0078

Incoming C0070041

Ok

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Date: 8/21/2006 7:08:44 PM
Subject: Grassy Trail Dam seismic update 8/19/06

Here is the seismic, inclinometer, and piezometer updates for 8/19/06 .
This past week we saw more MIS earthquakes reported than any other week this year.

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RB&G ENGINEERING
Grassy Trail Dam, Seismic Summary for August 19, 2006

For the two week period between August 4 and August 19, 2006 the number of MIS (Mining Induced Seismicity) earthquakes recorded near the site by the UUSS increased to 62. For comparison the following table summarizes the number of earthquakes and events recorded on the dam and Hillside units during the past three weeks. It should be noted from the table that while the number of earthquakes has increased during the last week the number of events recorded on the Dam and Hillside units has decreased. Prior to the 38 earthquakes recorded this past week, the highest number recoded during the a seven day period was 26 (ending on July 13th). MIS earthquakes ranged in magnitude from 0.9 to a high of 1.9. During the past two weeks thirty-three earthquakes were not recorded on the Dam and Hillside monitoring units.

7 Days Ending	Earthquakes	Hillside	Dam
3-Aug	22	17	19
10-Aug	22	23	23
18-Aug	38	12	17
Total	*82*	*52*	*59*

During the past two weeks the highest Peak Ground Acceleration (PGA) value recorded on the Hillside decreased from a previous high of 0.0298g to **0.0199g.** Highest PGA value on the Dam decreased from 0.0249g to **0.0182g**. The largest, 1.9 earthquake did not generate the highest PGA values. The 0.0182g event on the Dam occurred during a 1.6 magnitude event while the 0.0199g event on the Hillside occurred during a 1.4 magnitude event.

Inclinometers I-2, I-3, and I-4 continue to show similar movements as the last readings.

Piezometer readings are also similar to the previous reading.

No cracks or signs of movement were noted on the dam or abutments above the dam. And no significant changes in seepage readings were observed.

Michael Hansen
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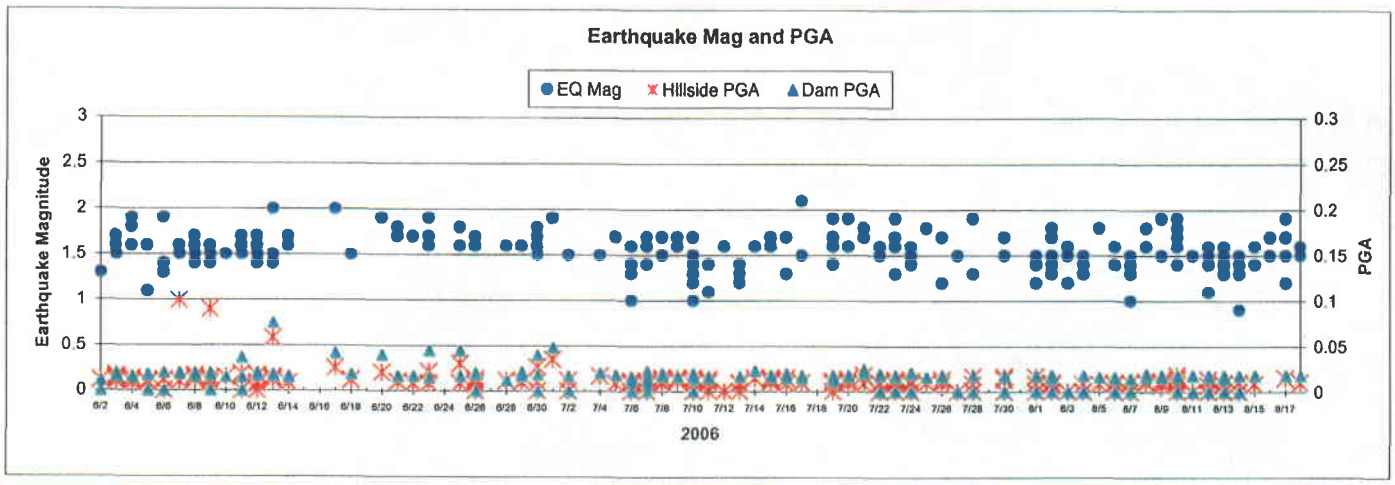
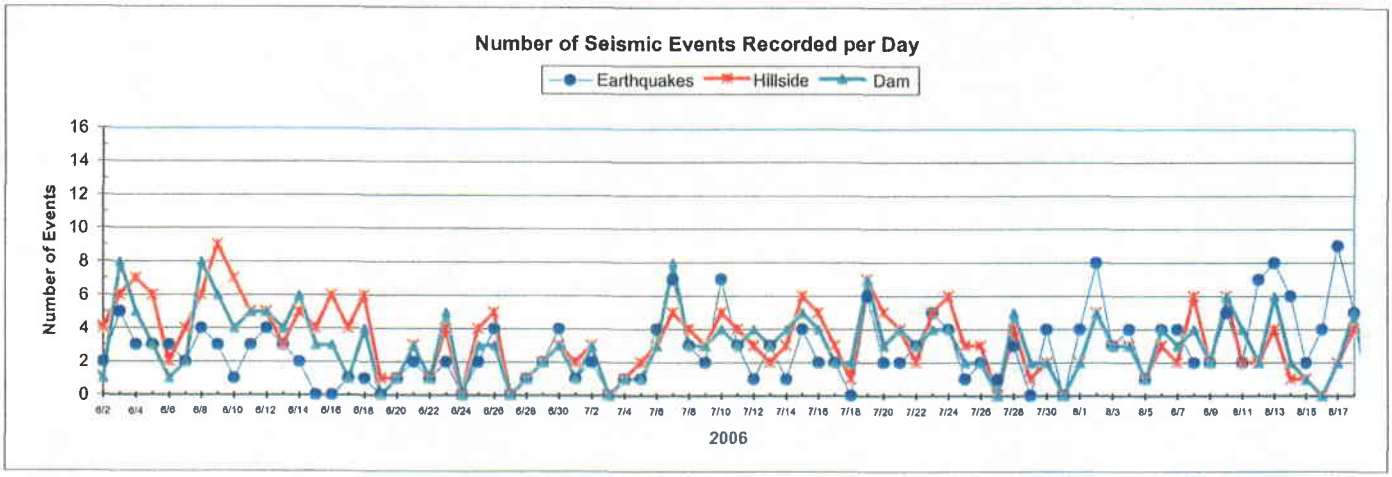
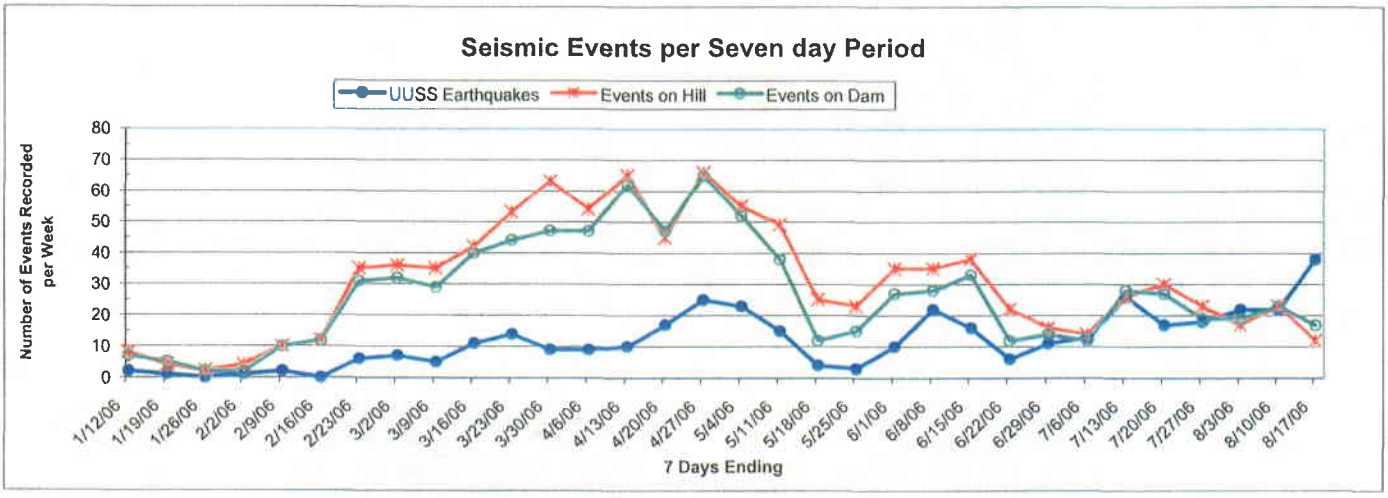
Grassy Trail Dam, Carbon County, Utah
August 19, 2006

