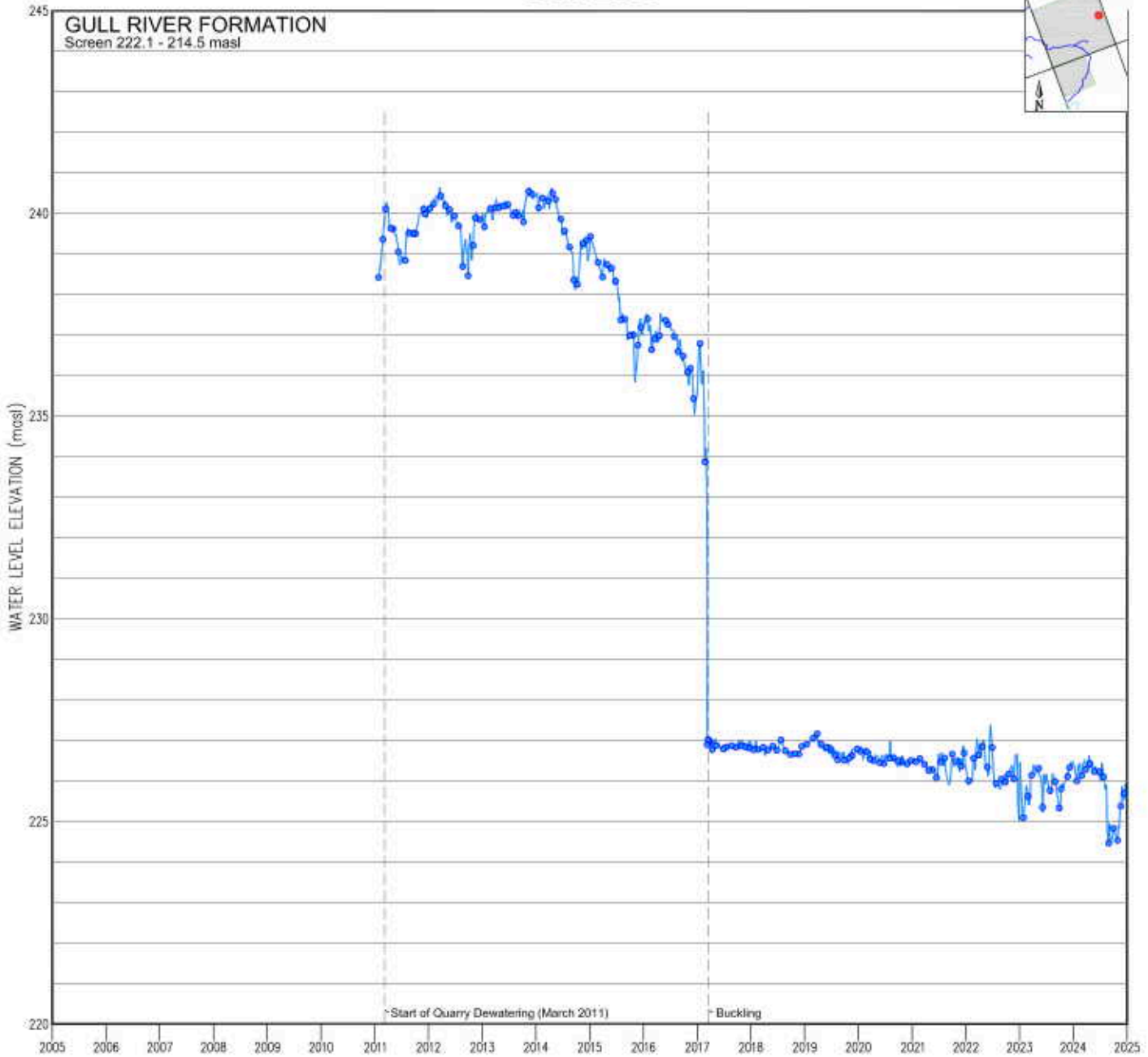


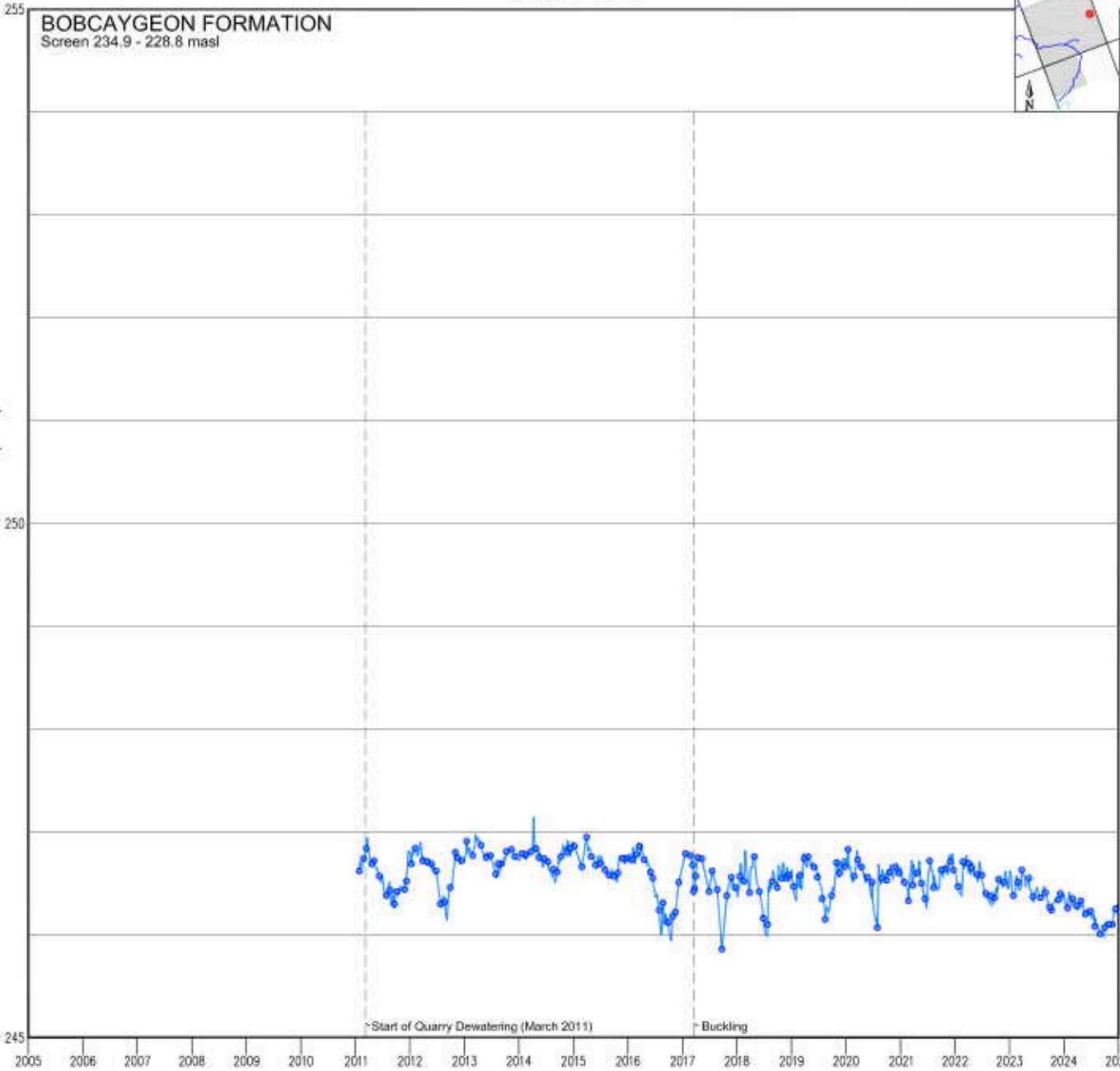
# OW-29A



MP Elevation 247.74 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
18-Apr-23	226.20	02-Aug-23	225.69	15-Nov-23	226.10	28-Feb-24	226.13	12-Jun-24	226.21	25-Sep-24	224.65
25-Apr-23	226.18	08-Aug-23	225.87	21-Nov-23	226.16	05-Mar-24	226.37	18-Jun-24	226.14	30-Sep-24	224.83
01-May-23	226.27	14-Aug-23	226.17	24-Nov-23	226.11	11-Mar-24	226.45	24-Jun-24	226.20	02-Oct-24	224.83
07-May-23	226.30	20-Aug-23	226.14	28-Nov-23	226.21	17-Mar-24	226.50	27-Jun-24	226.23	08-Oct-24	224.70
11-May-23	226.31	26-Aug-23	226.03	04-Dec-23	226.32	23-Mar-24	226.40	01-Jul-24	226.14	14-Oct-24	224.69
14-May-23	226.18	30-Aug-23	225.98	07-Dec-23	226.33	26-Mar-24	226.28	07-Jul-24	225.98	20-Oct-24	224.64
20-May-23	226.10	02-Sep-23	225.97	11-Dec-23	226.37	30-Mar-24	226.36	13-Jul-24	226.44	26-Oct-24	224.60
26-May-23	226.09	08-Sep-23	225.78	17-Dec-23	226.46	05-Apr-24	226.47	19-Jul-24	226.31	28-Oct-24	224.53
01-Jun-23	225.83	14-Sep-23	225.67	23-Dec-23	226.39	11-Apr-24	226.48	25-Jul-24	226.10	02-Nov-24	224.89
