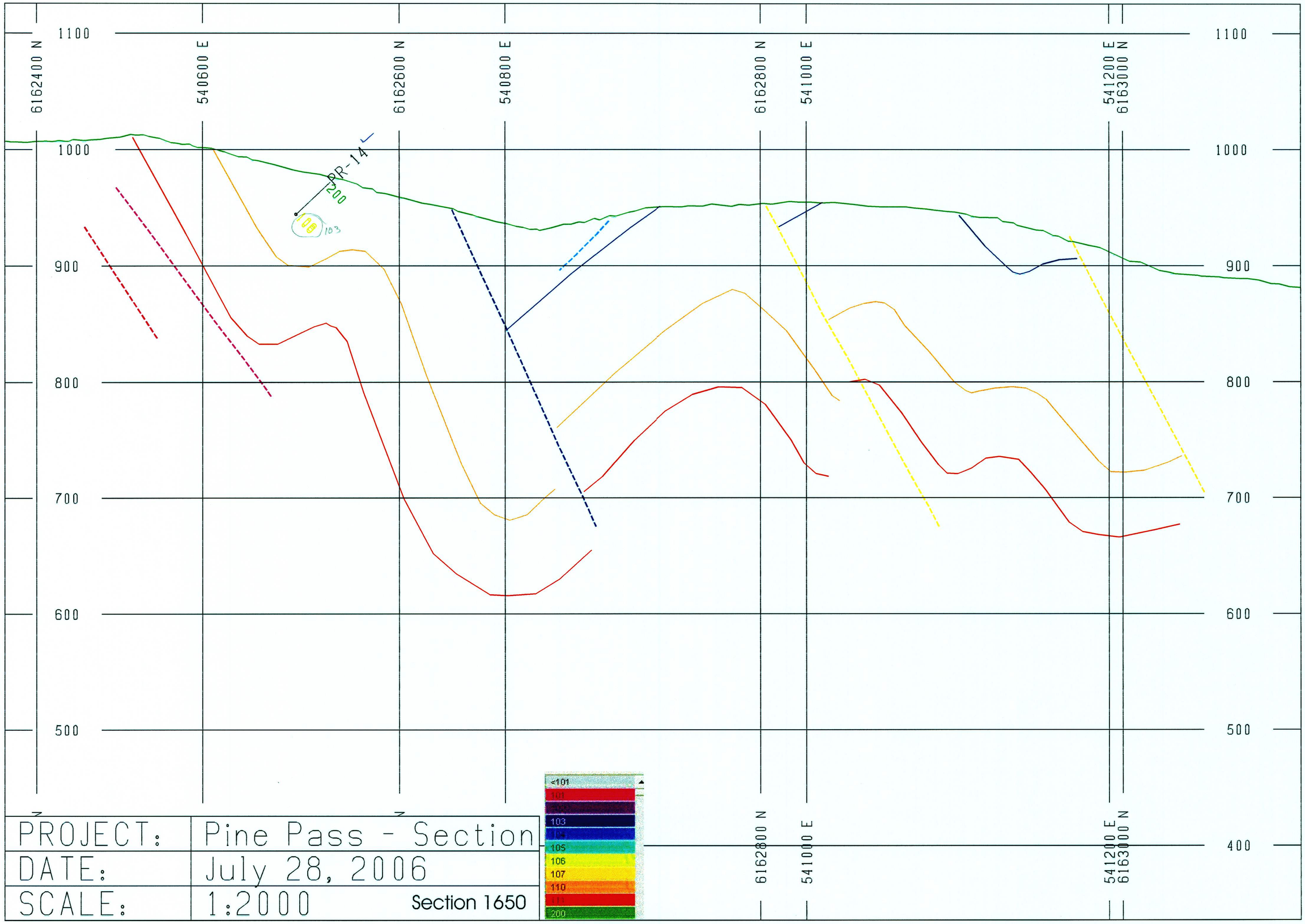


PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 1550

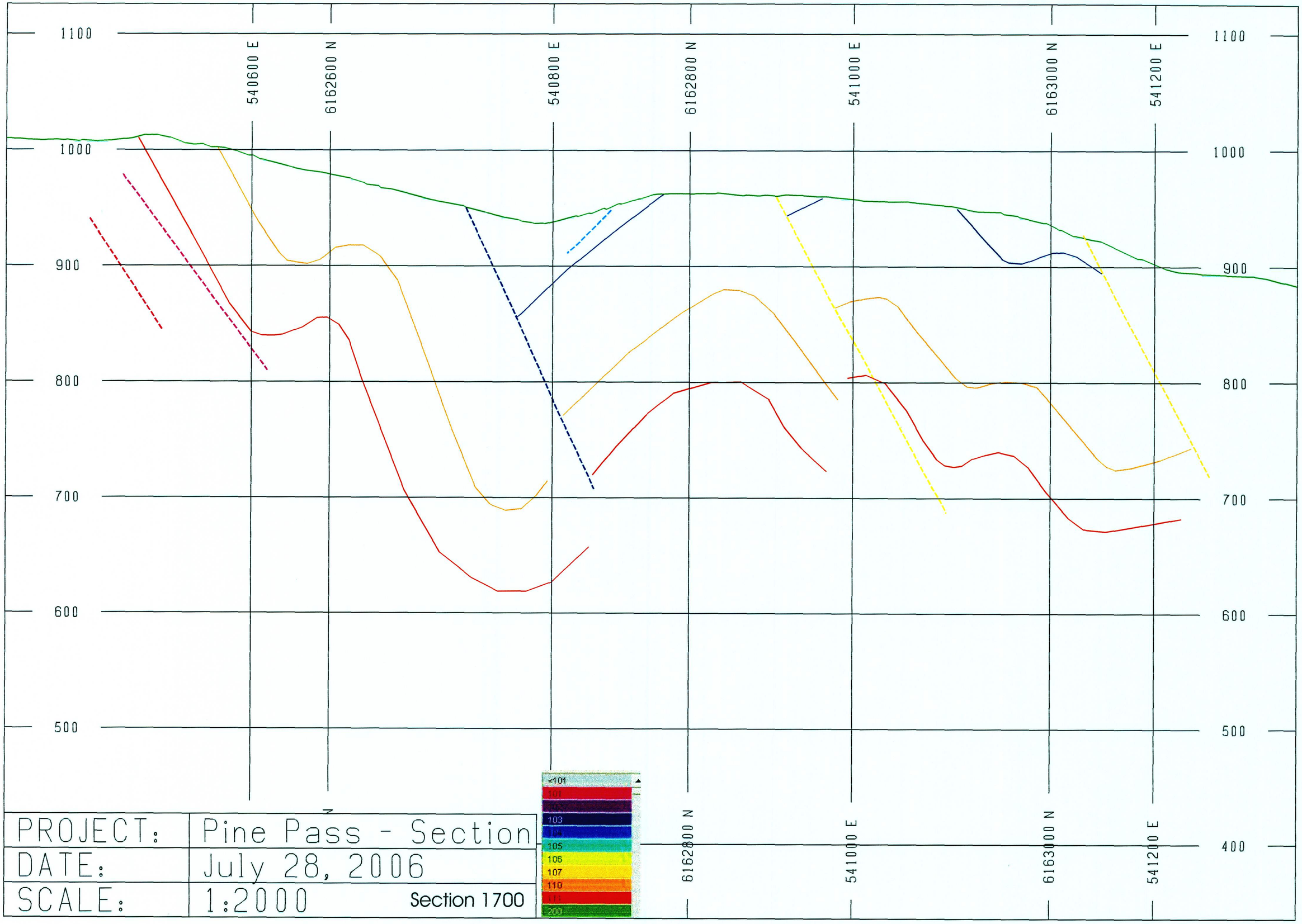


PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000

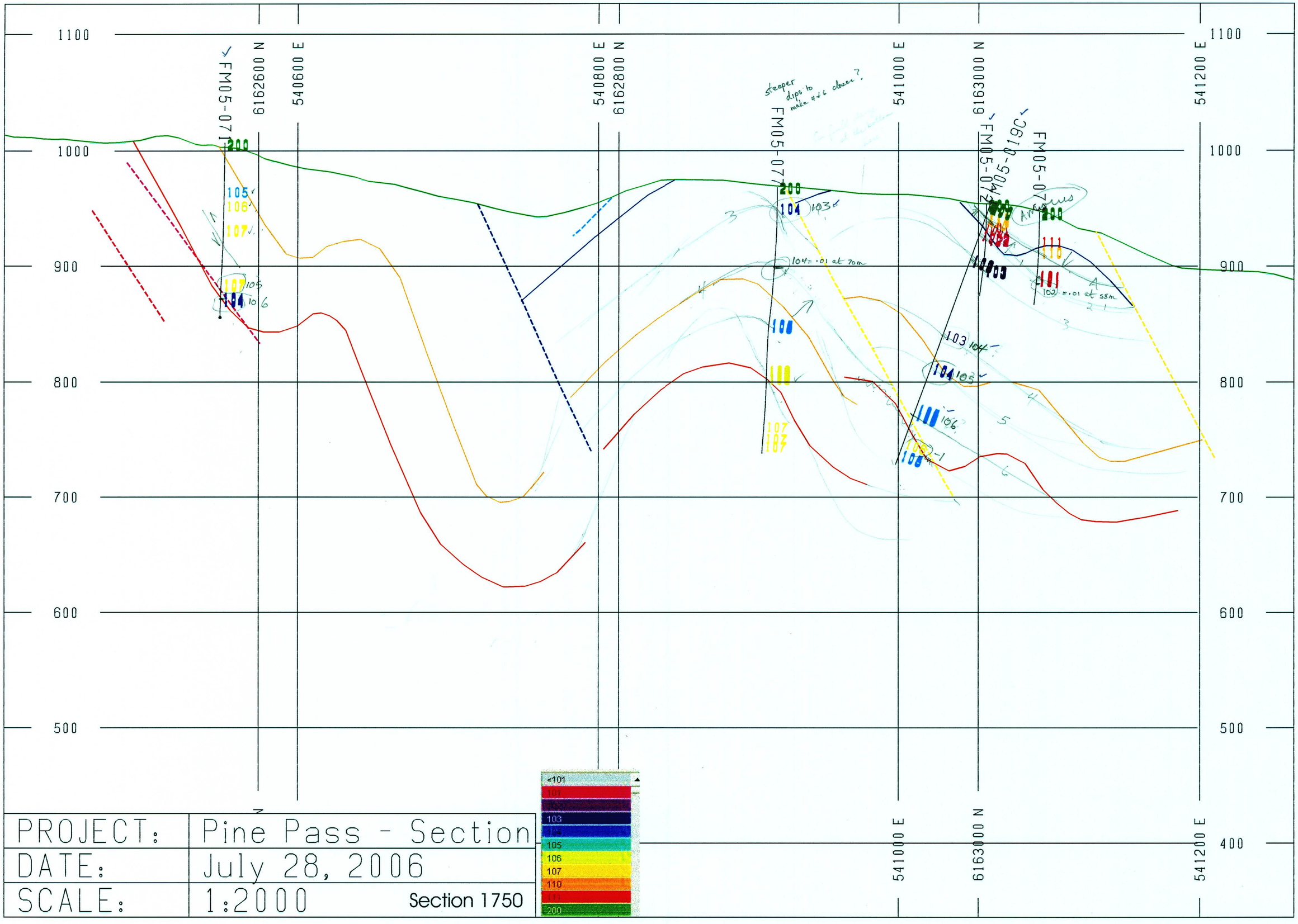
Section 1600



PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 1650

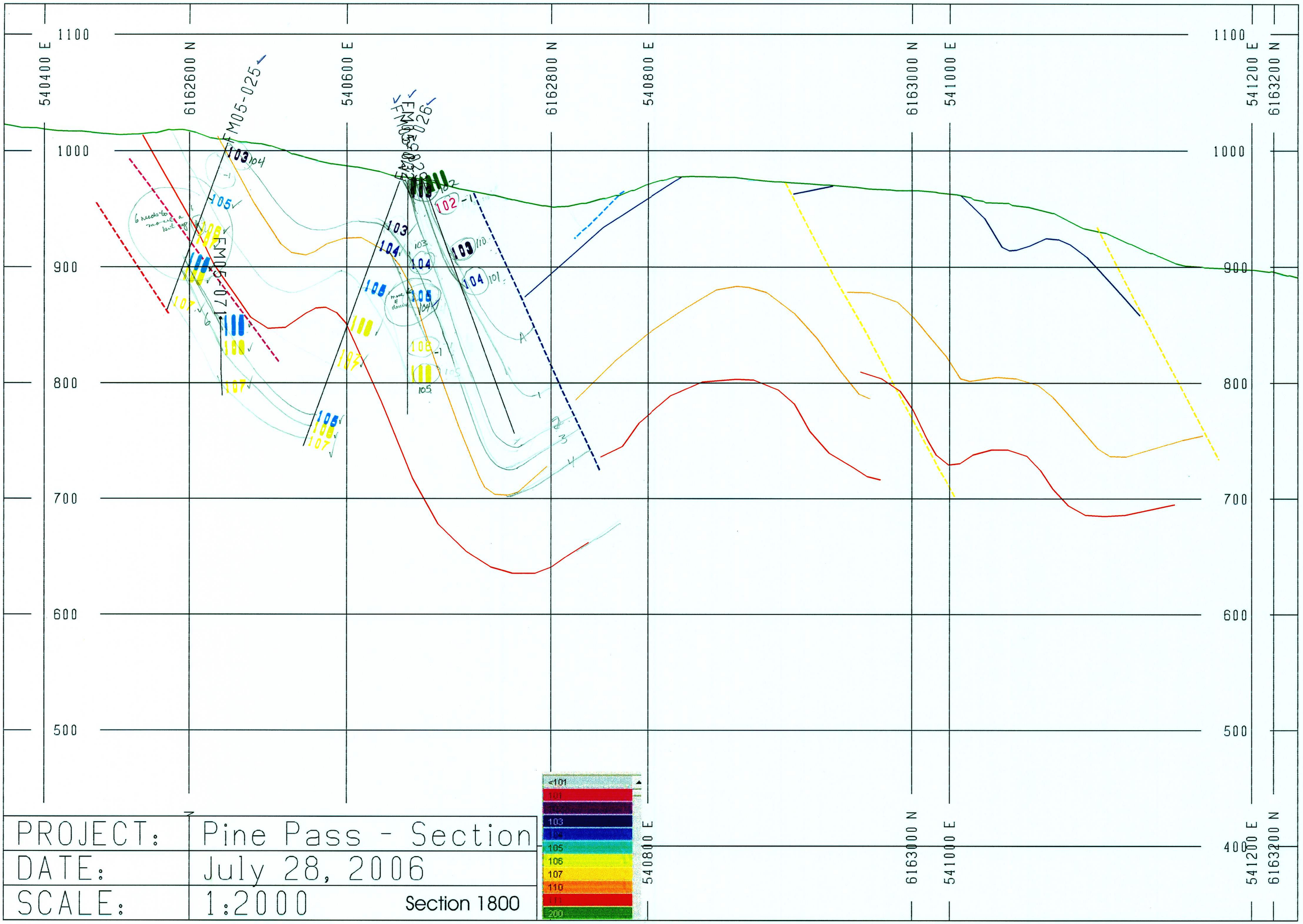


PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 1700



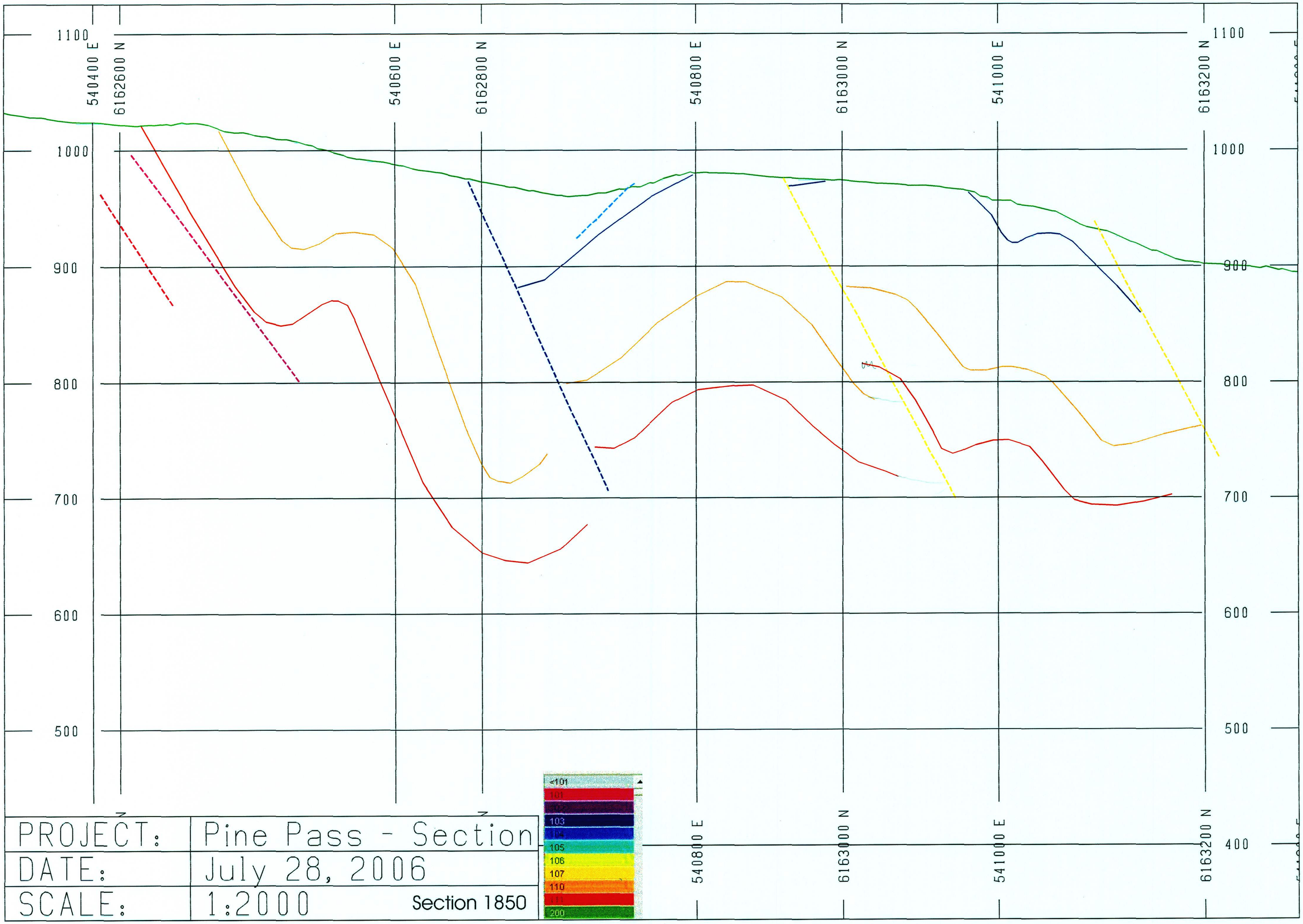
PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 1750