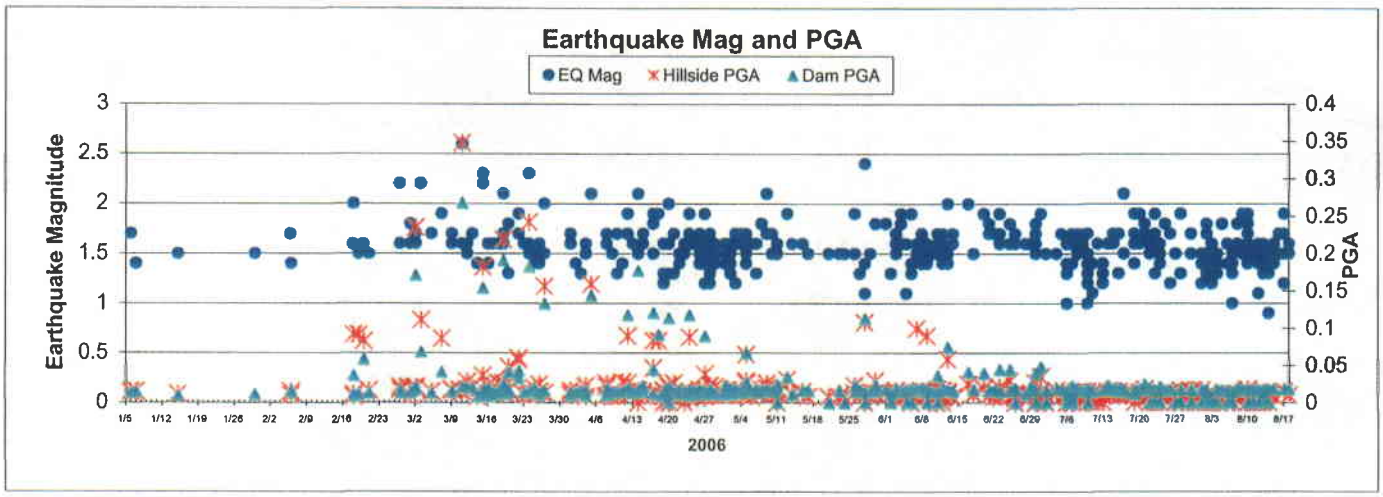
Type	Serial No.	Date	Time	Tran Peak (mm/s)	Vert Peak (mm/s)	Long Peak (mm/s)	PVS1 (mm/s)	Trigger	Tran Accel (g)	Vert Accel (g)	Long Accel (g)	Description	Post Event Note first line	
LOG	BE9689	8/4/06	11:19:21	***	***	***	***	***	***	***	***	Start Monitoring		
W	BE9689	8/4/06	11:38:27	0.889	0.841	0.825	1.17	Tran	0.0116	0.00829	0.0182	Grassy Tr. Dam		
LOG	BE9690	8/4/06	12:03:01	***	***	***	***	***	***	***	***	Start Monitoring		
W	BE9690	8/4/06	22:36:35	0.587	0.254	0.635	0.832	Long	0.00829	0.00663	0.00663	Hillside		
W	BE9689	8/4/06	22:36:36	0.683	0.587	0.619	0.77	Long	0.00829	0.00829	0.0149	Grassy Tr. Dam		
W	BE9690	8/4/06	22:48:20	0.746	0.222	0.651	0.748	Tran	0.00829	0.00497	0.00663	Hillside	EQ Mag	1.4
W	BE9689	8/4/06	22:48:21	0.603	0.714	0.778	0.905	Long	0.00663	0.00829	0.0182	Grassy Tr. Dam	EQ Mag	1.4
W	BE9690	8/5/06	7:00:59	0.651	0.206	0.508	0.74	Tran	0.00829	0.00497	0.00663	Hillside	EQ Mag	1.8
W	BE9689	8/5/06	7:01:00	0.683	0.714	0.619	0.842	Vert	0.00663	0.00663	0.0166	Grassy Tr. Dam	EQ Mag	1.8
W	BE9690	8/6/06	12:00:53	0.762	0.317	0.667	0.801	Tran	0.00994	0.00663	0.00829	Hillside	EQ Mag	1.6
W	BE9689	8/6/06	12:00:54	0.635	0.667	0.651	0.729	Tran	0.00829	0.00663	0.0149	Grassy Tr. Dam	EQ Mag	1.6
W	BE9690	8/6/06	14:39:06	0.698	0.27	0.825	0.844	Long	0.00829	0.00663	0.00829	Hillside	EQ Mag	1.6
W	BE9689	8/6/06	14:39:07	0.746	0.794	0.651	1.02	Vert	0.00994	0.00663	0.0166	Grassy Tr. Dam	EQ Mag	1.6
W	BE9690	8/6/06	20:07:10	0.571	0.254	0.635	0.755	Long	0.00829	0.00663	0.00829	Hillside	EQ Mag	1.6
W	BE9689	8/6/06	20:07:12	0.619	0.46	0.556	0.739	Tran	0.00663	0.00829	0.0149	Grassy Tr. Dam	EQ Mag	1.6
W	BE9689	8/6/06	21:00:50	0.444	0.603	0.365	0.735	Vert	0.00829	0.00829	0.0166	Grassy Tr. Dam		
W	BE9690	8/7/06	11:31:34	0.857	0.571	1.19	1.45	Tran	0.00994	0.00663	0.00994	Hillside	EQ Mag	1.5
W	BE9689	8/7/06	11:31:36	0.921	0.905	0.937	1.29	Tran	0.00829	0.00994	0.0149	Grassy Tr. Dam	EQ Mag	1.5
W	BE9689	8/7/06	17:30:53	0.683	0.587	0.444	0.802	Tran	0.00829	0.00663	0.0166	Grassy Tr. Dam		
W	BE9690	8/7/06	23:11:22	0.635	0.333	0.794	0.989	Long	0.00829	0.00663	0.00829	Hillside		
W	BE9689	8/7/06	23:11:24	0.698	0.73	0.683	0.965	Tran	0.00829	0.00663	0.0182	Grassy Tr. Dam		
W	BE9690	8/8/06	6:31:28	0.444	0.429	1.08	1.1	Long	0.00663	0.00994	0.00994	Hillside		
W	BE9690	8/8/06	6:52:52	0.683	0.413	0.952	1.23	Long	0.00829	0.00663	0.00994	Hillside		
W	BE9689	8/8/06	6:52:54	0.873	0.794	0.778	1.07	Tran	0.00829	0.00994	0.0149	Grassy Tr. Dam		
W	BE9690	8/8/06	10:28:11	0.444	0.222	0.667	0.827	Long	0.00663	0.00663	0.00829	Hillside		
W	BE9690	8/8/06	13:18:28	0.762	0.349	0.889	1.19	Long	0.00994	0.00663	0.00829	Hillside		
W	BE9689	8/8/06	13:18:30	0.857	0.714	0.762	1.14	Long	0.00829	0.00663	0.0166	Grassy Tr. Dam		
W	BE9690	8/8/06	17:27:52	1	0.746	1.24	1.41	Vert	0.0116	0.00829	0.0116	Hillside	EQ Mag	1.6
W	BE9689	8/8/06	17:27:54	1.3	1.11	1.16	1.46	Vert	0.0116	0.00829	0.0199	Grassy Tr. Dam	EQ Mag	1.6
W	BE9690	8/8/06	20:24:32	0.937	0.825	1.1	1.19	Vert	0.00994	0.00829	0.00994	Hillside	EQ Mag	1.6
W	BE9689	8/8/06	20:24:34	1.49	1.16	1.17	1.67	Tran	0.00994	0.00829	0.0166	Grassy Tr. Dam	EQ Mag	1.6
W	BE9690	8/9/06	2:11:01	1	0.444	0.794	1.17	Tran	0.0116	0.00829	0.00829	Hillside	EQ Mag	1.5
W	BE9689	8/9/06	2:11:03	0.825	0.889	0.81	1.18	Tran	0.00829	0.00994	0.0166	Grassy Tr. Dam	EQ Mag	1.5
W	BE9690	8/9/06	14:09:08	0.651	0.222	0.556	0.675	Tran	0.00663	0.00663	0.00663	Hillside	EQ Mag	1.6
W	BE9689	8/9/06	14:09:11	0.698	0.651	0.571	0.796	Tran	0.00829	0.00663	0.0182	Grassy Tr. Dam	EQ Mag	1.6
W	BE9690	8/10/06	6:03:26	0.619	0.333	0.603	0.704	Long	0.00829	0.00663	0.00829	Hillside	EQ Mag	1.6
W	BE9689	8/10/06	6:03:29	0.683	0.651	0.444	0.777	Tran	0.00829	0.00663	0.0182	Grassy Tr. Dam	EQ Mag	1.6
W	BE9690	8/10/06	7:21:06	1.19	0.492	1.24	1.65	Tran	0.0182	0.00663	0.0116	Hillside	EQ Mag	1.4
W	BE9689	8/10/06	7:21:09	1.16	1.02	1.14	1.63	Tran	0.0116	0.00994	0.0182	Grassy Tr. Dam	EQ Mag	1.4
W	BE9690	8/10/06	10:39:37	0.778	0.349	0.73	0.985	Tran	0.0116	0.00663	0.00829	Hillside		
W	BE9689	8/10/06	10:39:40	1.02	0.794	0.857	1.32	Long	0.00994	0.00829	0.0149	Grassy Tr. Dam		
W	BE9690	8/10/06	12:17:49	0.571	0.254	0.603	0.638	Long	0.00663	0.00829	0.00663	Hillside	EQ Mag	1.7
W	BE9689	8/10/06	12:17:52	0.683	0.587	0.444	0.696	Tran	0.00663	0.00829	0.0166	Grassy Tr. Dam	EQ Mag	1.7
W	BE9690	8/10/06	14:53:02	0.857	0.254	0.587	1.03	Tran	0.0116	0.00663	0.00994	Hillside		
W	BE9689	8/10/06	14:53:06	0.603	0.683	0.508	0.735	Tran	0.00829	0.00663	0.0166	Grassy Tr. Dam		
W	BE9690	8/10/06	20:09:43	1.13	0.714	0.857	1.34	Vert	0.0133	0.00994	0.00994	Hillside	EQ Mag	1.9
W	BE9689	8/10/06	20:09:47	1.16	0.841	0.841	1.32	Long	0.0116	0.00994	0.0182	Grassy Tr. Dam	EQ Mag	1.9
W	BE9690	8/11/06	11:49:37	0.905	0.349	0.762	1.18	Tran	0.0116	0.00663	0.00994	Hillside		
W	BE9689	8/11/06	11:49:41	0.635	0.762	0.571	0.809	Vert	0.00829	0.00663	0.0166	Grassy Tr. Dam		
W	BE9689	8/11/06	16:01:01	0.206	1.19	0.571	1.23	Vert	0.00829	0.0365	0.0182	Grassy Tr. Dam	Man Made	
W	BE9690	8/11/06	16:40:48	1.13	0.444	0.937	1.44	Tran	0.0133	0.00829	0.00994	Hillside		
W	BE9689	8/11/06	16:40:51	0.841	0.905	0.619	1.07	Tran	0.00829	0.00829	0.0182	Grassy Tr. Dam		
W	BE9689	8/11/06	23:43:45	0.825	0.762	0.508	1.07	Tran	0.00994	0.00663	0.0182	Grassy Tr. Dam	EQ Mag	1.5
W	BE9690	8/12/06	9:04:37	0.905	0.365	0.762	1.17	Tran	0.0133	0.00663	0.00829	Hillside	EQ Mag	1.5
W	BE9689	8/12/06	9:04:41	0.651	0.794	0.794	1.1	Tran	0.00829	0.00663	0.0182	Grassy Tr. Dam	EQ Mag	1.5
W	BE9690	8/12/06	9:50:52	0.603	0.222	0.492	0.623	Tran	0.00663	0.00663	0.00663	Hillside	EQ Mag	1.4
W	BE9689	8/12/06	15:09:19	0.778	0.429	0.508	0.841	Tran	0.00994	0.00663	0.0166	Grassy Tr. Dam	EQ Mag	1.6
W	BE9690	8/13/06	11:28:21	0.635	0.349	0.603	0.669	Long	0.00829	0.00663	0.00829	Hillside		
W	BE9689	8/13/06	11:28:26	0.746	0.587	0.651	0.871	Tran	0.00994	0.00663	0.0166	Grassy Tr. Dam		
W	BE9690	8/13/06	17:40:52	0.444	0.27	0.698	0.727	Long	0.00663	0.00497	0.00829	Hillside	EQ Mag	1.3
W	BE9689	8/13/06	17:40:57	0.825	0.571	0.476	0.946	Tran	0.00829	0.00663	0.0182	Grassy Tr. Dam	EQ Mag	1.3
W	BE9690	8/13/06	19:37:44	1.02	0.444	0.873	1.14	Long	0.00829	0.00663	0.00829	Hillside	EQ Mag	1.5
W	BE9689	8/13/06	19:37:49	1	0.857	0.841	1.21	Vert	0.00829	0.00829	0.0166	Grassy Tr. Dam	EQ Mag	1.5
W	BE9689	8/13/06	21:10:04	0.619	0.46	0.333	0.656	Tran	0.00829	0.00663	0.0166	Grassy Tr. Dam	EQ Mag	1.5
W	BE9690	8/13/06	21:11:49	0.698	0.333	0.825	0.914	Long	0.00663	0.00663	0.00994	Hillside		
W	BE9689	8/13/06	21:11:54	1.13	0.794	0.873	1.29	Tran	0.0116	0.00829	0.0182	Grassy Tr. Dam		
W	BE9689	8/13/06	23:18:58	0.619	0.635	0.54	0.795	Vert	0.00829	0.00829	0.0149	Grassy Tr. Dam	EQ Mag	1.6
W	BE9689	8/14/06	0:33:57	0.905	0.73	0.651	1.03	Long	0.00663	0.00829	0.0182	Grassy Tr. Dam	EQ Mag	1.5
W	BE9690	8/14/06	20:06:18	0.698	0.317	0.794	0.813	Long	0.00829	0.00497	0.00994	Hillside	EQ Mag	1.4