06-Jun-23	225.35	20-Sep-23	225.55	29-Dec-23	226.46	17-Apr-24	226.62	26-Jul-24	226.08	08-Nov-24	224.84
08-Jun-23	225.22	26-Sep-23	225.36	04-Jan-24	226.40	23-Apr-24	226.42	01-Aug-24	225.92	14-Nov-24	225.27
14-Jun-23	226.16	27-Sep-23	225.33	10-Jan-24	226.34	24-Apr-24	226.31	07-Aug-24	225.79	19-Nov-24	225.38
20-Jun-23	226.11	03-Oct-23	225.27	16-Jan-24	226.17	30-Apr-24	226.50	13-Aug-24	225.90	21-Nov-24	225.33
26-Jun-23	225.93	09-Oct-23	225.57	22-Jan-24	226.05	06-May-24	226.39	19-Aug-24	224.78	27-Nov-24	225.87
02-Jul-23	226.17	10-Oct-23	225.80	25-Jan-24	226.00	12-May-24	226.31	25-Aug-24	224.51	03-Dec-24	225.71
08-Jul-23	226.02	16-Oct-23	225.93	03-Feb-24	226.37	18-May-24	226.32	29-Aug-24	224.46	09-Dec-24	225.51
14-Jul-23	225.93	22-Oct-23	225.86	09-Feb-24	226.41	23-May-24	226.23	01-Sep-24	224.95	11-Dec-24	225.69
20-Jul-23	225.82	28-Oct-23	225.85	15-Feb-24	226.43	25-May-24	226.27	07-Sep-24	224.57	16-Dec-24	225.63
26-Jul-23	225.76	03-Nov-23	225.96	21-Feb-24	226.11	31-May-24	226.36	13-Sep-24	224.58	22-Dec-24	225.93
27-Jul-23	225.76	09-Nov-23	225.99	27-Feb-24	226.17	06-Jun-24	226.27	19-Sep-24	224.53	28-Dec-24	225.74