topo

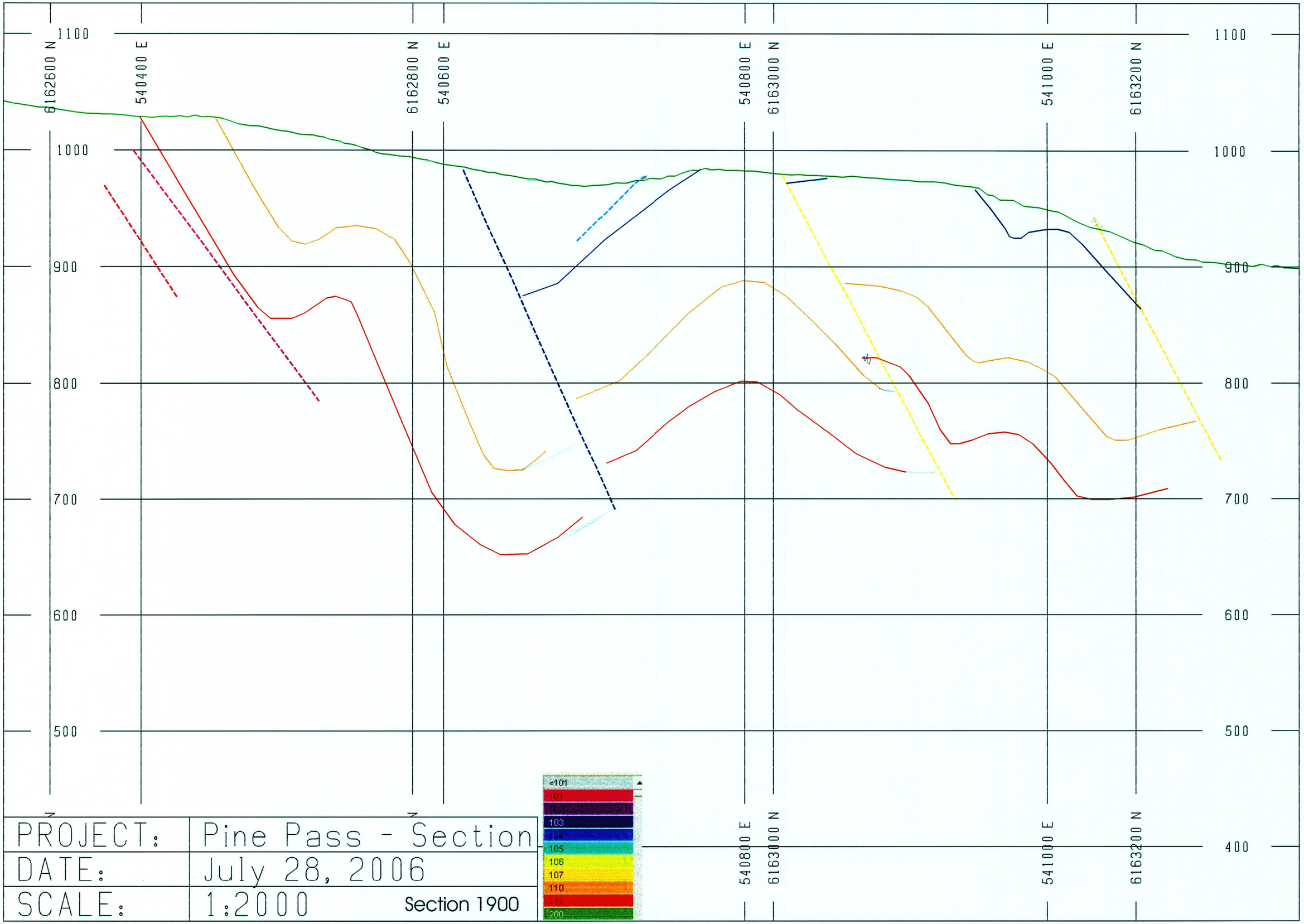


PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000

Section 1800



PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 1850



PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000

Section 1900

is fault still needed

1100
1000
900
800
700
600
500
400

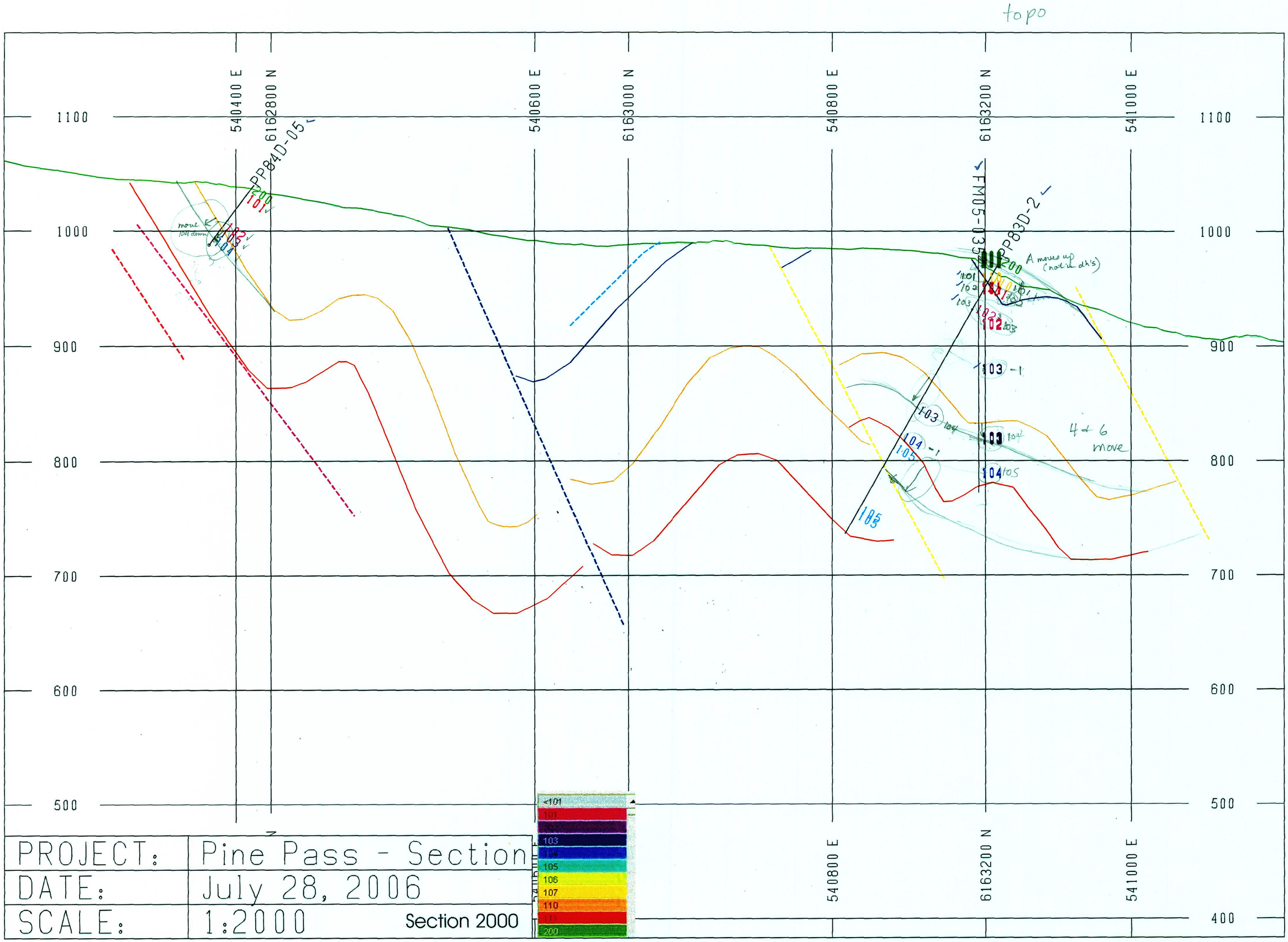
540400 E
6162800 N
540600 E
6163000 N
540800 E
6163200 N
541000 E

PP84D-05

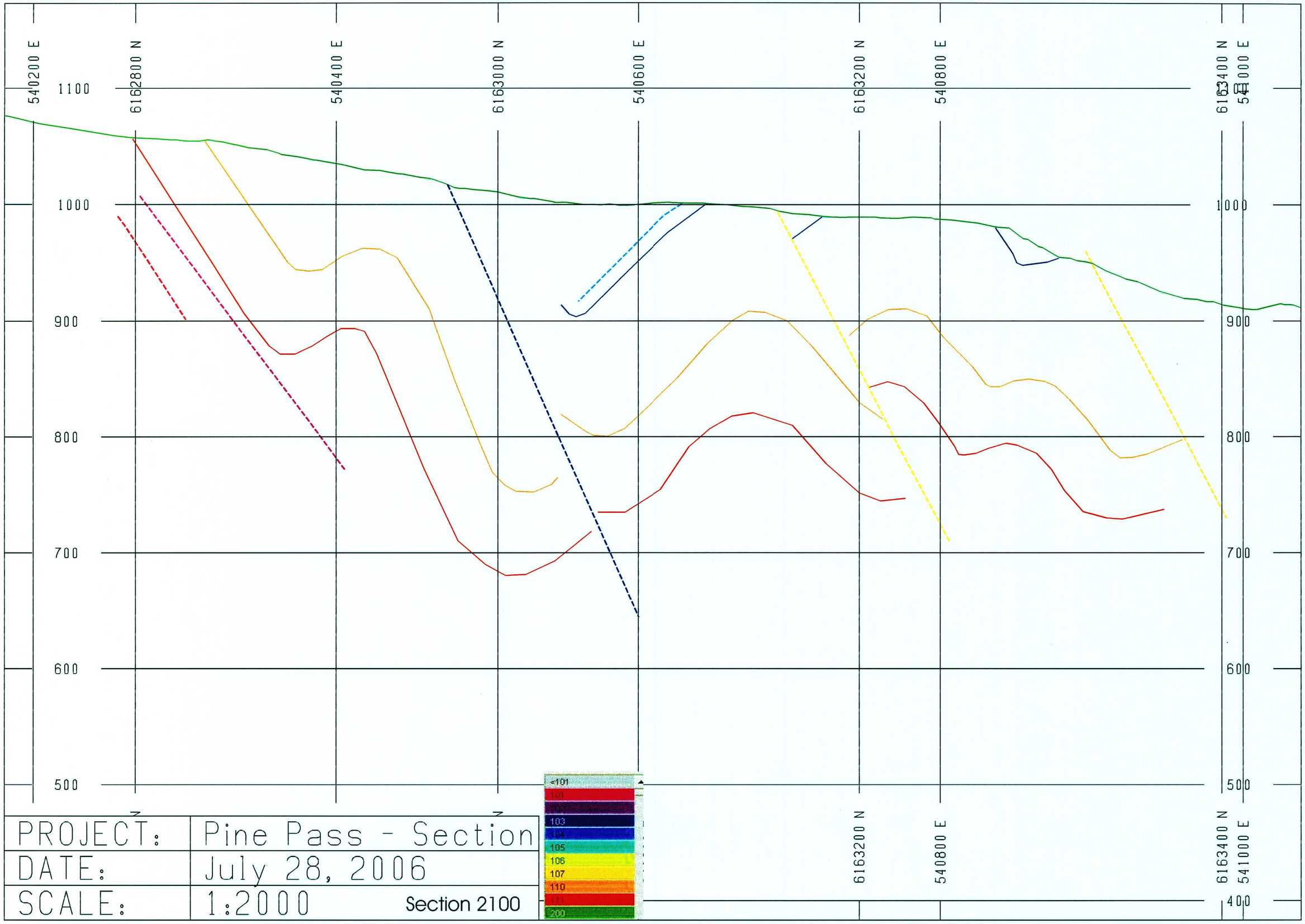
<101
101
102
103
104
105
106
107
110
111
200

PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000

Section 1950

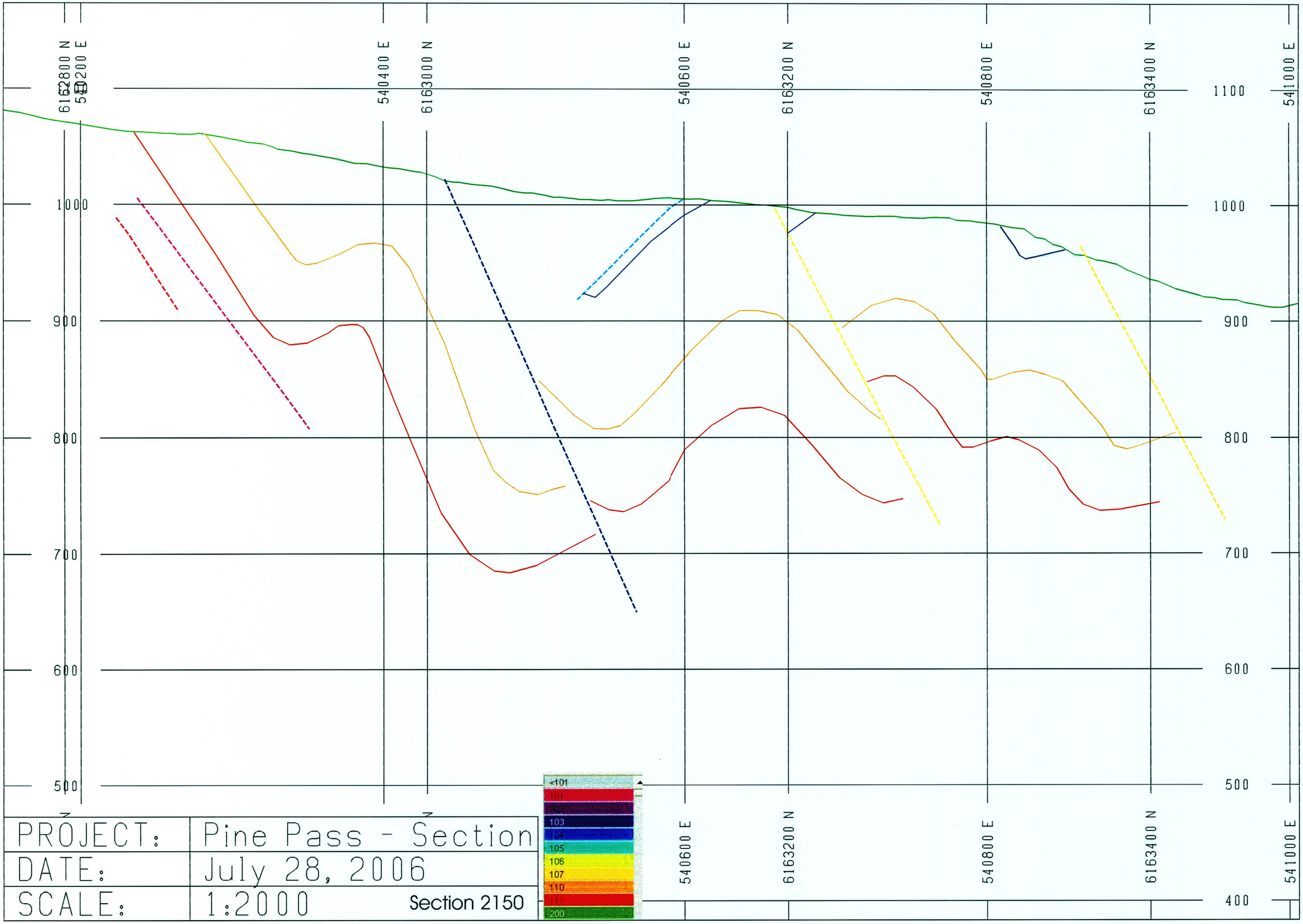

topo
540400 E
6162800 N
540600 E
6163000 N
540800 E
6163200 N
541000 E
1100
1000
900
800
700
600
500
400
PP84D-05
PP83D-2
FM05-035
A moves up (not in dh's)
4 & 6 move
PROJECT: Pine Pass - Section
DATE: July 28, 2006
SCALE: 1:2000
Section 2000
<101
101
102
103
104
105
106
107
110
111
200

PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 2050



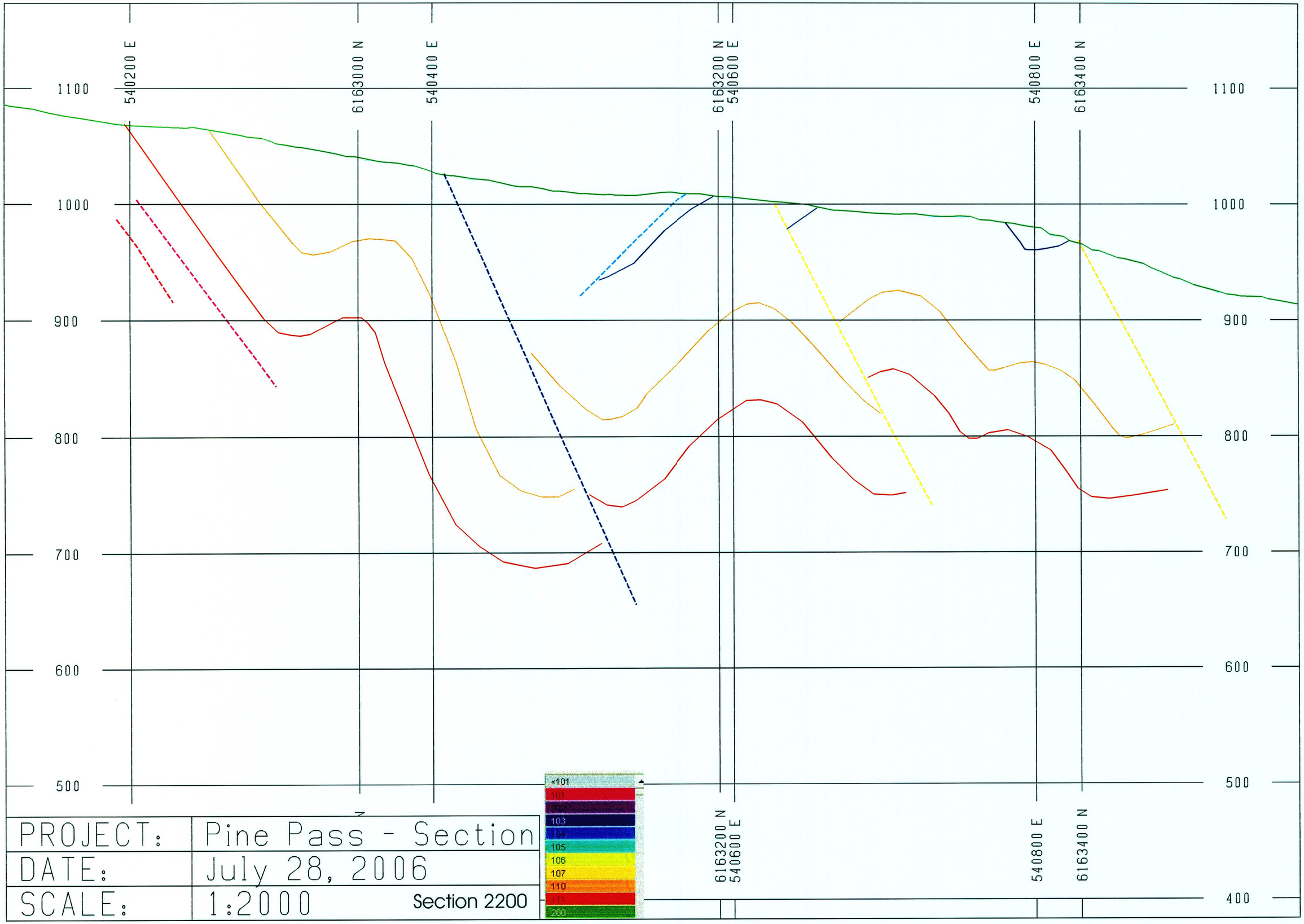
PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000

Section 2100



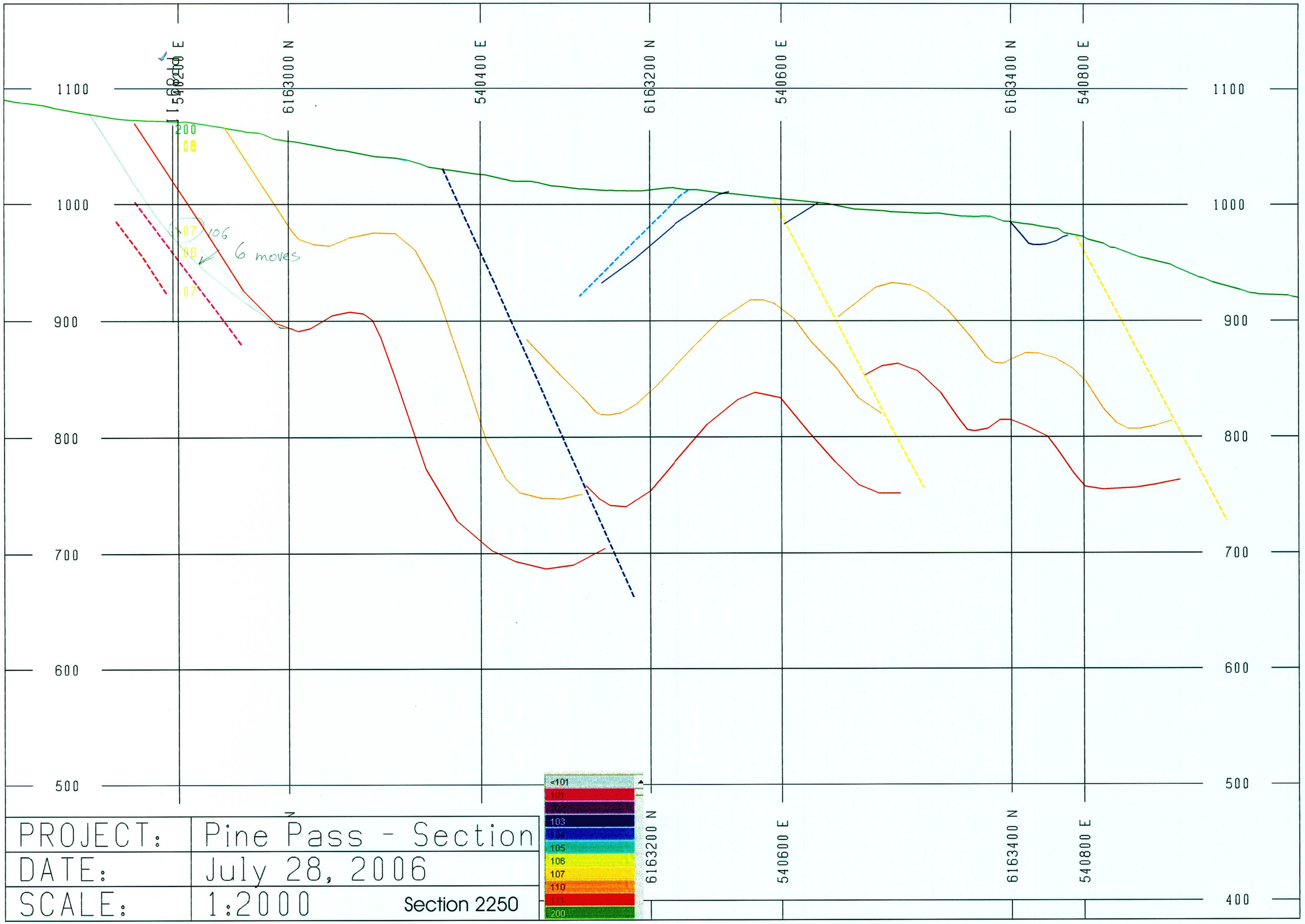
PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000