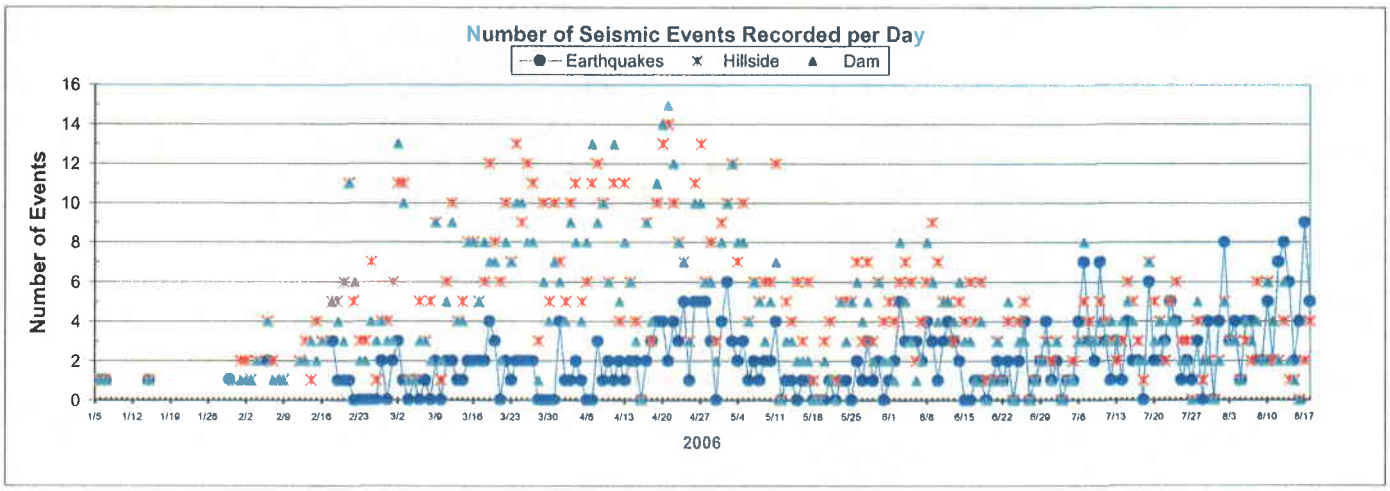
W	BE9689	8/14/06	20:06:23	0.762	0.81	0.73	0.967	Vert	0.00829	0.00829	0.0182	Grassy Tr. Dam	EQ Mag	1.4
W	BE9690	8/15/06	19:14:17	0.619	0.27	0.746	0.89	Long	0.00829	0.00663	0.00829	Hillside	EQ Mag	1.6
W	BE9689	8/15/06	19:14:22	0.635	0.54	0.698	0.824	Long	0.00994	0.00663	0.0182	Grassy Tr. Dam	EQ Mag	1.6
W	BE9690	8/17/06	9:44:15	0.968	0.635	1.94	1.98	Vert	0.00994	0.00663	0.0149	Hillside	EQ Mag	1.9
W	BE9689	8/17/06	9:44:21	1.64	1.14	1.6	2.08	Tran	0.0133	0.00994	0.0182	Grassy Tr. Dam	EQ Mag	1.9
W	BE9690	8/17/06	19:55:32	0.635	0.302	1.13	1.28	Long	0.00829	0.00663	0.00994	Hillside		
W	BE9689	8/17/06	19:55:39	0.905	0.683	0.873	1.26	Tran	0.00994	0.00663	0.0182	Grassy Tr. Dam		
W	BE9690	8/18/06	7:39:18	0.667	0.46	1.1	1.28	Long	0.00663	0.00663	0.00994	Hillside	EQ Mag	1.5
W	BE9689	8/18/06	7:39:24	1.02	0.841	0.683	1.17	Tran	0.00829	0.00829	0.0182	Grassy Tr. Dam	EQ Mag	1.5
W	BE9689	8/18/06	8:48:05	0.73	0.587	0.587	0.837	Tran	0.00663	0.00663	0.0166	Grassy Tr. Dam		
W	BE9690	8/18/06	17:10:20	0.714	0.302	0.921	1.06	Long	0.00829	0.00663	0.00829	Hillside		
W	BE9689	8/18/06	17:10:27	0.746	0.698	0.778	1.04	Long	0.00994	0.00829	0.0166	Grassy Tr. Dam		
W	BE9690	8/18/06	20:15:34	0.667	0.317	0.873	0.877	Long	0.00829	0.00663	0.00829	Hillside		
W	BE9689	8/18/06	20:15:40	1.17	0.81	1.17	1.42	Vert	0.00829	0.00663	0.0166	Grassy Tr. Dam		
W	BE9690	8/18/06	22:56:40	0.476	0.222	0.603	0.617	Long	0.00663	0.00497	0.00663	Hillside		
W	BE9689	8/18/06	22:56:47	0.603	0.508	0.508	0.712	Tran	0.00829	0.00663	0.0182	Grassy Tr. Dam		
LOG	BE9689	8/19/06	***	***	***	***	***	***	***	***	***	Keyboard Stop		
LOG	BE9690	8/19/06	***	***	***	***	***	***	***	***	***	Keyboard Stop		