# OW-29B



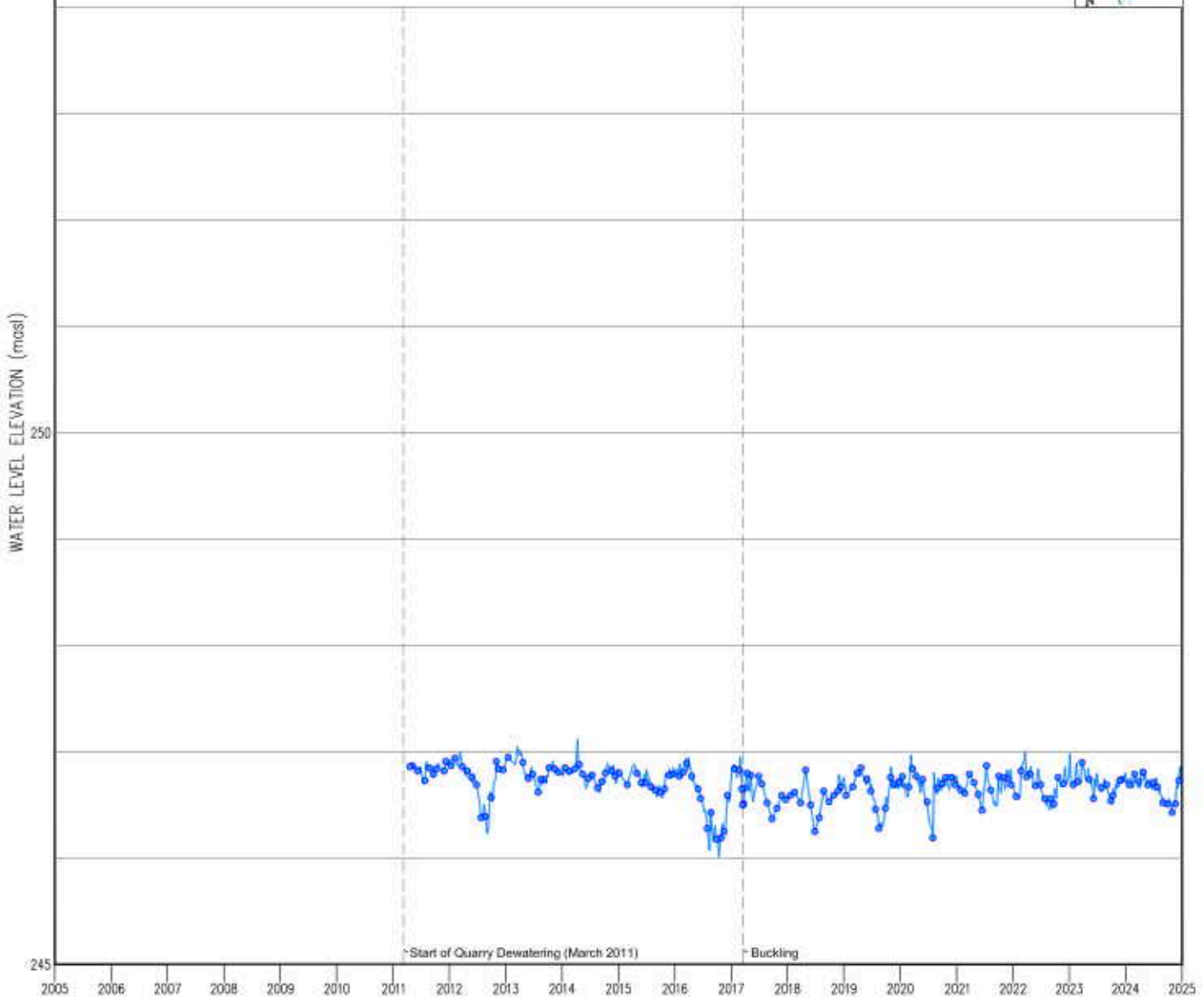
MP Elevation 247.74 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
19-Apr-23	246.47	03-Aug-23	246.36	16-Nov-23	246.35	29-Feb-24	246.31	13-Jun-24	246.21	26-Sep-24	245.98
26-Apr-23	246.48	09-Aug-23	246.38	22-Nov-23	246.33	06-Mar-24	246.34	19-Jun-24	246.19	30-Sep-24	246.07
02-May-23	246.51	15-Aug-23	246.45	24-Nov-23	246.34	12-Mar-24	246.32	25-Jun-24	246.20	03-Oct-24	246.07
08-May-23	246.54	21-Aug-23	246.47	29-Nov-23	246.36	18-Mar-24	246.30	27-Jun-24	246.23	09-Oct-24	246.12
11-May-23	246.55	27-Aug-23	246.43	05-Dec-23	246.40	24-Mar-24	246.26	02-Jul-24	246.18	15-Oct-24	246.13
15-May-23	246.47	30-Aug-23	246.41	07-Dec-23	246.40	26-Mar-24	246.28	08-Jul-24	246.15	21-Oct-24	246.11
21-May-23	246.43	03-Sep-23	246.38	12-Dec-23	246.39	31-Mar-24	246.24	14-Jul-24	246.20	27-Oct-24	246.09
27-May-23	246.43	09-Sep-23	246.35	18-Dec-23	246.37	06-Apr-24	246.25	20-Jul-24	246.20	28-Oct-24	246.10
02-Jun-23	246.38	15-Sep-23	246.32	24-Dec-23	246.35	12-Apr-24	246.28	25-Jul-24	246.08	03-Nov-24	246.09
06-Jun-23	246.37	21-Sep-23	246.28	30-Dec-23	246.39	18-Apr-24	246.29	27-Jul-24	246.16	09-Nov-24	246.09
09-Jun-23	246.32	27-Sep-23	246.27	05-Jan-24	246.35	23-Apr-24	246.33	02-Aug-24	246.12	15-Nov-24	246.09
15-Jun-23	246.39	28-Sep-23	246.24	11-Jan-24	246.28	25-Apr-24	246.27	08-Aug-24	246.09	19-Nov-24	246.10
21-Jun-23	246.41	04-Oct-23	246.21	17-Jan-24	246.30	01-May-24	246.28	14-Aug-24	246.09	22-Nov-24	246.11
27-Jun-23	246.40	10-Oct-23	246.24	23-Jan-24	246.27	07-May-24	246.29	20-Aug-24	246.06	28-Nov-24	246.20
03-Jul-23	246.46	11-Oct-23	246.24	25-Jan-24	246.26	13-May-24	246.24	26-Aug-24	246.02	04-Dec-24	246.22
09-Jul-23	246.43	17-Oct-23	246.30	04-Feb-24	246.41	19-May-24	246.23	29-Aug-24	246.01	10-Dec-24	246.20
15-Jul-23	246.40	23-Oct-23	246.31	10-Feb-24	246.38	23-May-24	246.20	02-Sep-24	246.02	11-Dec-24	246.25
21-Jul-23	246.38	29-Oct-23	246.31	16-Feb-24	246.34	26-May-24	246.20	08-Sep-24	246.02	17-Dec-24	246.26
27-Jul-23	246.36	04-Nov-23	246.34	22-Feb-24	246.28	01-Jun-24	246.24	14-Sep-24	246.02	23-Dec-24	246.30
28-Jul-23	246.37	10-Nov-23	246.33	28-Feb-24	246.35	07-Jun-24	246.24	20-Sep-24	246.00	29-Dec-24	246.25