Section 2150

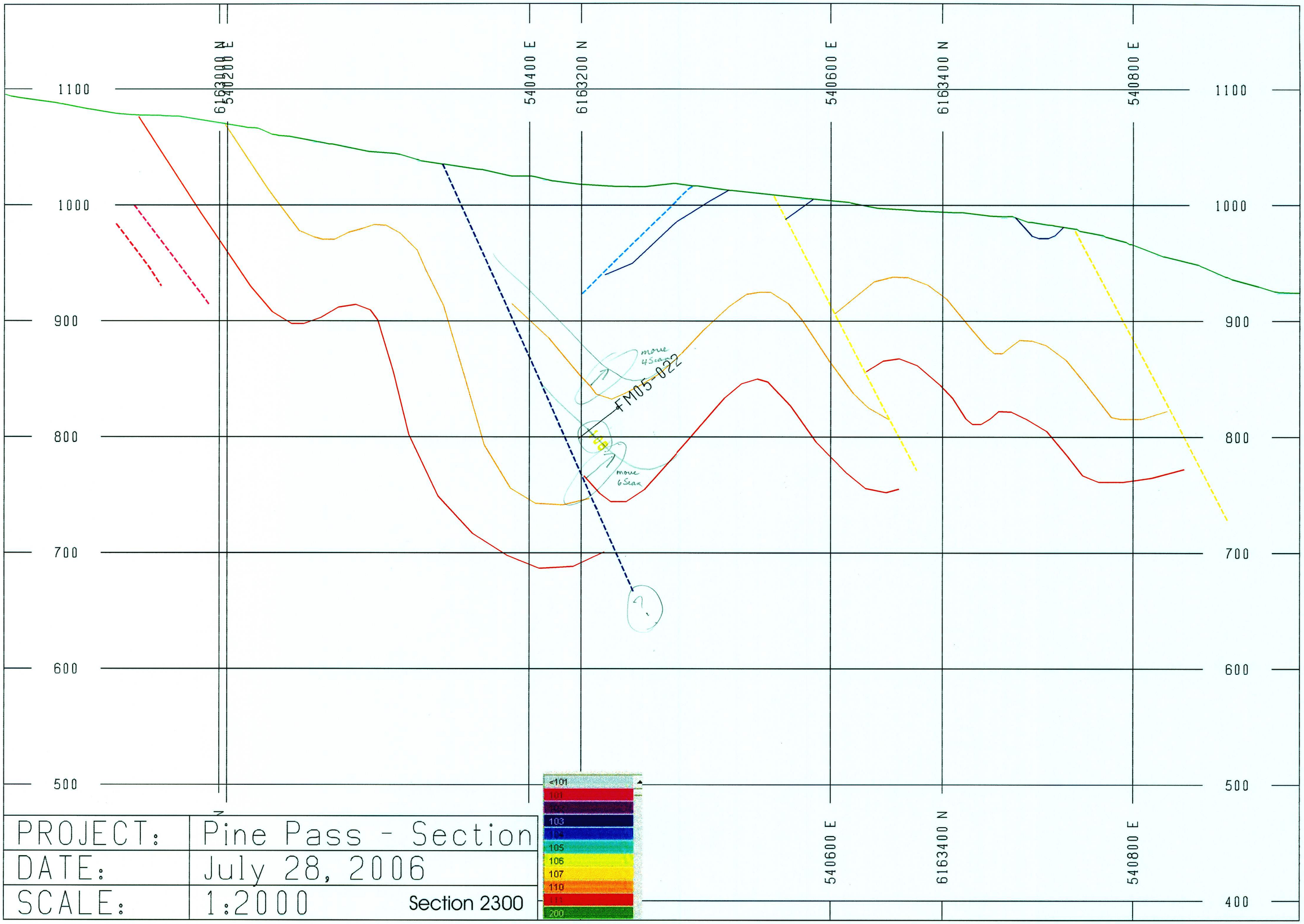


PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000

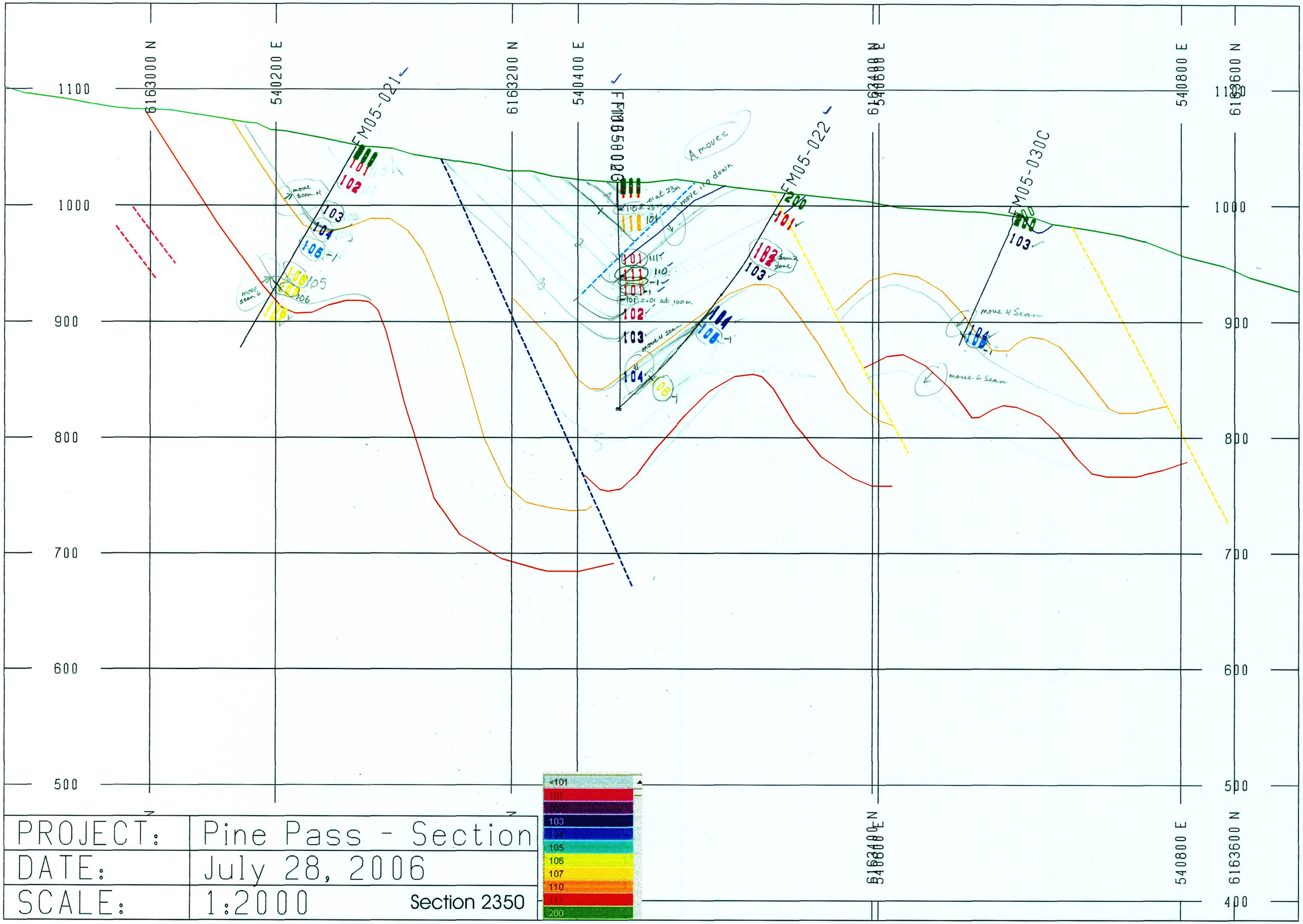
Section 2200



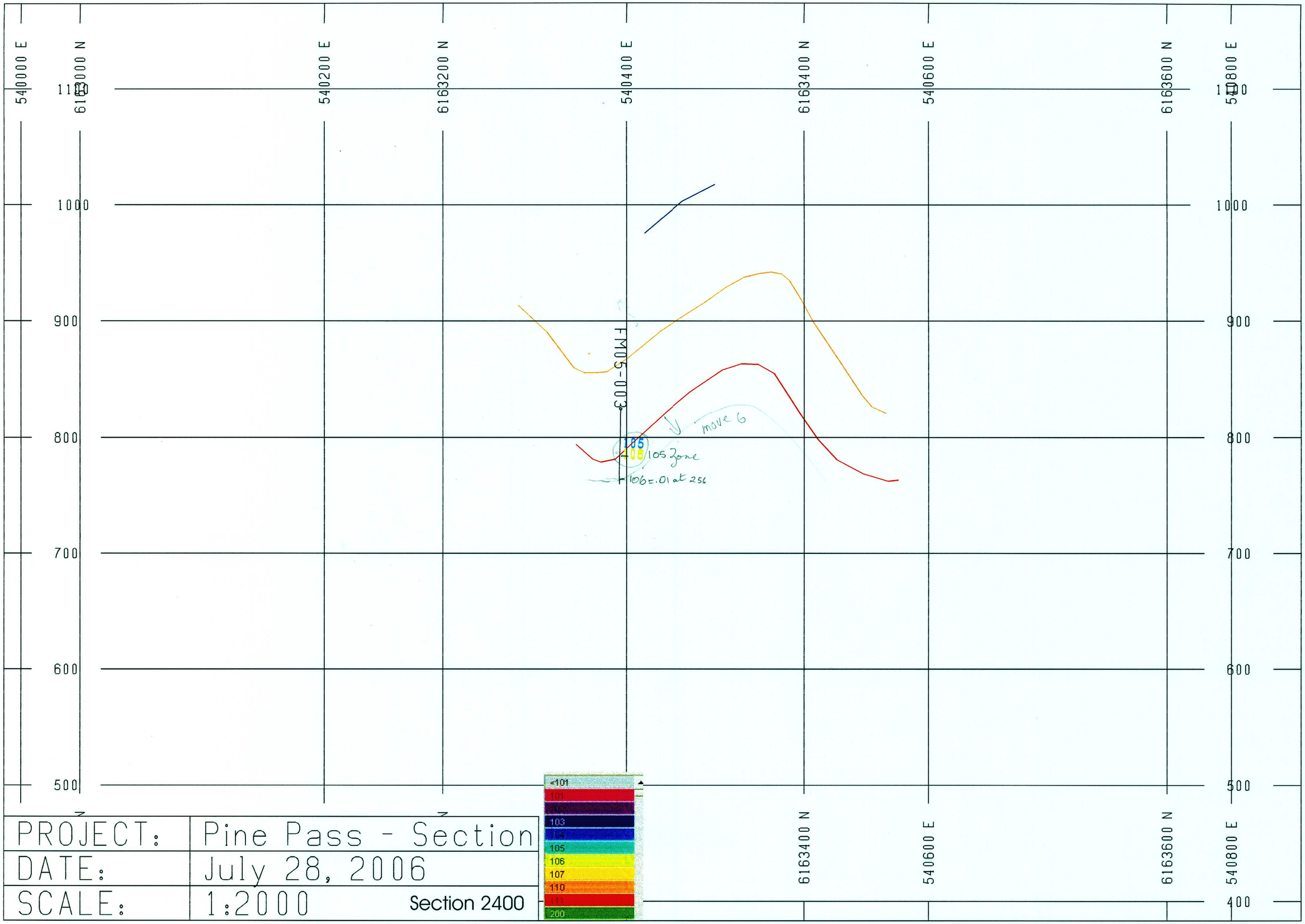
PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 2250



PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 2300

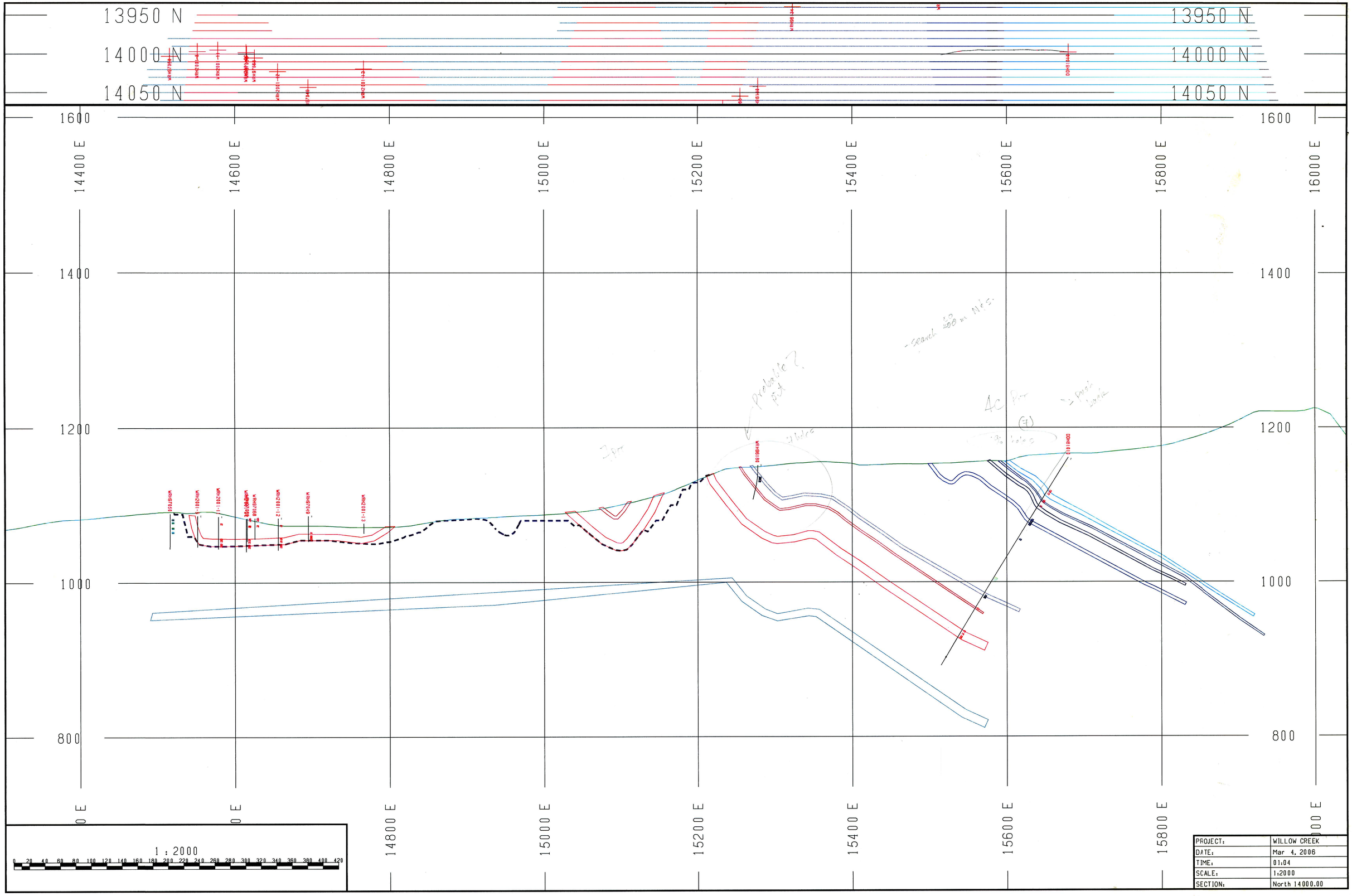


PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000 Section 2350



PROJECT:	Pine Pass - Section
DATE:	July 28, 2006
SCALE:	1:2000

Section 2400


13950 N
14000 N
14050 N
1600
1400
1200
1000
800
14400 E
14600 E
14800 E
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E
1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420
PROJECT: WILLOW CREEK
DATE: Mar 4, 2006
TIME: 01:04
SCALE: 1:2000
SECTION: North 14000.00

14050 N
14100 N
14150 N

1600
1400
1200
1000
800

14400 E
14600 E
14800 E
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E

1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:04
SCALE:	1:2000
SECTION:	North 14100.00

14150 N
14200 N
14250 N

1600
1400
1200
1000
800

14400 E
14600 E
14800 E
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E

1 : 2000

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:04
SCALE:	1:2000
SECTION:	North 14200.00

14250 N
14300 N
14350 N

1600
1400
1200
1000
800

14400 E
14600 E
14800 E
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E

1 : 2000

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:04
SCALE:	1:2000
SECTION:	North 14300.00

14350 N
14400 N
14450 N
1600
1400
1200
1000
800
14400 E
14600 E
14800 E
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E
WRH2001-15
WRH2001-7C
WRH97067
WRH2001-16
WRH96227
WRH96183
WC05-27
WC05-26
WC05-04
WC05-12
WC05-15
DDH81044
WRH96229
DDH81009
1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420
PROJECT: WILLOW CREEK
DATE: Mar 4, 2006
TIME: 01:04
SCALE: 1:2000
SECTION: North 14400.00

14450 N
14500 N
14550 N
1600
1400
1200
1000
800
14400 E
14600 E
14800 E
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E

1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:04
SCALE:	1:2000
SECTION:	North 14500.00

14550 N

14600 N

14650 N

1600

1400

1200

1000

800

14400 E

14600 E

14800 E

15000 E

15200 E

15400 E

15600 E

15800 E

16000 E

1 : 2000

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:04
SCALE:	1:2000
SECTION:	North 14600.00

14650 N

14700 N

14750 N

14650 N

14700 N

14750 N

1600

1400

1200

1000

800

14400 E

14600 E

14800 E

15000 E

15200 E

15400 E

15600 E

15800 E

16000 E

1 : 2000

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:06
SCALE:	1:2000
SECTION:	North 14700.00

14750 N
14800 N
14850 N

1600
1400
1200
1000
800

14400 E
14600 E
14800 E
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E

1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:06
SCALE:	1:2000
SECTION:	North 14800.00