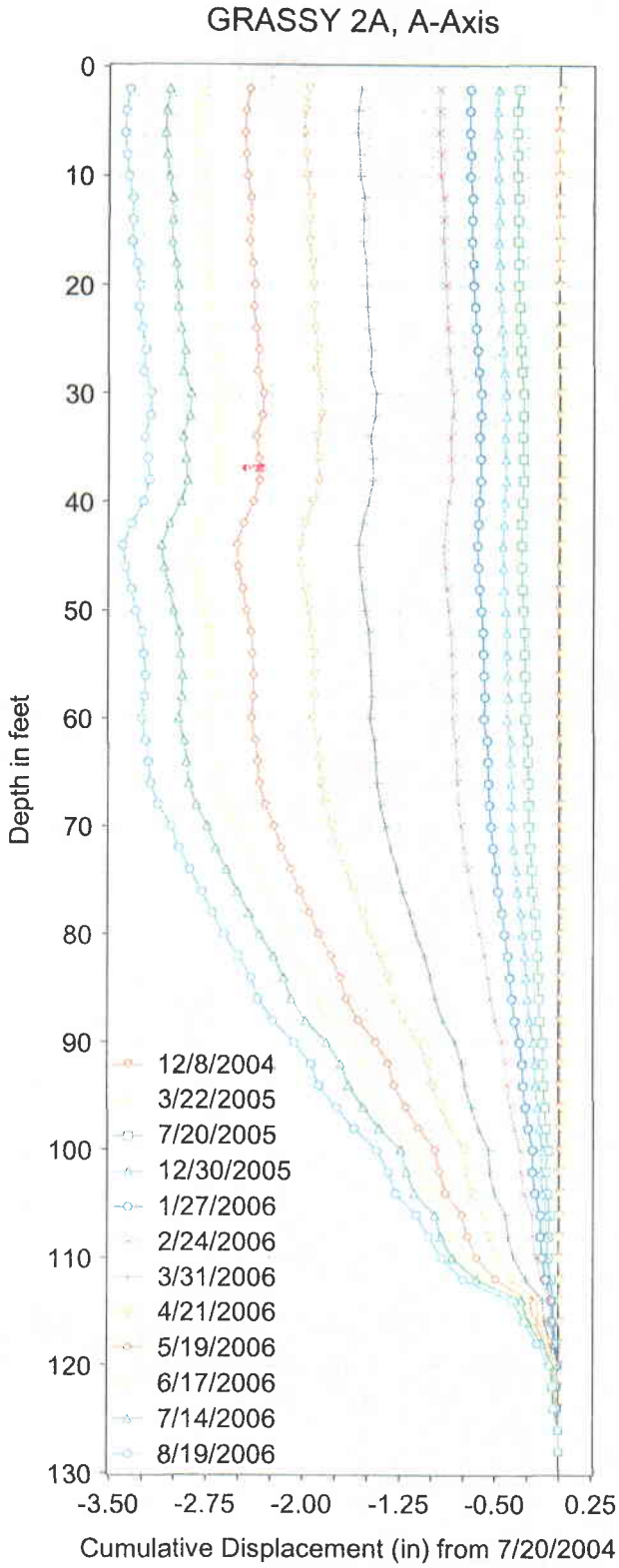

Earthquake Mag and PGA
EQ Mag
Hillside PGA
Dam PGA
Earthquake Magnitude
PGA
2006

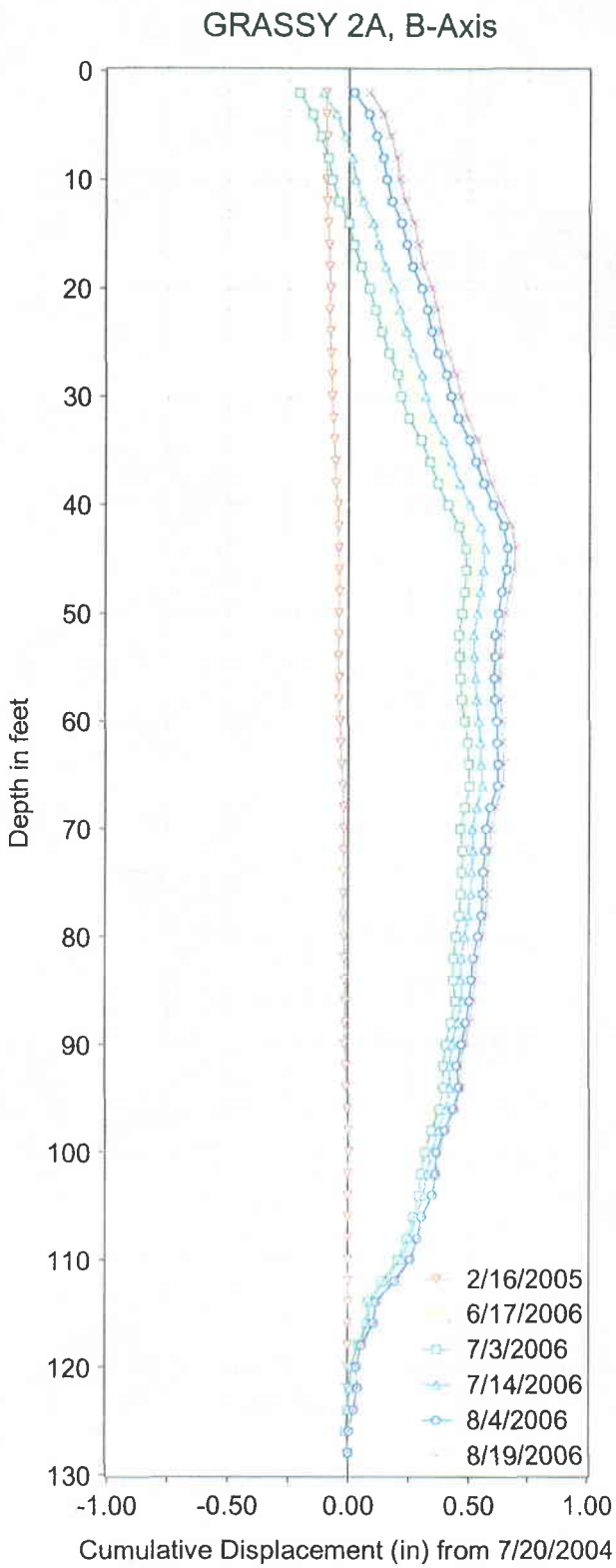

Number of Seismic Events Recorded per Day
Earthquakes
Hillside
Dam
Number of Events
2006

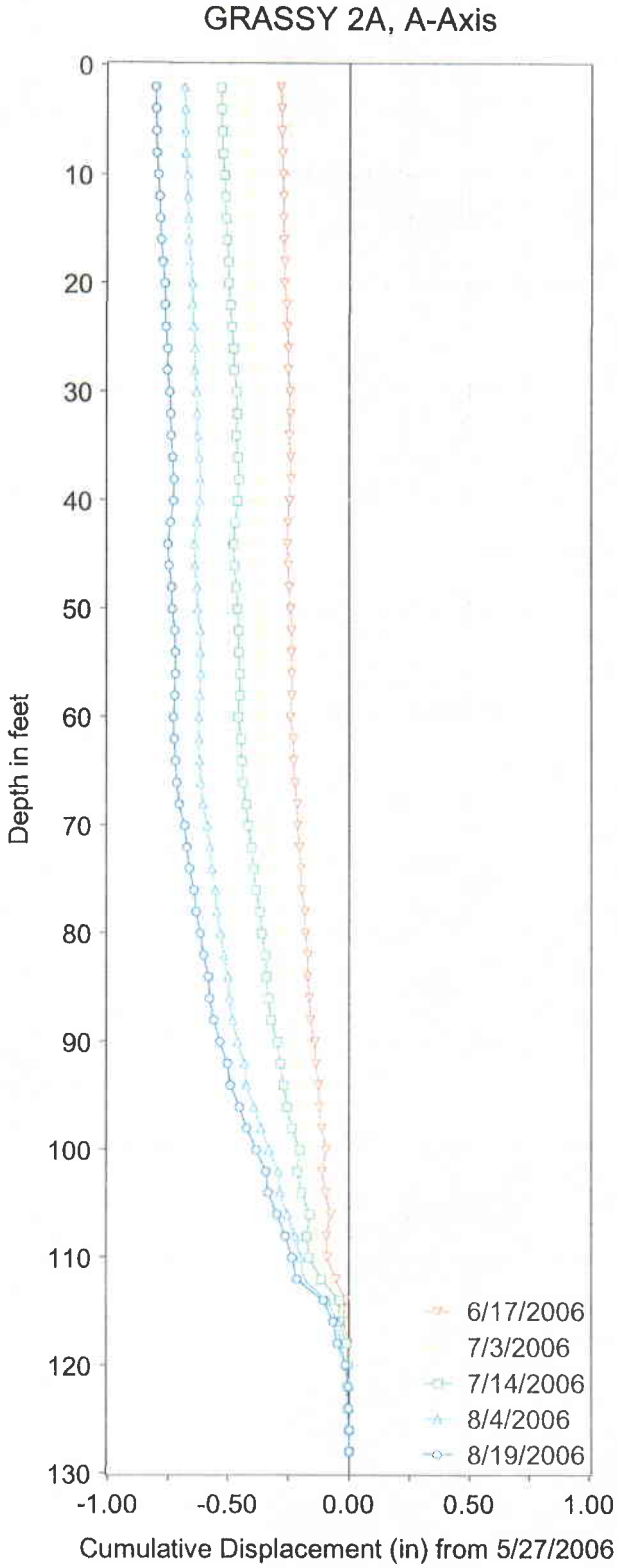

Seismic Events per Seven day Period
UUSS Earthquakes
Events on Hill
Events on Dam
Number of Events Recorded per Week
7 Days Ending