# OW-29C



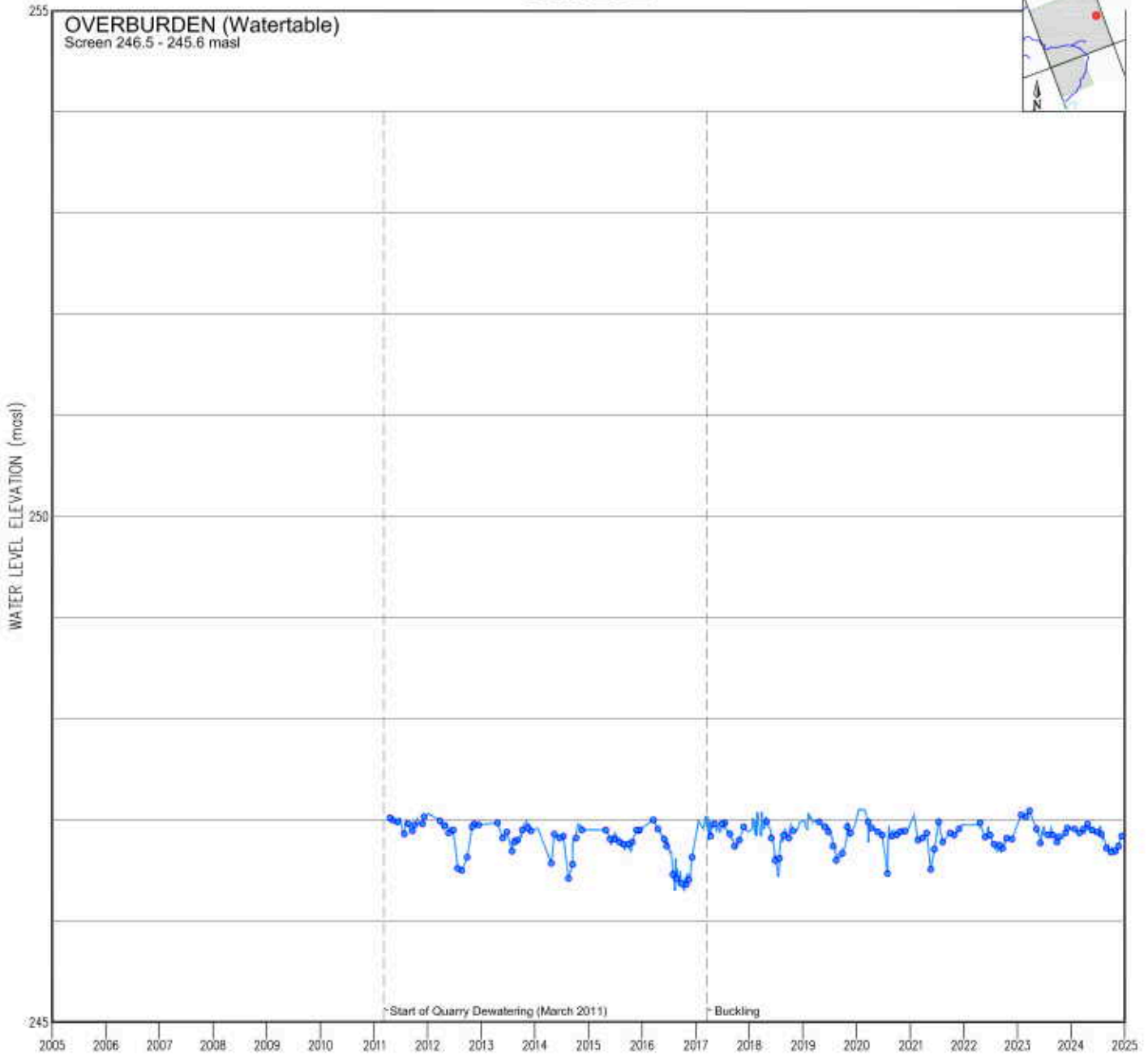
255  
BOBCAYGEON FORMATION (Upper)  
Screen 243.3 - 241.1 masl