14850 N
14900 N
14950 N

1600
1400
1200
1000
800

14400 E
14600 E
14800 E
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E

1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:06
SCALE:	1:2000
SECTION:	North 14900.00

14950 N

15000 N

15050 N

1600

1400

1200

1000

800

14400 E

14600 E

14800 E

15000 E

15200 E

15400 E

15600 E

15800 E

16000 E

1 : 2000

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:06
SCALE:	1:2000
SECTION:	North 15000.00

15050 N
15100 N
15150 N

14600 E
14800 E
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E

1400
1200
1000
800
600

1 : 2000

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

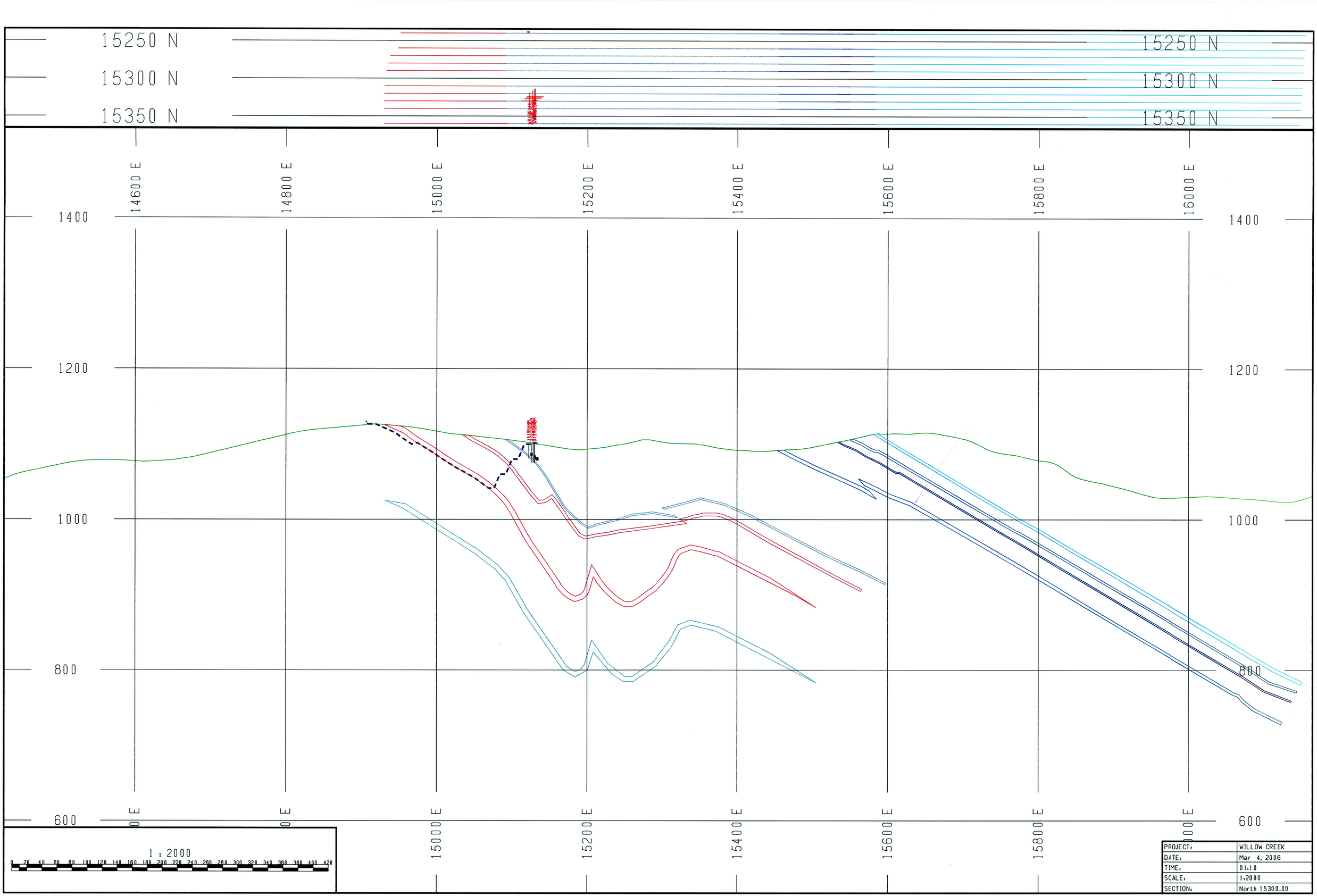
PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:10
SCALE:	1:2000
SECTION:	North 15100.00

15150 N
15200 N
15250 N
WRH961006
WRH962
WRH9621IC
DDH81014
DDH81038
DDH81013
DDH81029
14600 E
14800 E
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E
1400
1200
1000
800
600
4 pit
1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420
PROJECT:
WILLOW CREEK
DATE:
Mar 4, 2006
TIME:
01:10
SCALE:
1:2000
SECTION:
North 15200.00

15250 N
15300 N
15350 N

14600 E
14800 E
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E

1400
1200
1000
800
600



1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:10
SCALE:	1:2000
SECTION:	North 15300.00

15350 N
15400 N
15450 N

14600 E
14800 E
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E

1400
1200
1000
800
600

1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:10
SCALE:	1:2000
SECTION:	North 15400.00

15450 N

15500 N

15550 N

14600 E

14800 E

15000 E

15200 E

15400 E

15600 E

15800 E

16000 E

1400

1200

1000

800

600

1 : 2000

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:10
SCALE:	1:2000
SECTION:	North 15500.00

15550 N

15600 N

15650 N

14600 E

14800 E

15000 E

15200 E

15400 E

15600 E

15800 E

16000 E

1400

1200

1000

800

600

1 : 2000

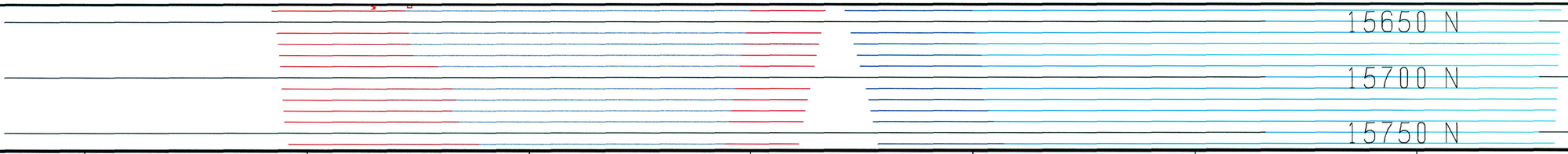
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:10
SCALE:	1:2000
SECTION:	North 15600.00

15650 N

15700 N

15750 N



15650 N

15700 N

15750 N

14600 E | 14800 E | 15000 E | 15200 E | 15400 E | 15600 E | 15800 E | 16000 E

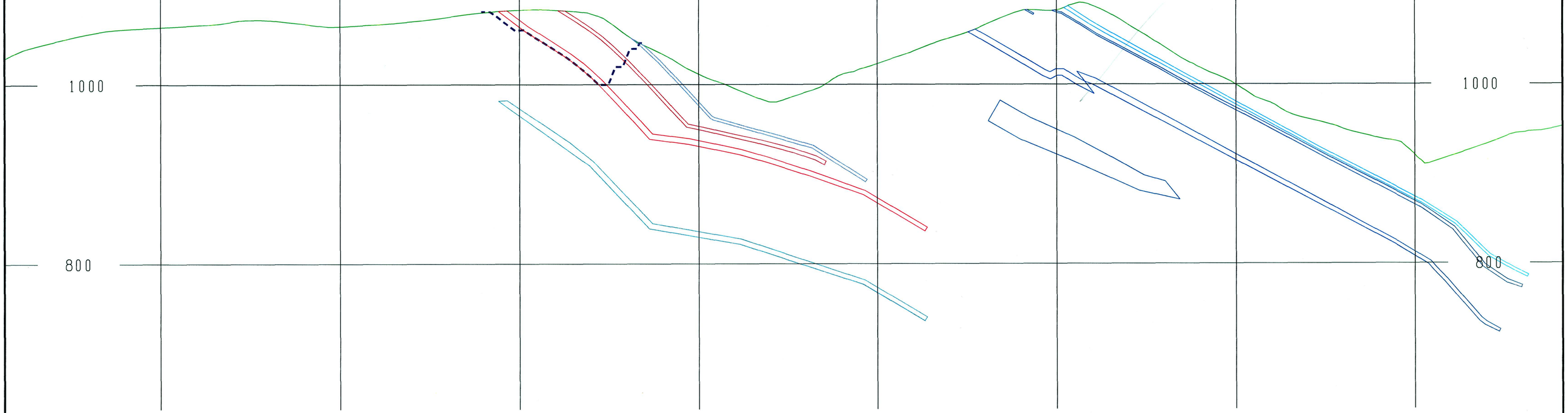
1400

1200

1000

800

600



1 : 2000

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:10
SCALE:	1:2000
SECTION:	North 15700.00

15750 N
15800 N
15850 N

14600 E
14800 E
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E

1400
1200
1000
800
600

1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:10
SCALE:	1:2000
SECTION:	North 15800.00