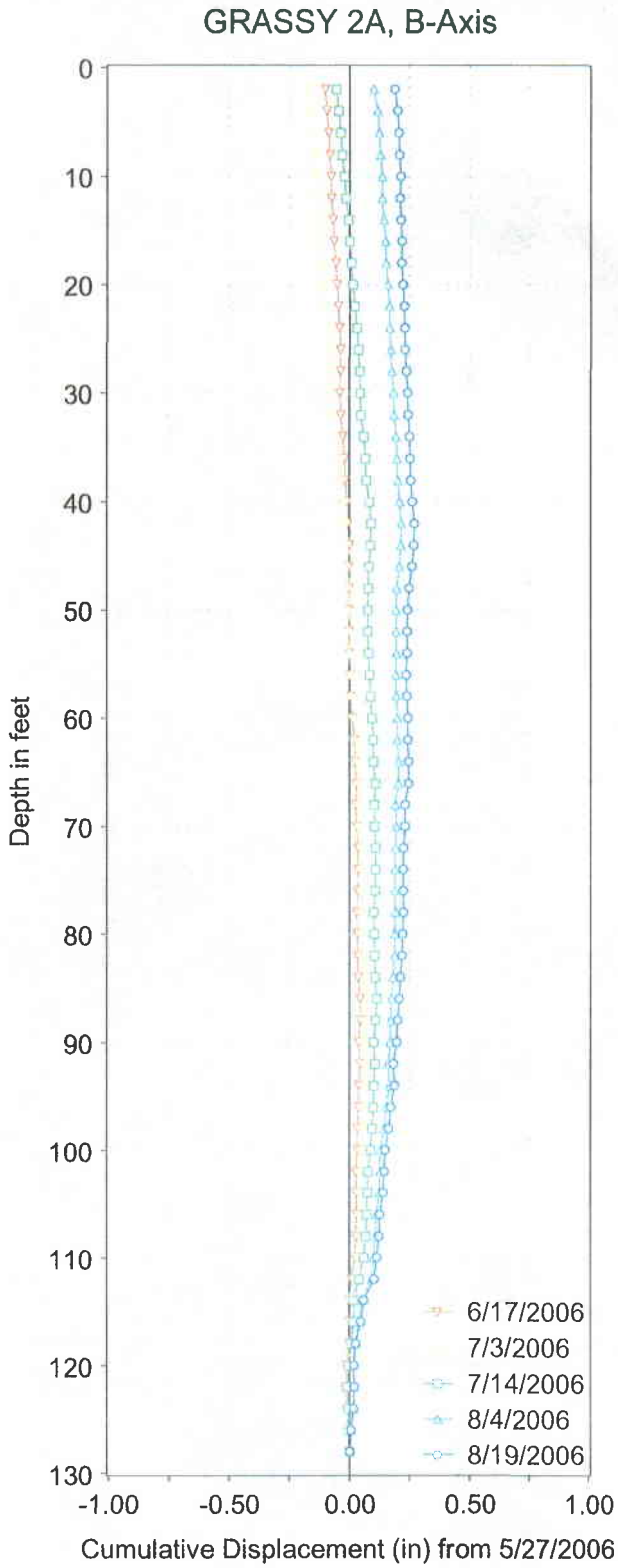

Earthquake Mag and PGA
EQ Mag
Hillside PGA
Dam PGA
Earthquake Magnitude
PGA
2006

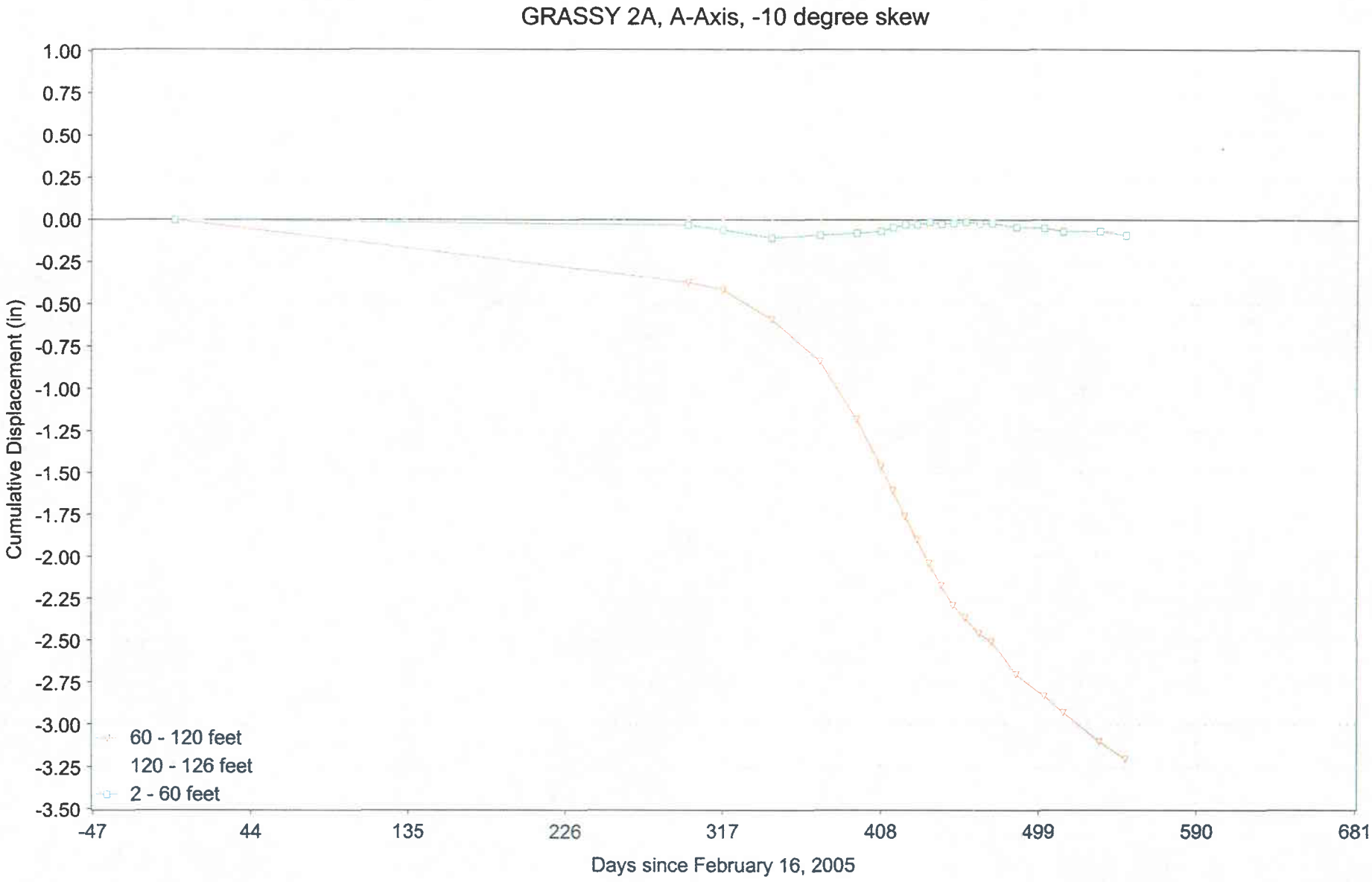

Number of Seismic Events Recorded per Day
Earthquakes
Hillside
Dam
Number of Events
2006

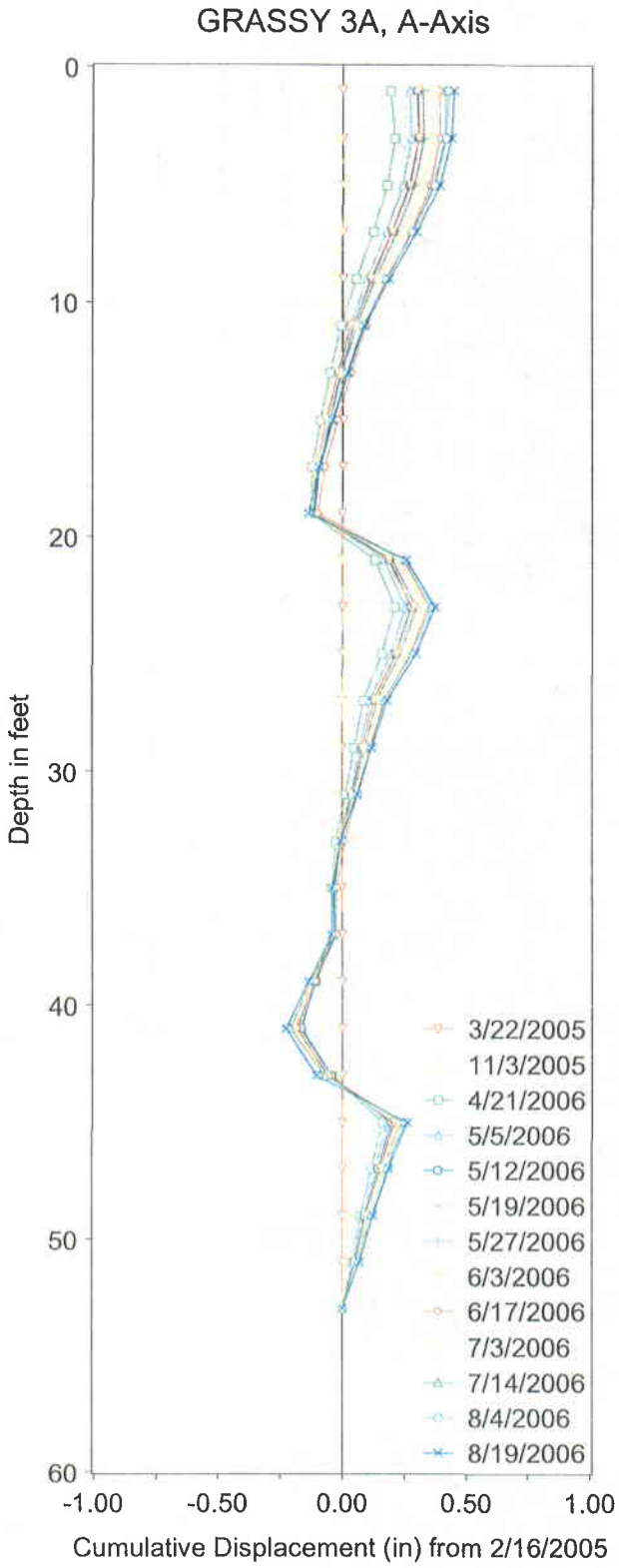

GRASSY 2A, A-Axis
Depth in feet
Cumulative Displacement (in) from 7/20/2004
0
10
20
30
40
50
60
70
80
90
100
110
120
130
-3.50
-2.75
-2.00
-1.25
-0.50
0.25
12/8/2004
3/22/2005
7/20/2005
12/30/2005
1/27/2006
2/24/2006
3/31/2006
4/21/2006
5/19/2006
6/17/2006
7/14/2006
8/19/2006

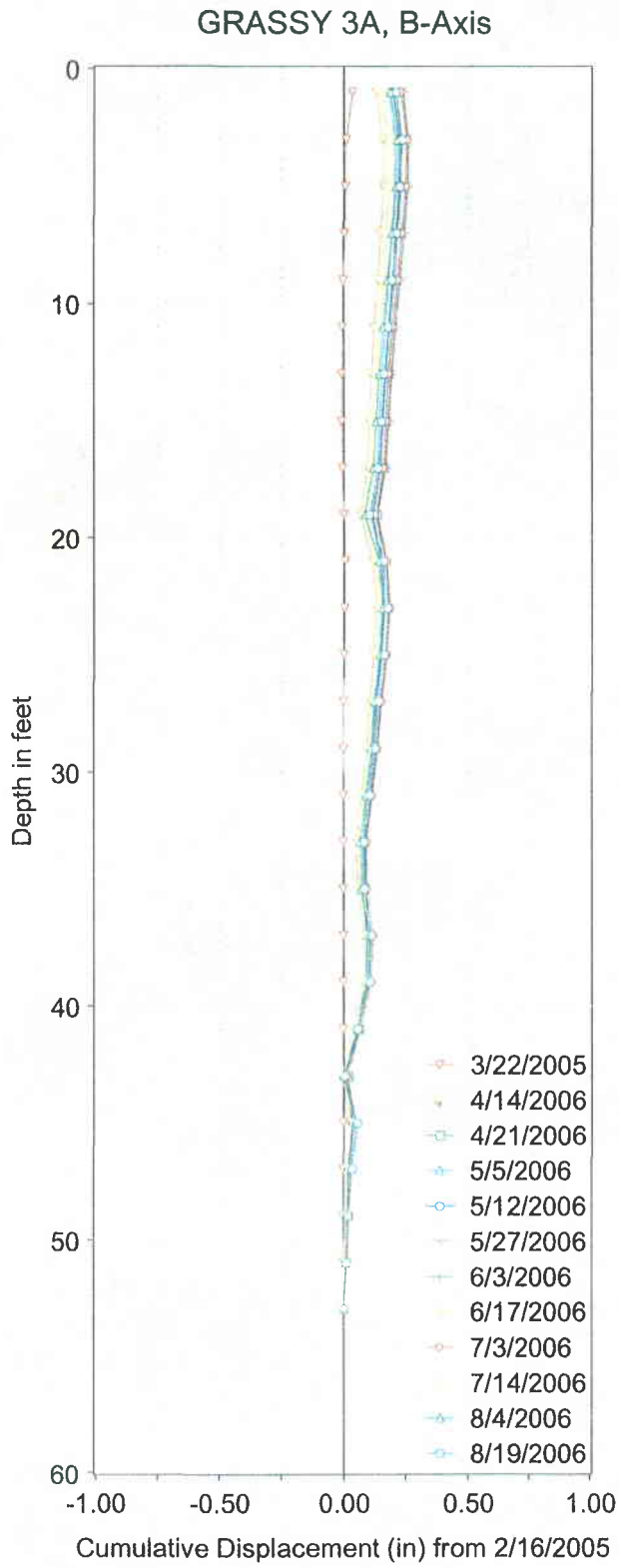

GRASSY 2A, B-Axis
Depth in feet
Cumulative Displacement (in) from 7/20/2004
0
10
20
30
40
50
60
70
80
90
100
110
120
130
-1.00
-0.50
0.00
0.50
1.00
2/16/2005
6/17/2006
7/3/2006
7/14/2006
8/4/2006
8/19/2006


GRASSY 2A, A-Axis
Depth in feet
0
10
20
30
40
50
60
70
80
90
100
110
120
130
-1.00
-0.50
0.00
0.50
1.00
Cumulative Displacement (in) from 5/27/2006
6/17/2006
7/3/2006
7/14/2006
8/4/2006
8/19/2006