MP Elevation 247.81 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
20-Apr-23	246.73	04-Aug-23	246.66	17-Nov-23	246.67	01-Mar-24	246.76	14-Jun-24	246.68	27-Sep-24	246.53
27-Apr-23	246.76	10-Aug-23	246.67	23-Nov-23	246.73	07-Mar-24	246.72	20-Jun-24	246.65	30-Sep-24	246.51
03-May-23	246.84	16-Aug-23	246.75	24-Nov-23	246.73	13-Mar-24	246.72	26-Jun-24	246.71	04-Oct-24	246.56
09-May-23	246.78	22-Aug-23	246.71	30-Nov-23	246.75	19-Mar-24	246.72	27-Jun-24	246.71	10-Oct-24	246.55
11-May-23	246.74	28-Aug-23	246.66	06-Dec-23	246.75	25-Mar-24	246.66	03-Jul-24	246.67	16-Oct-24	246.52
16-May-23	246.71	30-Aug-23	246.69	07-Dec-23	246.74	26-Mar-24	246.72	09-Jul-24	246.63	22-Oct-24	246.50
22-May-23	246.75	04-Sep-23	246.64	13-Dec-23	246.74	01-Apr-24	246.66	15-Jul-24	246.76	28-Oct-24	246.43
28-May-23	246.68	10-Sep-23	246.61	19-Dec-23	246.75	07-Apr-24	246.77	21-Jul-24	246.69	29-Oct-24	246.47
03-Jun-23	246.63	16-Sep-23	246.60	25-Dec-23	246.78	13-Apr-24	246.83	25-Jul-24	246.67	04-Nov-24	246.51
06-Jun-23	246.56	22-Sep-23	246.58	31-Dec-23	246.80	19-Apr-24	246.78	26-Jul-24	246.66	10-Nov-24	246.50
10-Jun-23	246.57	27-Sep-23	246.54	06-Jan-24	246.70	23-Apr-24	246.81	03-Aug-24	246.62	16-Nov-24	246.54
16-Jun-23	246.75	29-Sep-23	246.53	12-Jan-24	246.74	26-Apr-24	246.73	09-Aug-24	246.64	19-Nov-24	246.51
22-Jun-23	246.67	05-Oct-23	246.51	18-Jan-24	246.74	02-May-24	246.82	15-Aug-24	246.60	23-Nov-24	246.65
28-Jun-23	246.80	10-Oct-23	246.59	24-Jan-24	246.68	08-May-24	246.75	21-Aug-24	246.57	29-Nov-24	246.70
04-Jul-23	246.73	12-Oct-23	246.65	25-Jan-24	246.69	14-May-24	246.74	27-Aug-24	246.53	05-Dec-24	246.65
10-Jul-23	246.69	18-Oct-23	246.64	05-Feb-24	246.75	20-May-24	246.69	29-Aug-24	246.52	11-Dec-24	246.73
16-Jul-23	246.69	24-Oct-23	246.62	11-Feb-24	246.74	23-May-24	246.69	03-Sep-24	246.56	12-Dec-24	246.77
22-Jul-23	246.69	30-Oct-23	246.70	17-Feb-24	246.66	27-May-24	246.72	09-Sep-24	246.54	18-Dec-24	246.86
27-Jul-23	246.66	05-Nov-23	246.66	23-Feb-24	246.70	02-Jun-24	246.73	15-Sep-24	246.53	24-Dec-24	246.74
29-Jul-23	246.64	11-Nov-23	246.72	28-Feb-24	246.79	08-Jun-24	246.70	21-Sep-24	246.49	30-Dec-24	246.87