15850 N

15900 N

15950 N

14600 E

14800 E

15000 E

15200 E

15400 E

15600 E

15800 E

16000 E

1400

1200

1000

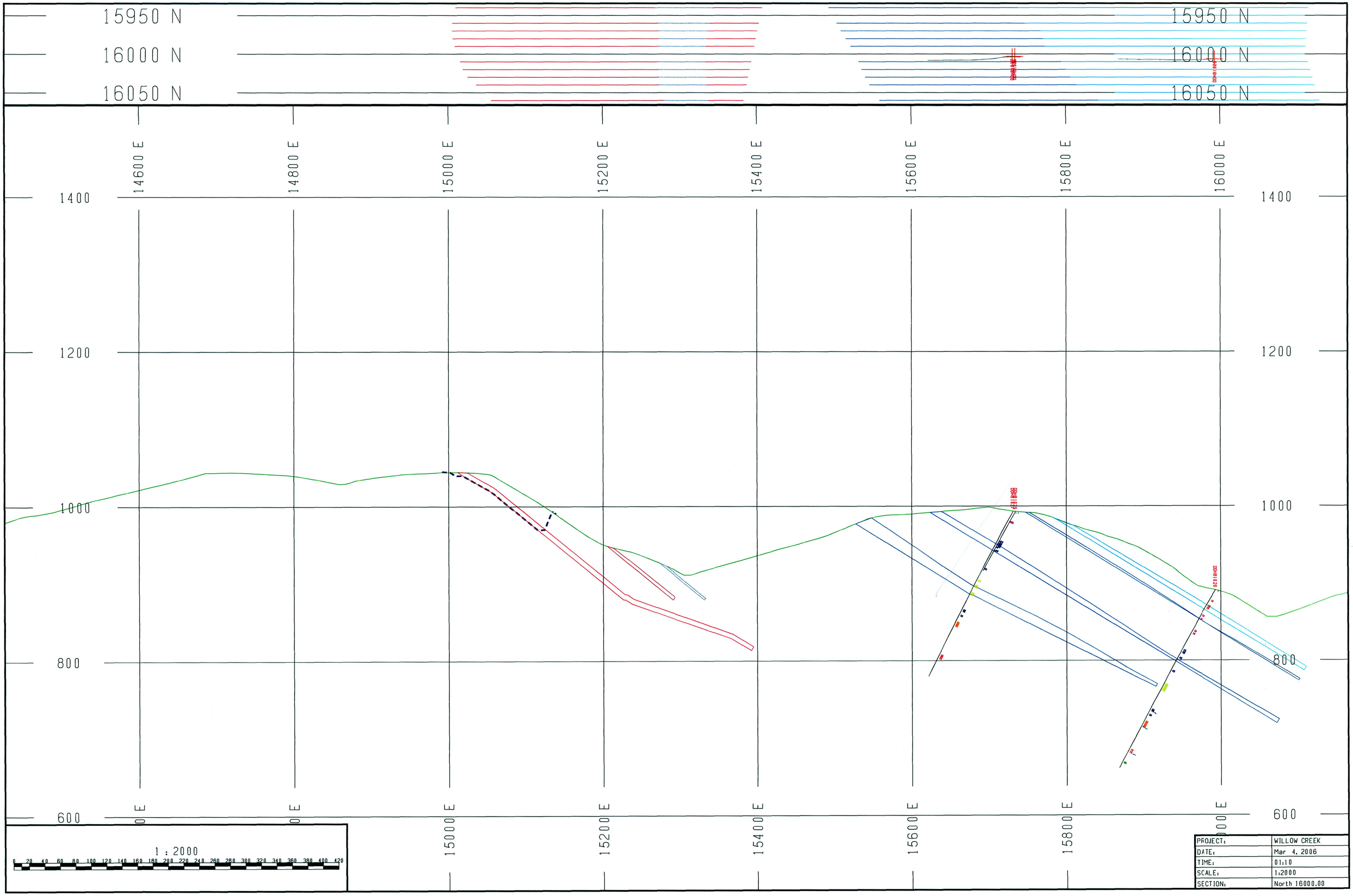
800

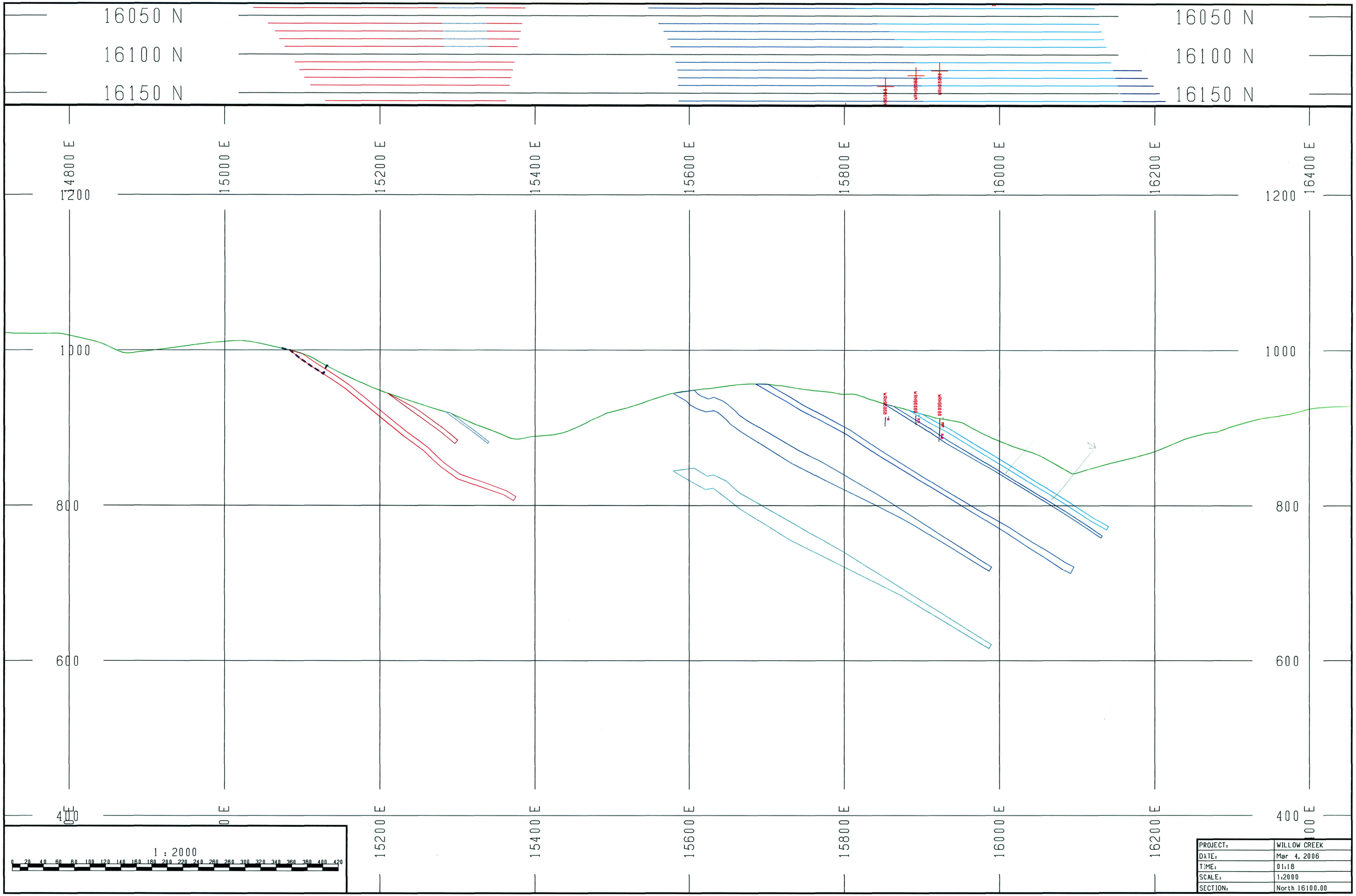
600

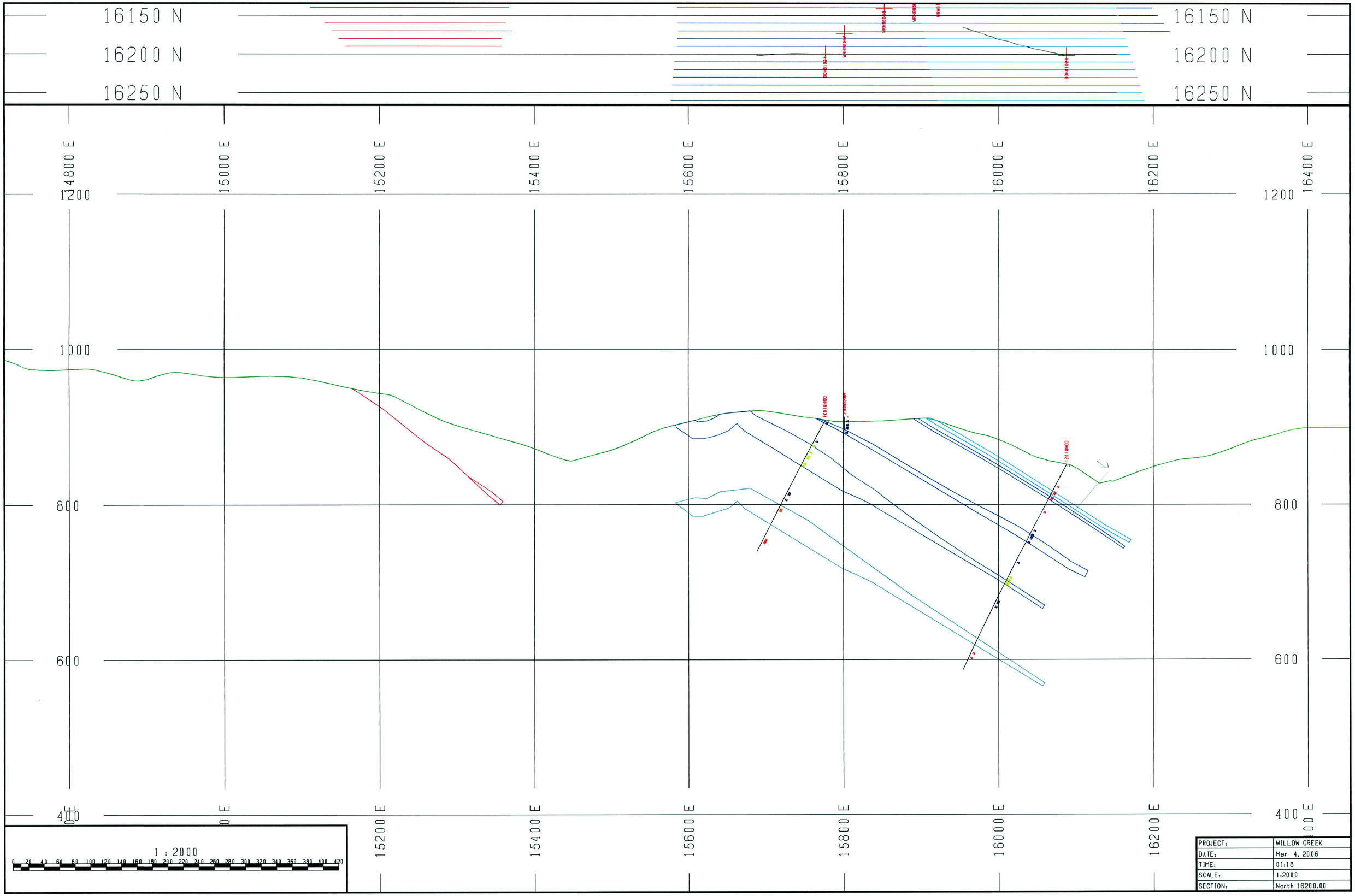
1 : 2000

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:10
SCALE:	1:2000
SECTION:	North 15900.00


15950 N
16000 N
16050 N
14600 E
14800 E
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E
1400
1200
1000
800
600
1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420
PROJECT: WILLOW CREEK
DATE: Mar 4, 2006
TIME: 01:10
SCALE: 1:2000
SECTION: North 16000.00


16050 N
16100 N
16150 N
14800 E
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E
16200 E
16400 E
1200
1000
800
600
400
1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420
PROJECT: WILLOW CREEK
DATE: Mar 4, 2006
TIME: 01:18
SCALE: 1:2000
SECTION: North 16100.00


16150 N
16200 N
16250 N
14800 E
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E
16200 E
16400 E
1200
1000
800
600
400
1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420
PROJECT: WILLOW CREEK
DATE: Mar 4, 2006
TIME: 01:18
SCALE: 1:2000
SECTION: North 16200.00

16250 N

16300 N

16350 N

14800 E

15000 E

15200 E

15400 E

15600 E

15800 E

16000 E

16200 E

16400 E

1200

1000

800

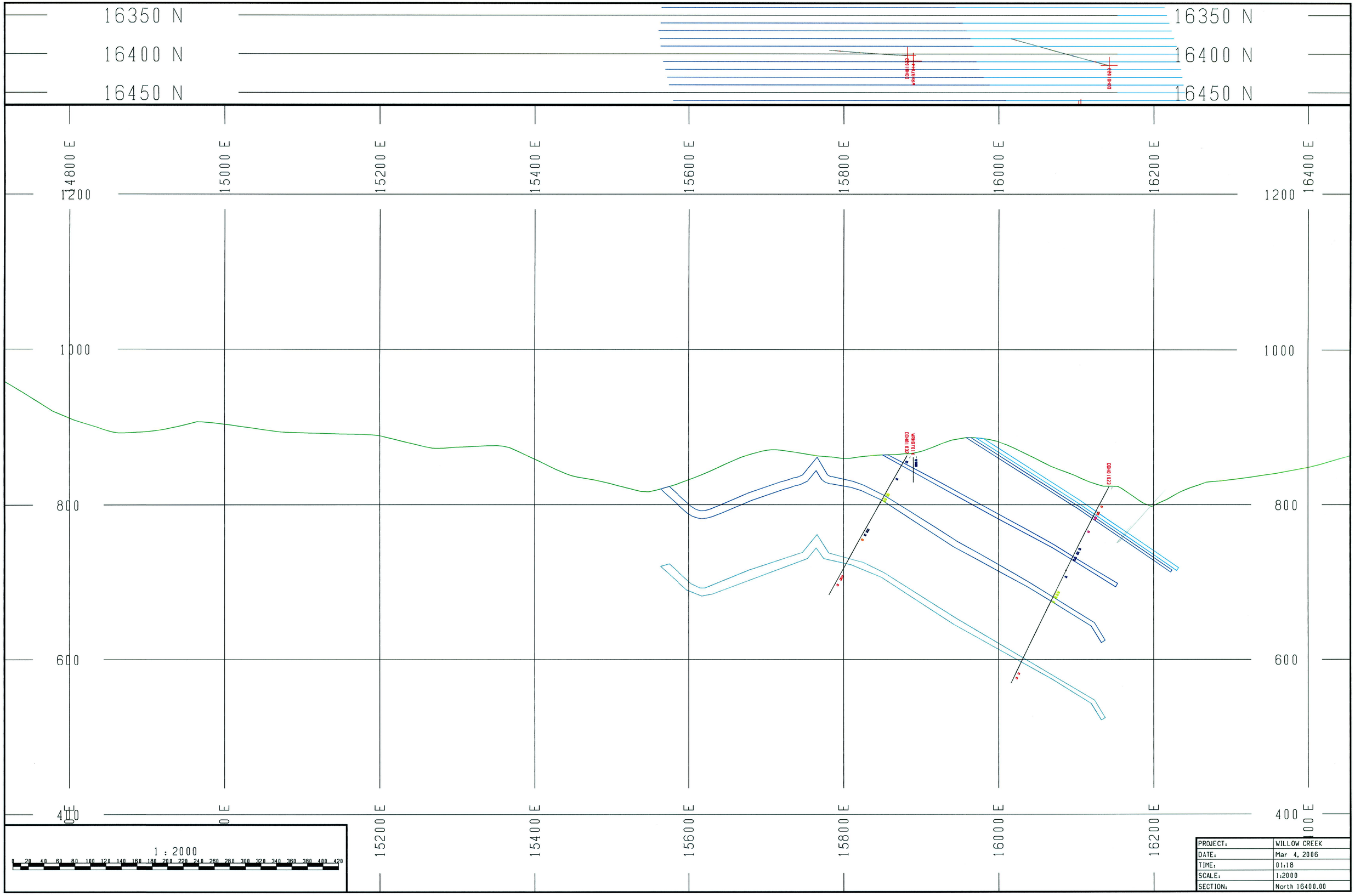
600

400

1 : 2000

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:18
SCALE:	1:2000
SECTION:	North 16300.00



PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:18
SCALE:	1:2000
SECTION:	North 16400.00

16450 N
16500 N
16550 N

14800 E
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E
16200 E
16400 E

1200
1000
800
600
400

1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:18
SCALE:	1:2000
SECTION:	North 16500.00

16550 N
16600 N
16650 N

14800 E
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E
16200 E
16400 E

1200
1000
800
600
400

1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:18
SCALE:	1:2000
SECTION:	North 16600.00

16650 N

16700 N

16750 N

14800 E

15000 E

15200 E

15400 E

15600 E

15800 E

16000 E

16200 E

16400 E

1200

1000

800

600

400

1 : 2000

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:18
SCALE:	1:2000
SECTION:	North 16700.00

16750 N

16800 N

16850 N

14800 E

15000 E

15200 E

15400 E

15600 E

15800 E

16000 E

16200 E

16400 E

1200

1000

800

600

400

1 : 2000

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:18
SCALE:	1:2000
SECTION:	North 16800.00

16850 N

16900 N

16950 N

14800 E

15000 E

15200 E

15400 E

15600 E

15800 E

16000 E

16200 E

16400 E

1200

1000

800

600

400

WRH97159

WRH97158

1 : 2000

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:18
SCALE:	1:2000
SECTION:	North 16900.00

16950 N

17000 N

17050 N

14800 E

15000 E

15200 E

15400 E

15600 E

15800 E

16000 E

16200 E

16400 E

1200

1000

800

600

400

1 : 2000

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:18
SCALE:	1:2000
SECTION:	North 17000.00

17050 N

17100 N

17150 N

15000 E

15200 E

15400 E

15600 E

15800 E

16000 E

16200 E

16400 E

16600 E

1200

1000

800

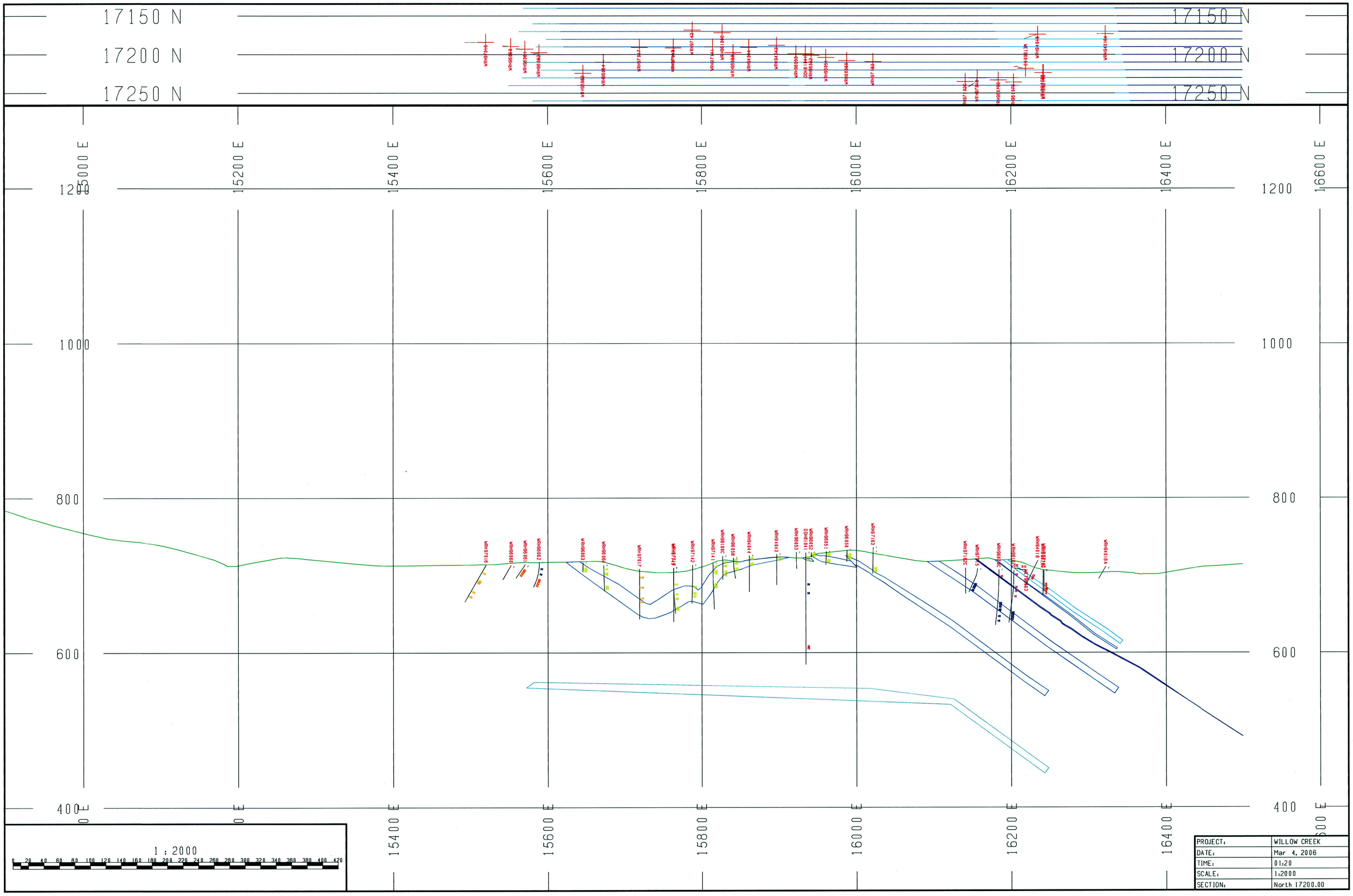
600

400

1 : 2000

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:20
SCALE:	1:2000
SECTION:	North 17100.00


17150 N
17200 N
17250 N
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E
16200 E
16400 E
16600 E
1200
1000
800
600
400
1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420
PROJECT: WILLOW CREEK
DATE: Mar 4, 2006
TIME: 01:20
SCALE: 1:2000
SECTION: North 17200.00

17250 N

17300 N

17350 N

15000 E

15200 E

15400 E

15600 E

15800 E

16000 E

16200 E

16400 E

16600 E

1200

1000

800

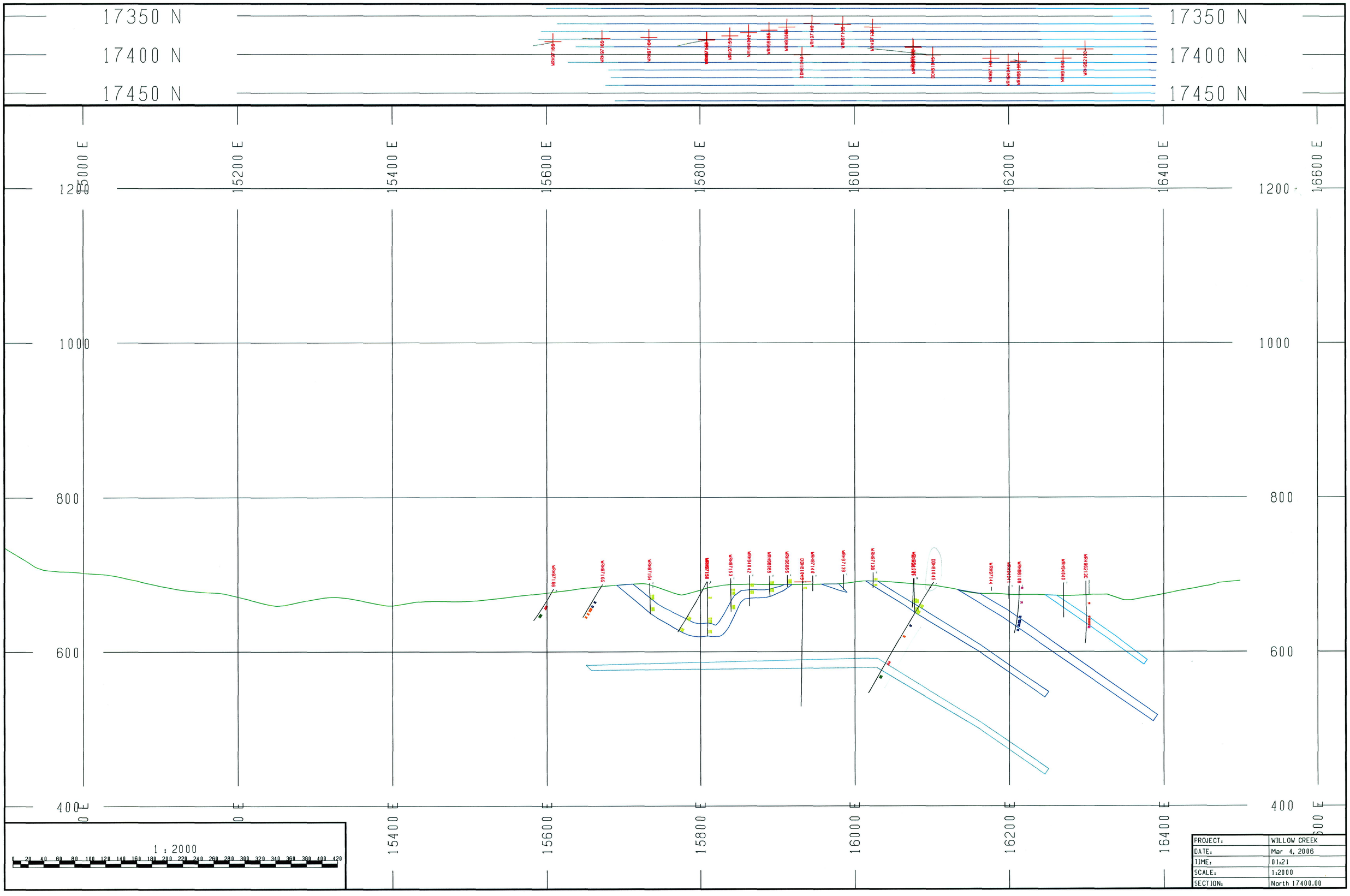
600

400

1 : 2000

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:21
SCALE:	1:2000
SECTION:	North 17300.00


17350 N
17400 N
17450 N
15000 E
15200 E
15400 E
15600 E
15800 E
16000 E
16200 E
16400 E
16600 E
1200
1000
800
600
400
1 : 2000
0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420
PROJECT: WILLOW CREEK
DATE: Mar 4, 2006
TIME: 01:21
SCALE: 1:2000
SECTION: North 17400.00

17450 N

17500 N

17550 N

15000 E

15200 E

15400 E

15600 E

15800 E

16000 E

16200 E

16400 E

16600 E

1200

1000

800

600

400

1 : 2000

0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340 360 380 400 420

PROJECT:	WILLOW CREEK
DATE:	Mar 4, 2006
TIME:	01:21
SCALE:	1:2000
SECTION:	North 17500.00