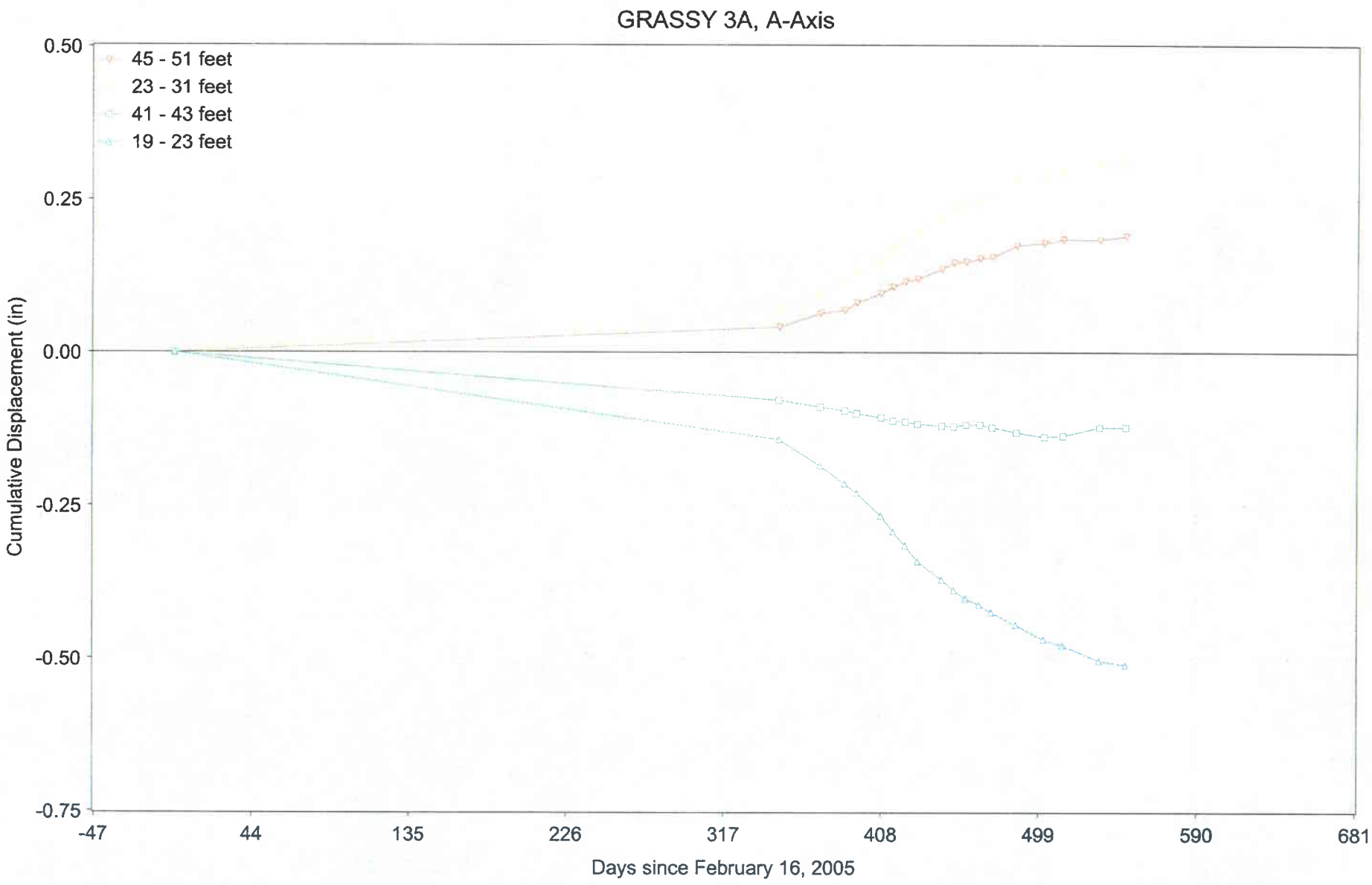

GRASSY 2A, B-Axis
Depth in feet
0
10
20
30
40
50
60
70
80
90
100
110
120
130
-1.00
-0.50
0.00
0.50
1.00
Cumulative Displacement (in) from 5/27/2006
6/17/2006
7/3/2006
7/14/2006
8/4/2006
8/19/2006

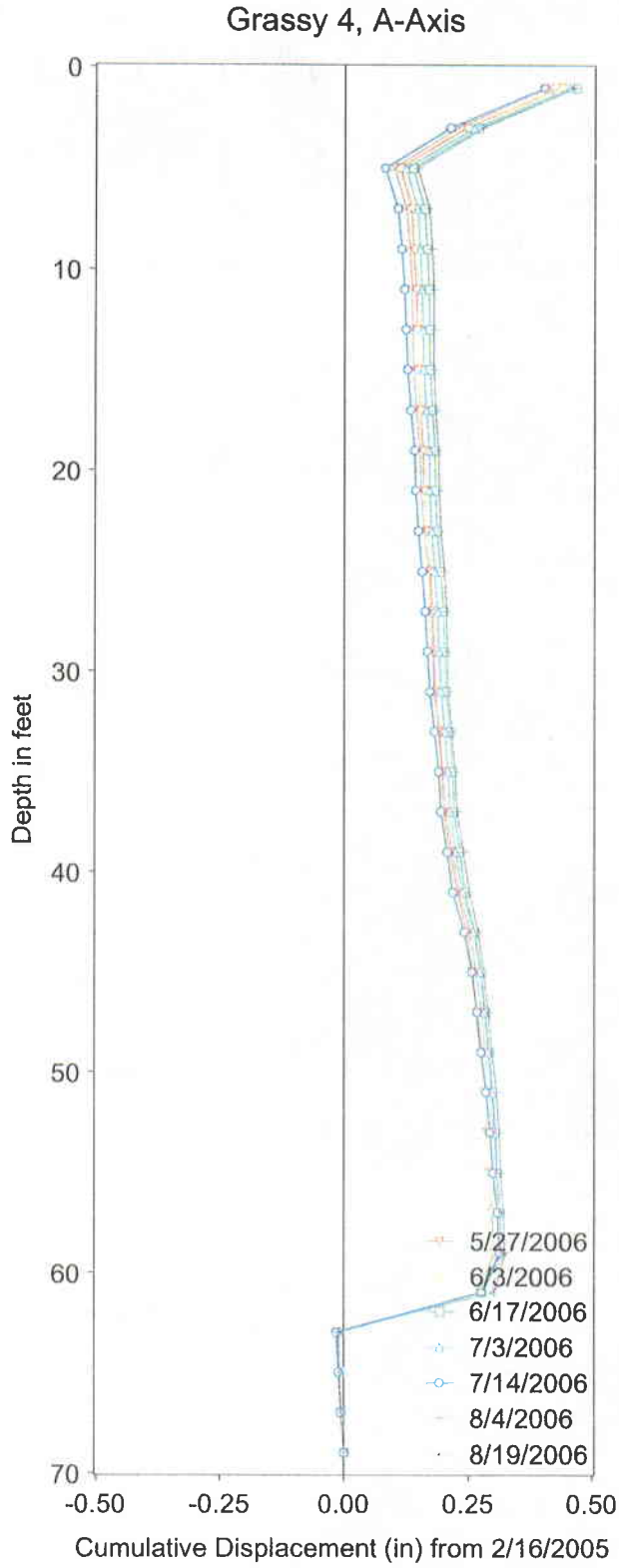

GRASSY 2A, A-Axis, -10 degree skew
Cumulative Displacement (in)
1.00
0.75
0.50
0.25
0.00
-0.25
-0.50
-0.75
-1.00
-1.25
-1.50
-1.75
-2.00
-2.25
-2.50
-2.75
-3.00
-3.25
-3.50
-47
44
135
226
317
408
499
590
681
Days since February 16, 2005
60 - 120 feet
120 - 126 feet
2 - 60 feet