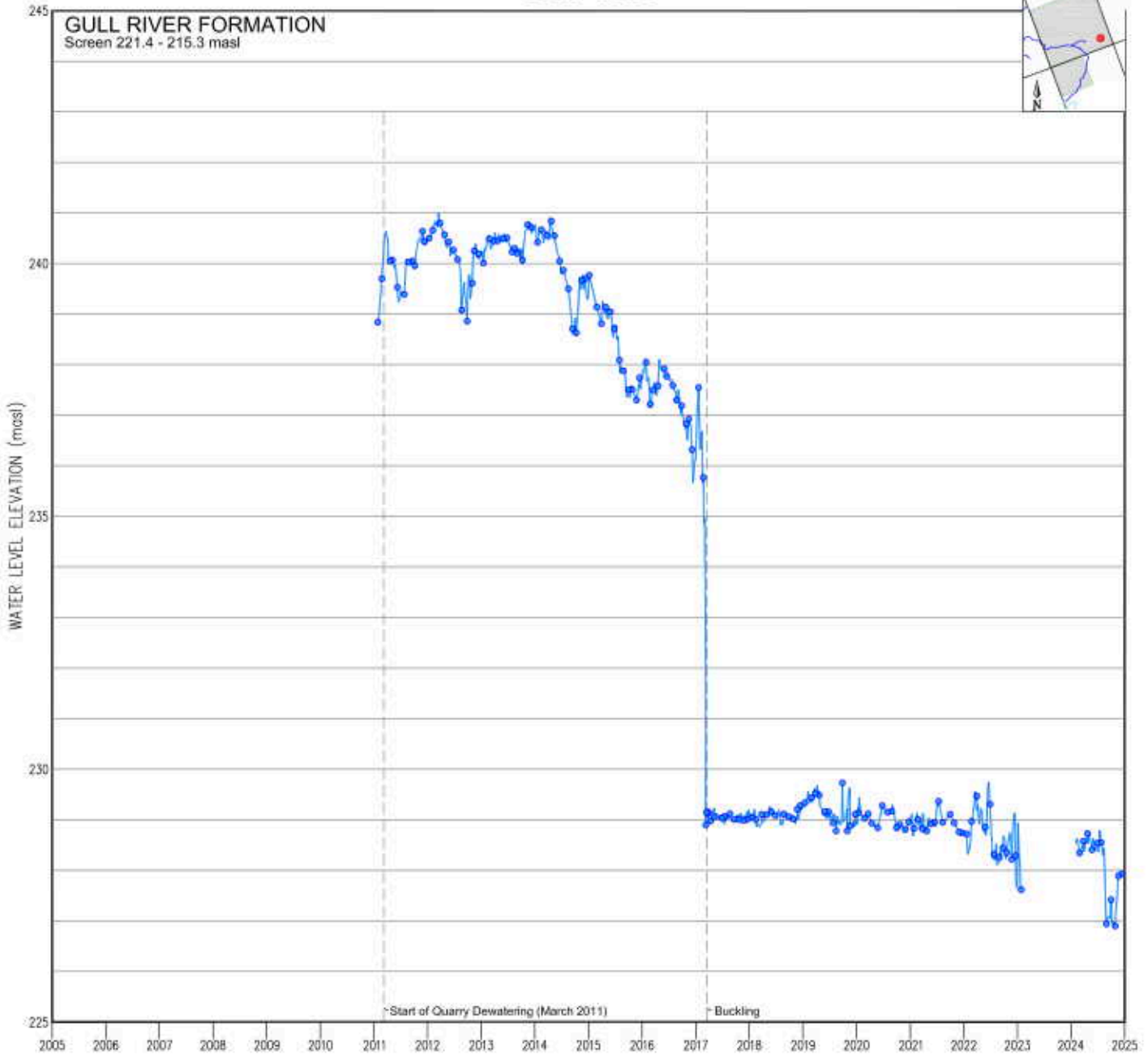
# OW-29D



MP Elevation 248.02 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
17-Jun-22	246.93	25-Sep-22	246.72	05-Jul-23	246.89	13-Oct-23	246.83	09-May-24	246.91	22-Aug-24	246.77
23-Jun-22	246.88	01-Oct-22	246.78	11-Jul-23	246.87	19-Oct-23	246.81	15-May-24	246.90	28-Aug-24	246.74
29-Jun-22	246.85	07-Oct-22	246.76	17-Jul-23	246.87	25-Oct-23	246.82	21-May-24	246.87	29-Aug-24	246.72
30-Jun-22	246.82	13-Oct-22	246.78	23-Jul-23	246.87	31-Oct-23	246.83	23-May-24	246.90	04-Sep-24	246.73
06-Jul-22	246.82	19-Oct-22	246.81	27-Jul-23	246.85	06-Nov-23	246.82	28-May-24	246.92	10-Sep-24	246.75
12-Jul-22	246.80	20-Oct-22	246.82	30-Jul-23	246.86	12-Nov-23	246.84	03-Jun-24	246.90	16-Sep-24	246.70
18-Jul-22	246.76	24-Nov-22	246.81	05-Aug-23	246.86	18-Nov-23	246.85	09-Jun-24	246.88	22-Sep-24	246.68
24-Jul-22	246.75	27-Jan-23	247.05	11-Aug-23	246.87	24-Nov-23	246.87	15-Jun-24	246.86	28-Sep-24	246.70
26-Jul-22	246.76	27-Feb-23	247.03	17-Aug-23	246.92	07-Dec-23	246.92	21-Jun-24	246.86	30-Sep-24	246.68
31-Jul-22	246.71	24-Mar-23	247.09	23-Aug-23	246.90	25-Jan-24	246.91	27-Jun-24	246.88	05-Oct-24	246.73
06-Aug-22	246.72	11-May-23	246.91	29-Aug-23	246.87	28-Feb-24	246.87	28-Jun-24	246.88	11-Oct-24	246.72
12-Aug-22	246.72	17-May-23	246.87	30-Aug-23	246.85	26-Mar-24	246.91	04-Jul-24	246.87	17-Oct-24	246.70
18-Aug-22	246.69	23-May-23	246.88	05-Sep-23	246.86	27-Mar-24	246.89	10-Jul-24	246.85	23-Oct-24	246.68
24-Aug-22	246.69	29-May-23	246.84	11-Sep-23	246.83	02-Apr-24	246.86	16-Jul-24	246.94	28-Oct-24	246.69
30-Aug-22	246.75	04-Jun-23	246.80	17-Sep-23	246.82	08-Apr-24	246.91	22-Jul-24	246.88	30-Oct-24	246.68
31-Aug-22	246.75	06-Jun-23	246.77	23-Sep-23	246.80	14-Apr-24	246.96	25-Jul-24	246.86	05-Nov-24	246.71
06-Sep-22	246.71	11-Jun-23	246.76	27-Sep-23	246.78	20-Apr-24	246.93	29-Jul-24	246.84	11-Nov-24	246.70
12-Sep-22	246.68	17-Jun-23	246.89	30-Sep-23	246.77	23-Apr-24	246.96	04-Aug-24	246.81	17-Nov-24	246.71
18-Sep-22	246.72	23-Jun-23	246.85	06-Oct-23	246.78	27-Apr-24	246.90	10-Aug-24	246.84	19-Nov-24	246.74
23-Sep-22	246.72	29-Jun-23	246.93	10-Oct-23	246.83	03-May-24	246.94	16-Aug-24	246.80	11-Dec-24	246.84

# OW-30A

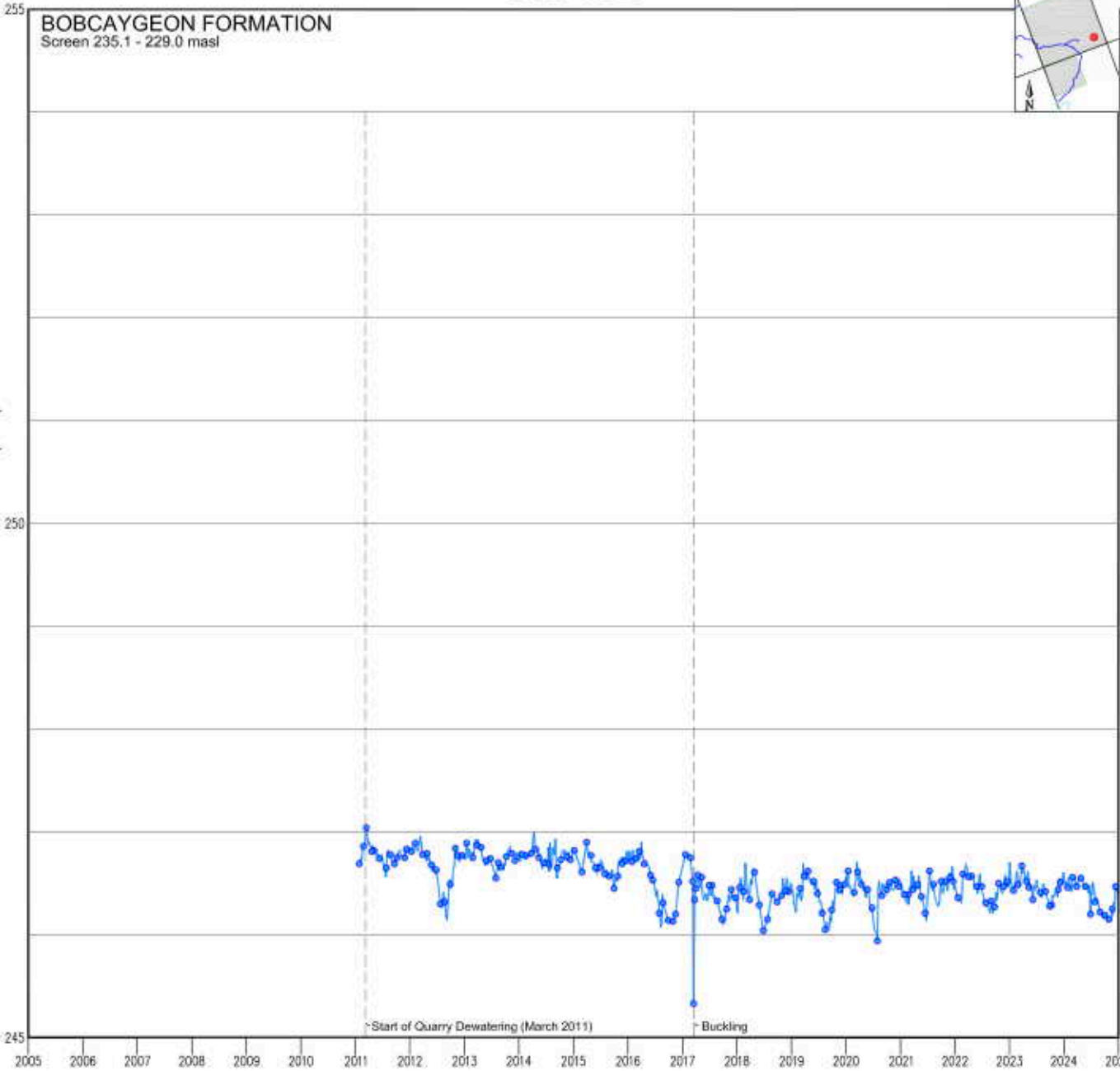


MP Elevation 248.12 masl

Readings after January 2023 Unreliable

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
22-Feb-22	228.97	08-Jun-22	229.16	21-Sep-22	228.51	30-Dec-22	227.66	24-Apr-24	228.53	07-Aug-24	228.30
23-Feb-22	229.02	14-Jun-22	229.67	23-Sep-22	228.44	05-Jan-23	228.93	30-Apr-24	228.69	13-Aug-24	228.44
01-Mar-22	229.00	20-Jun-22	229.75	28-Sep-22	228.68	11-Jan-23	228.36	06-May-24	228.64	29-Aug-24	226.94
07-Mar-22	229.20	26-Jun-22	229.28	04-Oct-22	228.63	17-Jan-23	228.15	12-May-24	228.60	04-Sep-24	227.04
13-Mar-22	229.30	29-Jun-22	229.31	10-Oct-22	228.51	23-Jan-23	227.65	18-May-24	228.54	10-Sep-24	227.08
19-Mar-22	229.57	03-Jul-22	229.00	16-Oct-22	228.23	27-Jan-23	227.62	23-May-24	228.41	16-Sep-24	227.05
25-Mar-22	229.37	09-Jul-22	228.65	20-Oct-22	228.35	02-Feb-24	228.53	25-May-24	228.55	22-Sep-24	227.06
30-Mar-22	229.47	15-Jul-22	228.24	23-Oct-22	228.40	08-Feb-24	228.61	31-May-24	228.64	28-Sep-24	227.31
01-Apr-22	229.18	21-Jul-22	228.28	29-Oct-22	228.53	14-Feb-24	228.62	06-Jun-24	228.47	30-Sep-24	227.42
07-Apr-22	229.30	26-Jul-22	228.32	04-Nov-22	228.67	28-Feb-24	228.35	12-Jun-24	228.43	05-Oct-24	226.96
13-Apr-22	228.98	28-Jul-22	228.19	10-Nov-22	228.72	05-Mar-24	228.31	18-Jun-24	228.40	11-Oct-24	227.00
19-Apr-22	228.91	03-Aug-22	228.32	16-Nov-22	228.66	11-Mar-24	228.40	24-Jun-24	228.48	17-Oct-24	226.88
26-Apr-22	229.22	09-Aug-22	228.53	22-Nov-22	228.30	17-Mar-24	228.50	27-Jun-24	228.54	23-Oct-24	226.97
02-May-22	229.19	15-Aug-22	228.12	24-Nov-22	228.22	23-Mar-24	228.43	01-Jul-24	228.47	28-Oct-24	226.90
08-May-22	228.96	21-Aug-22	228.14	29-Nov-22	228.65	26-Mar-24	228.58	07-Jul-24	228.36	30-Oct-24	227.08
14-May-22	228.80	27-Aug-22	228.14	05-Dec-22	229.02	30-Mar-24	228.37	13-Jul-24	228.60	05-Nov-24	227.33
20-May-22	228.74	31-Aug-22	228.26	11-Dec-22	229.14	05-Apr-24	228.50	19-Jul-24	228.72	11-Nov-24	227.52
26-May-22	228.86	03-Sep-22	228.37	17-Dec-22	229.05	11-Apr-24	228.57	25-Jul-24	228.55	17-Nov-24	227.83
27-May-22	228.77	09-Sep-22	228.25	19-Dec-22	228.29	17-Apr-24	228.56	26-Jul-24	228.54	19-Nov-24	227.89
02-Jun-22	228.69	15-Sep-22	228.34	24-Dec-22	227.68	23-Apr-24	228.73	01-Aug-24	228.40	11-Dec-24	227.93