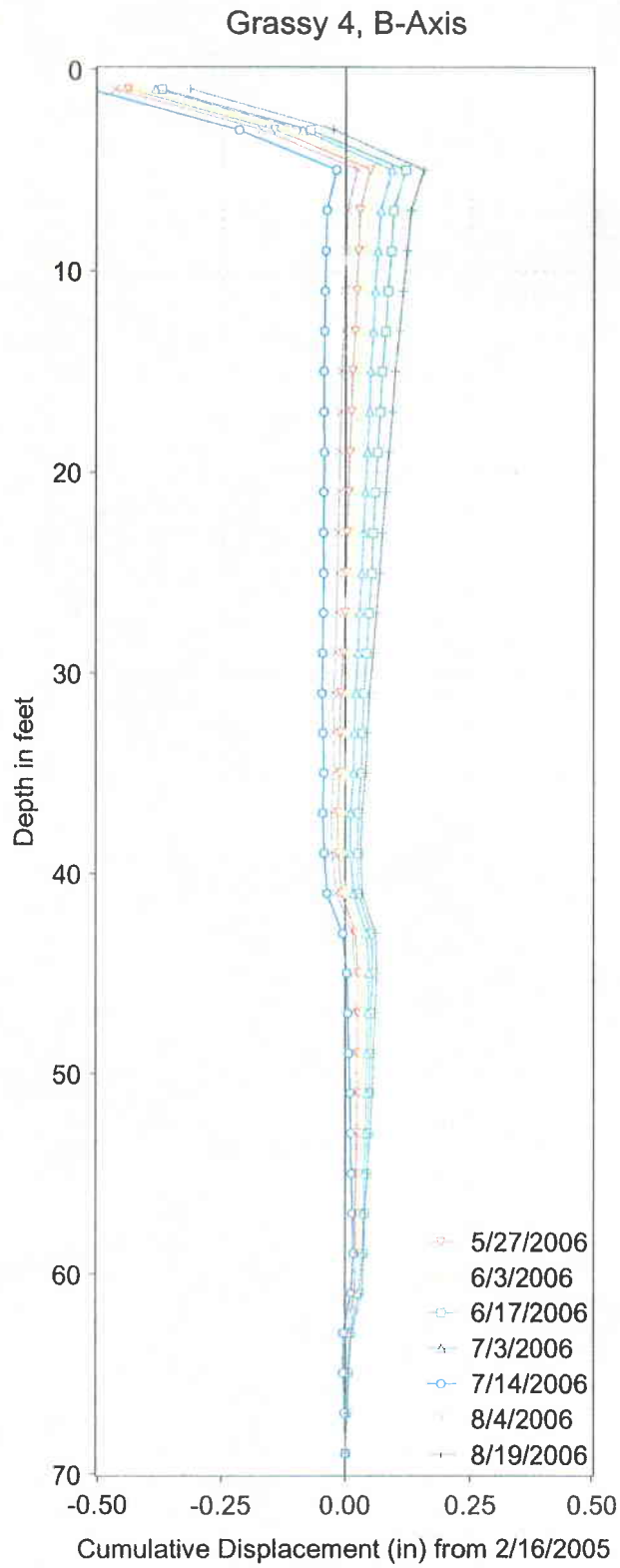


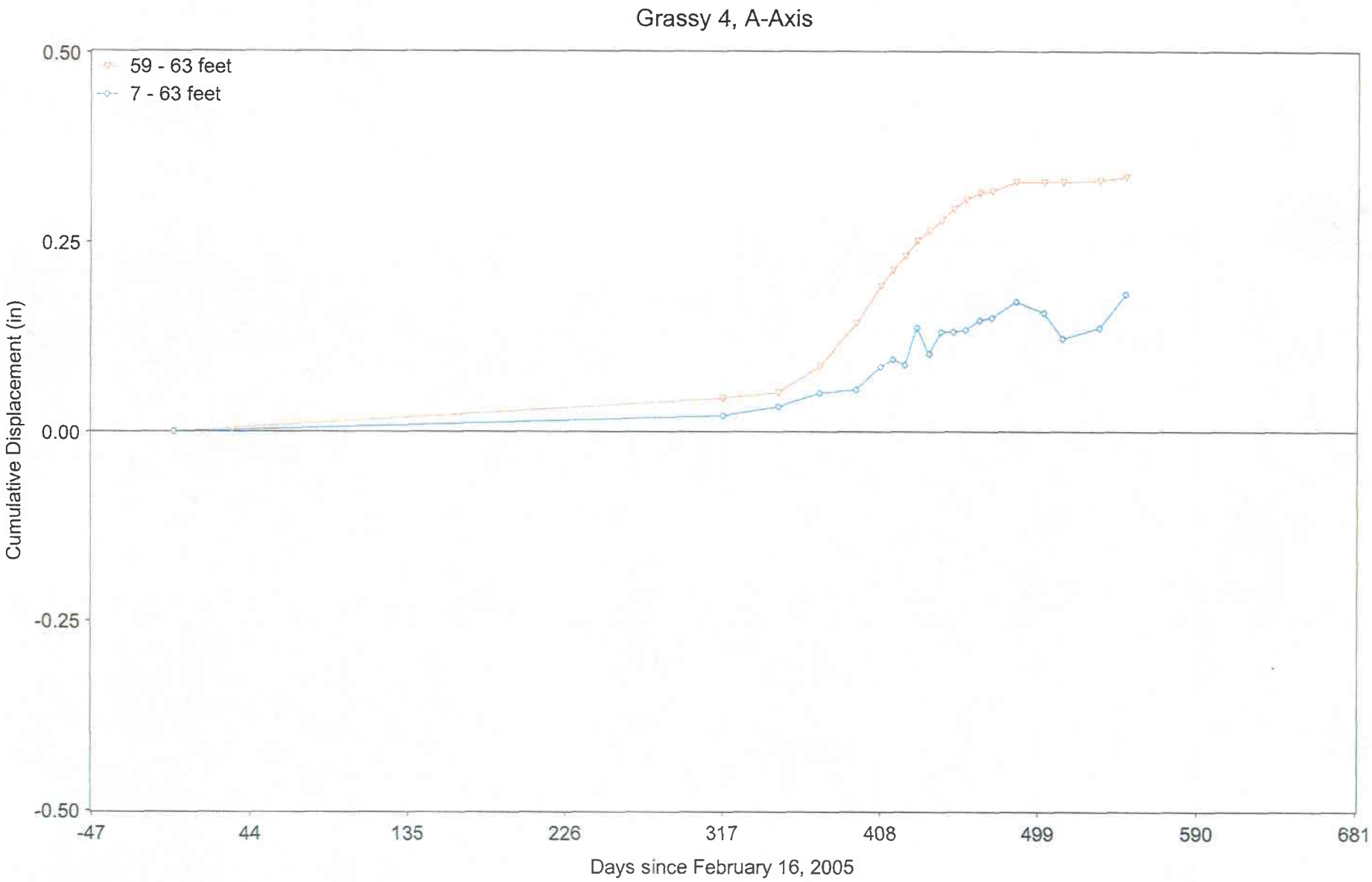


-30 degree skew


GRASSY 3A, A-Axis
45 - 51 feet
23 - 31 feet
41 - 43 feet
19 - 23 feet
0.50
0.25
0.00
-0.25
-0.50
-0.75
Cumulative Displacement (in)
-47
44
135
226
317
408
499
590
681
Days since February 16, 2005

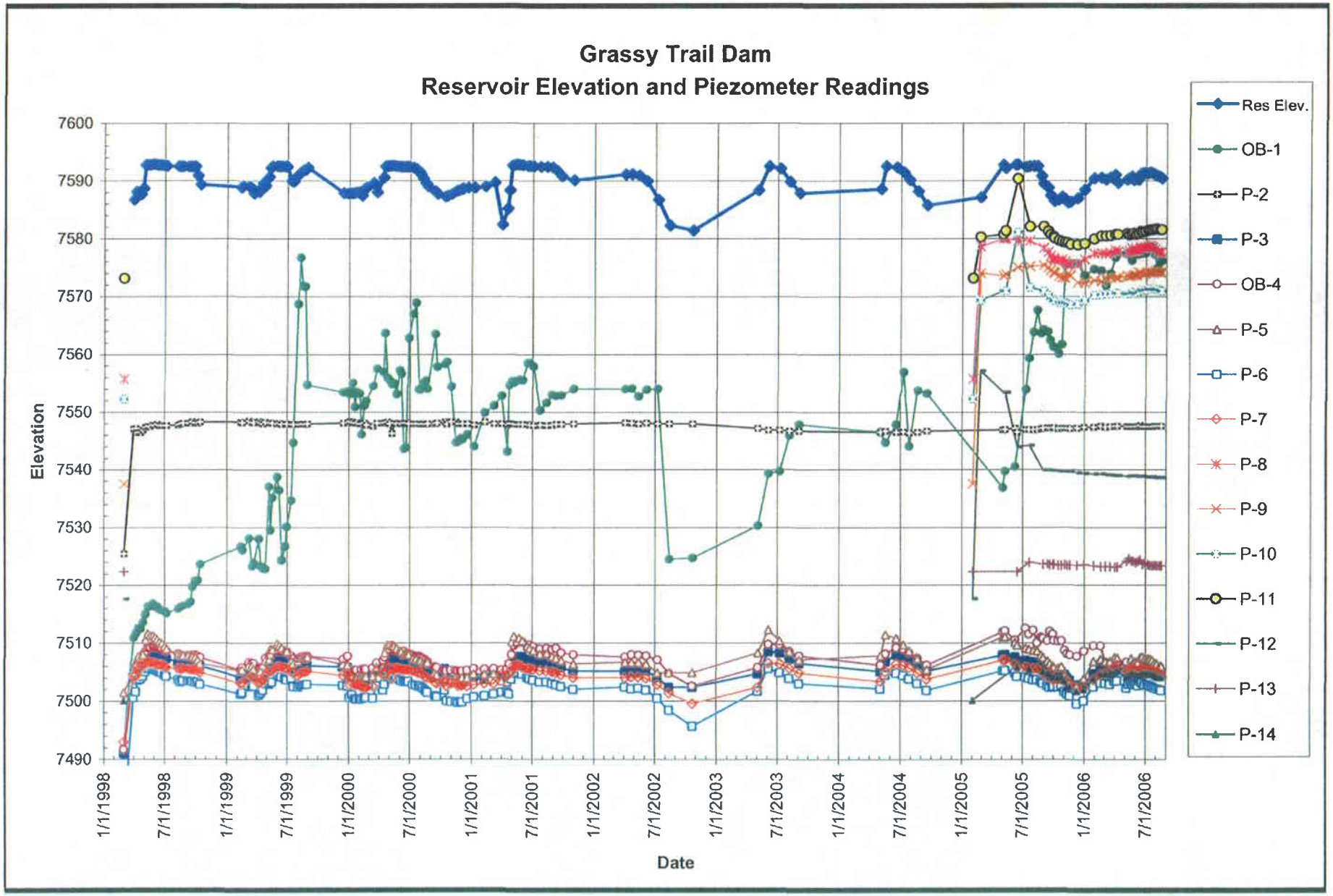

Grassy 4, A-Axis
Depth in feet
0
10
20
30
40
50
60
70
-0.50
-0.25
0.00
0.25
0.50
Cumulative Displacement (in) from 2/16/2005
5/27/2006
6/3/2006
6/17/2006
7/3/2006
7/14/2006
8/4/2006
8/19/2006


Grassy 4, B-Axis
Depth in feet
0
10
20
30
40
50
60
70
-0.50
-0.25
0.00
0.25
0.50
Cumulative Displacement (in) from 2/16/2005
5/27/2006
6/3/2006
6/17/2006
7/3/2006
7/14/2006
8/4/2006
8/19/2006


Grassy 4, A-Axis
59 - 63 feet
7 - 63 feet
0.50
0.25
0.00
-0.25
-0.50
Cumulative Displacement (in)
-47
44
135
226
317
408
499
590
681
Days since February 16, 2005

GRASSY TRAIL DAM PIEZOMETER & OBSERVATION WELL READINGS

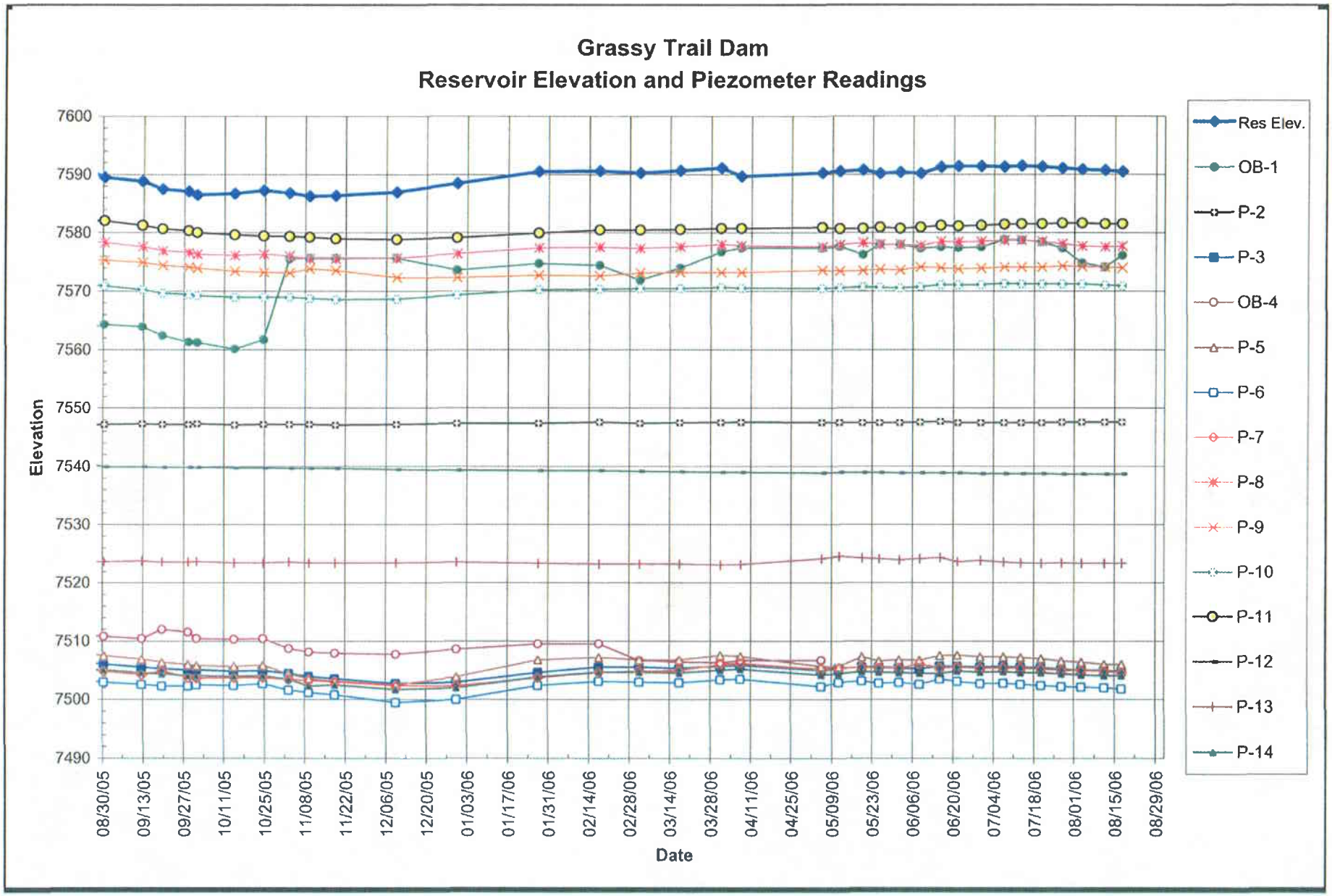
TAKE READINGS AT RIM ELEV.			05-2		79-4	98-3		05-4		79-3	05-3A	05-3		98-2	98-4	98-6
			5+62		5+15	4+14		~4+14		3+63	2+77	2+71				
Dam Crest Elev		7600.0	PIEZ.	PIEZ.	O.W.	PIEZ.		PIEZ.		O.W.	PIEZ	PIEZ	PIEZ	PIEZ	PIEZ	PIEZ
Spillway Elev.		7592.5	8	9	1	2	3	13	14	4	10	11	12	5	6	7
Rim Elev. (ft)			7601.5		7601.8	7601.7		7558.9	7558.9	7601.7	7601.8	7601.7	7601.7	7528.8	7512.0	7519.5
Tip Elev. (ft		(actual)	7554.5	7535.1	7491.8	7525.4	7491.0	7521.0	7499.5	7491.7	7550.8	7572.0	7529.5	7501.5	7479.5	7493.0
Piezometer Location:			CREST EMBANK.	CREST FOUND.	CREST EMBANK/FOUND	CREST EMBANK.	CREST FOUND.	O.S. SLOPE EMBANK.	O.S. SLOPE FOUND.	CREST EMBANK/FOUND	CREST EMBANK.	CREST EMBANK.	CREST FOUND.	TOE FOUND.	TOE FOUND.	TOE FOUND.
Date	Initials	Reservoir Elevation	45.75' (47')	65' (66.4')	110'	76.2' (76.3')	110.7'	36.5' (37.9')	58.8' (59.4')	110'	49.5' (51')	28.5' (29.7')	84.0' (72.2')	27.3'	32.5'	26.5'
8/30/2005	LW	-36"	23.2	26.2	37.4	54.5	95.6	35.2	53.8	90.9	30.8	19.6	61.7	21.3	9.0	14.6
9/12/2005	LW	-44"	23.9	26.6	37.8	54.4	96.1	35.1	54.3	91.3	31.5	20.4	61.7	21.9	9.4	15.2
9/19/2005	DC	-59"	24.6	27.1	39.3	54.5	96.4	35.3	54.5	89.7	32.1	21.0	61.8	22.4	9.7	14.5
9/28/2005	LW	-65"	24.9	27.4	40.4	54.5	96.6	35.3	54.8	90.2	32.3	21.3	61.8	22.8	9.7	15.7
10/7/2005	WD	-72"	25.2	27.6	40.5	54.4	96.6	35.2	54.8	91.3	32.5	21.6	61.8	23.0	9.5	15.8
10/14/2005	LW	-69"	25.4	28.1	41.6	54.6	96.8	35.4	54.9	91.4	32.8	22.0	61.9	23.1	9.6	15.7
10/24/2005	WD	-63"	25.2	28.3	40.0	54.5	96.7	35.4	54.8	91.3	32.8	22.2	61.8	22.9	9.3	15.7
11/2/2005	WD	-68"	25.5	28.4	26.2	54.5	97.2	35.3	55.4	93.0	32.8	22.3	62.0	24.4	10.4	16.0
11/7/2005	LW	-75"	26.0	27.7	26.7	54.5	97.7	35.4	56.6	93.6	33.0	22.4	62.0	25.2	10.8	16.2
11/18/2005	WD	-73.5"	26.0	28.0	26.1	54.6	98.1	35.4	56.4	93.8	33.2	22.7	62.0	25.7	11.2	16.4
12/9/2005	MKS	-66.5" ice	25.9	29.2	26.1	54.5	98.9	35.4	57.2	94.0	33.1	22.8	62.2	26.3	12.5	17.1
12/30/2005	MKS	-48" ice	25.1	29.2	28.1	54.3	98.7	35.3	56.9	93.1	32.4	22.5	62.3	24.9	12.0	17.1
1/27/2006	MKS	-24" ice	24.1	28.8	27.0	54.3	97.0	35.5	55.0	92.2	31.5	21.7	62.4	22.0	9.6	15.7
2/17/2006	MNH	-23" ice	24.0	28.9	27.3	54.1	96.1	35.6	54.2	92.2	31.4	21.2	62.4	21.6	8.9	14.8
3/3/2006	MNH	-27" ice	24.2	28.4	29.8	54.3	96.1	35.6	54.2	95.0	31.3	21.2	62.5	22.0	9.0	14.6
3/17/2006	MNH	-22" ice	23.9	28.3	27.8	54.2	96.4	35.6	54.4	95.3	31.3	21.1	62.6	22.0	9.2	14.5
3/31/2006	MNH	-17" ice	28.3	28.3	25.0	54.2	96.0	35.8	53.9	95.4	31.1	21.0	62.7	21.3	8.6	13.5
4/7/2006	MNH	-34" ice	23.7	28.3	24.4	54.1	95.8	35.7	53.7	95.0	31.2	20.9	62.7	21.4	8.5	13.2
5/5/2006	MNH	-27"	23.9	28.0	24.4	54.2	96.7	34.7	54.7	95.0	31.3	20.8	62.8	23.2	9.8	14.3
5/11/2006	LW	-24"	23.6	28.1	24.1	54.2	96.4	34.3	54.5		31.2	21.0	62.7	23.2	9.1	14.0
5/19/2006	LW	-20.5"	23.2	28.0	25.5	54.2	96.1	34.6	54.1		31.0	20.9	62.7	21.5	8.8	13.9
5/25/2006	LW	-28"	23.5	27.8	23.7	54.2	96.1	34.7	54.2		31.1	20.7	62.7	22.2	9.2	14.0
6/1/2006	LW	-25.5"	23.5	27.9	23.8	54.2	96.3	34.9	54.3		31.2	20.9	62.8	22.0	9.1	14.1
6/8/2006	GK	-27.7"	23.7	27.4	24.4	54.1	96.4	34.7	54.4		31.0	20.7	62.8	22.1	9.4	13.3
6/15/2006	LW	-15"	23.0	27.5	24.2	54.0	96.0	34.5	54.4		30.6	20.4	62.8	21.3	8.5	14.0
6/21/2006	LW	-13"	23.1	27.7	24.3	54.2	96.0	35.2	54.0		30.7	20.5	62.8	21.2	8.9	13.9
6/29/2006	LW	-13"	23.0	27.6	24.2	54.2	96.1	35.0	54.2		30.6	20.4	62.9	21.5	9.3	14.1
7/7/2006	LW	-14"	22.8	27.4	22.9	54.2	96.0	35.3	54.1		30.4	20.2	62.9	21.5	9.2	14.0
7/13/2006	LW	-12"	22.8	27.4	23.0	54.2	96.2	35.4	54.3		30.5	20.1	62.9	21.6	9.4	14.1
7/20/2006	LW	-14"	23.0	27.4	23.3	54.2	96.2	35.5	54.3		30.5	20.1	62.9	21.8	9.6	14.2
7/27/2006	LW	-16.75"	23.4	27.2	24.4	54.1	96.5	35.4	54.5		30.5	20	63	22.2	9.8	14.4
8/3/2006	LW	-19.5"	23.8	27.3	26.9	54.1	96.7	35.5	54.7		30.5	20	63	22.4	9.9	14.5
8/11/2006	GK	-21"	23.9	27.4	27.6	54.1	96.7	35.5	54.8		30.7	20.1	63.0	22.8	10	14.6
8/17/2006	LW	-24"	23.8	27.5	25.6	54.1	96.9	35.5	54.8		30.8	20.1	63.0	22.8	10.2	14.8



RB&G ENGINEERING INC.
Provo, Utah

Figure Reservoir Elevation and Piezometer Readings
March 1998 to August 17, 2006

Grassy Trail Dam and Reservoir



RB&G ENGINEERING INC.
Provo, Utah

Figure Reservoir Elevation and Piezometer Readings
August 30, 2005 to August 17, 2006

Grassy Trail Dam and Reservoir