# OW-30B



MP Elevation 248.12 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
23-Apr-23	246.54	01-Aug-23	246.36	14-Nov-23	246.42	28-Feb-24	246.56	11-Jun-24	246.41	24-Sep-24	246.16
24-Apr-23	246.52	07-Aug-23	246.42	20-Nov-23	246.37	04-Mar-24	246.56	17-Jun-24	246.41	30-Sep-24	246.19
30-Apr-23	246.58	13-Aug-23	246.49	24-Nov-23	246.44	10-Mar-24	246.54	23-Jun-24	246.48	01-Oct-24	246.17
06-May-23	246.61	19-Aug-23	246.49	27-Nov-23	246.50	16-Mar-24	246.55	27-Jun-24	246.20	07-Oct-24	246.19
11-May-23	246.46	25-Aug-23	246.43	03-Dec-23	246.55	22-Mar-24	246.47	30-Jun-24	246.42	13-Oct-24	246.20
13-May-23	246.51	30-Aug-23	246.42	07-Dec-23	246.51	26-Mar-24	246.47	06-Jul-24	246.39	19-Oct-24	246.15
19-May-23	246.46	01-Sep-23	246.40	10-Dec-23	246.52	29-Mar-24	246.49	12-Jul-24	246.51	25-Oct-24	246.13
25-May-23	246.49	07-Sep-23	246.37	16-Dec-23	246.49	04-Apr-24	246.50	18-Jul-24	246.45	28-Oct-24	246.15
31-May-23	246.42	13-Sep-23	246.35	22-Dec-23	246.51	10-Apr-24	246.53	24-Jul-24	246.42	01-Nov-24	246.14
06-Jun-23	246.34	19-Sep-23	246.32	28-Dec-23	246.60	16-Apr-24	246.56	25-Jul-24	246.32	07-Nov-24	246.15
07-Jun-23	246.35	25-Sep-23	246.28	03-Jan-24	246.51	22-Apr-24	246.53	31-Jul-24	246.35	13-Nov-24	246.18
13-Jun-23	246.47	27-Sep-23	246.28	09-Jan-24	246.49	23-Apr-24	246.55	06-Aug-24	246.32	19-Nov-24	246.25
19-Jun-23	246.46	02-Oct-23	246.25	15-Jan-24	246.52	29-Apr-24	246.54	12-Aug-24	246.34	20-Nov-24	246.18
25-Jun-23	246.44	08-Oct-23	246.28	21-Jan-24	246.46	05-May-24	246.52	18-Aug-24	246.31	26-Nov-24	246.31
01-Jul-23	246.53	10-Oct-23	246.29	25-Jan-24	246.46	11-May-24	246.47	24-Aug-24	246.27	02-Dec-24	246.31
07-Jul-23	246.47	15-Oct-23	246.39	02-Feb-24	246.56	17-May-24	246.45	29-Aug-24	246.22	08-Dec-24	246.29
13-Jul-23	246.46	21-Oct-23	246.36	08-Feb-24	246.51	23-May-24	246.47	31-Aug-24	246.24	11-Dec-24	246.47
19-Jul-23	246.42	27-Oct-23	246.38	14-Feb-24	246.46	14-May-24	246.44	06-Sep-24	246.21	15-Dec-24	246.42
25-Jul-23	246.41	02-Nov-23	246.41	20-Feb-24	246.42	30-May-24	246.50	12-Sep-24	246.20	21-Dec-24	246.47
27-Jul-23	246.41	08-Nov-23	246.40	26-Feb-24	246.46	05-Jun-24	246.46	18-Sep-24	246.17	27-Dec-24	246.39

TOMLINSON QUARRY  
CARDEN TOWNSHIP

22514097  
8 Apr 25

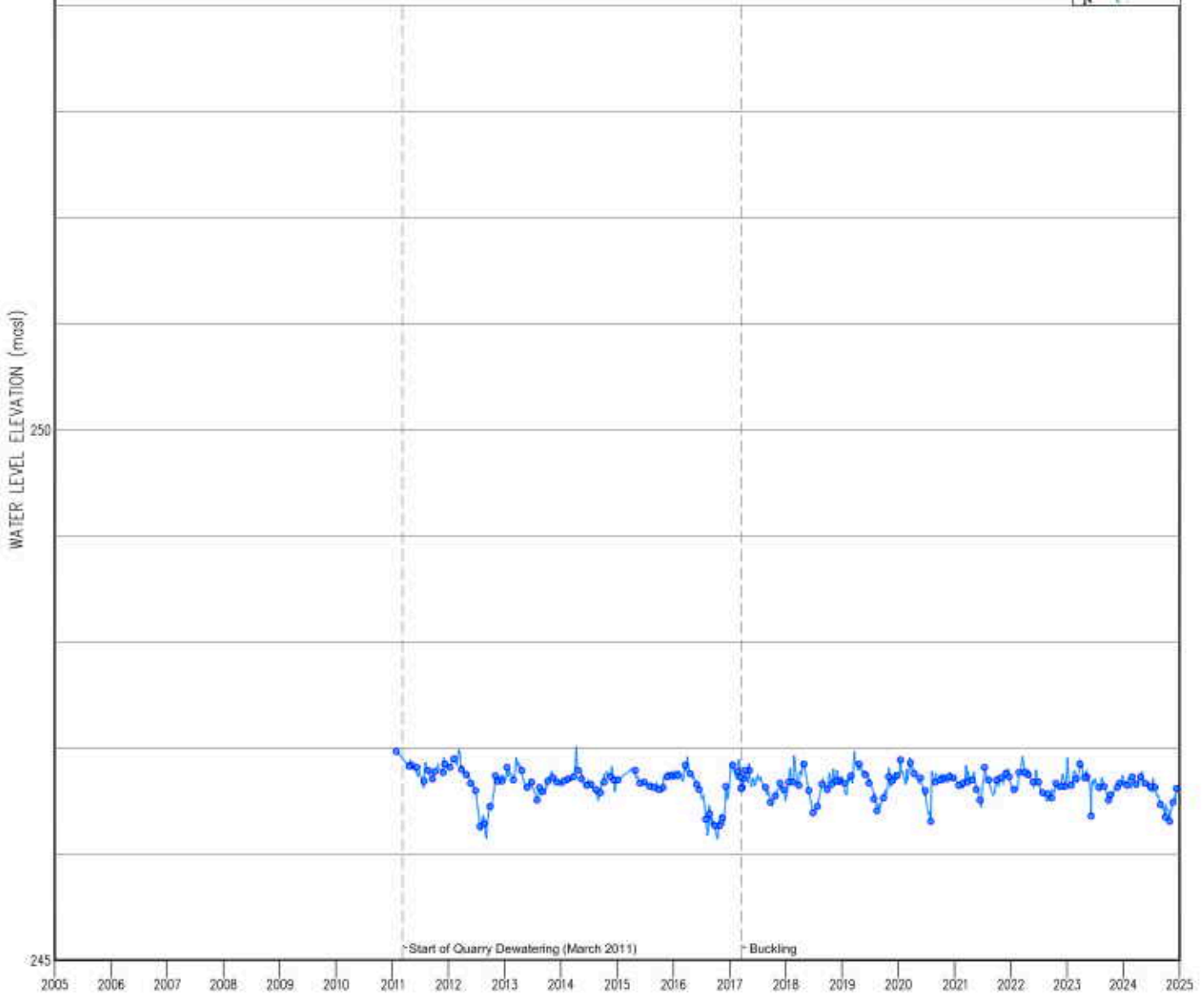


A24055

# OW-30C



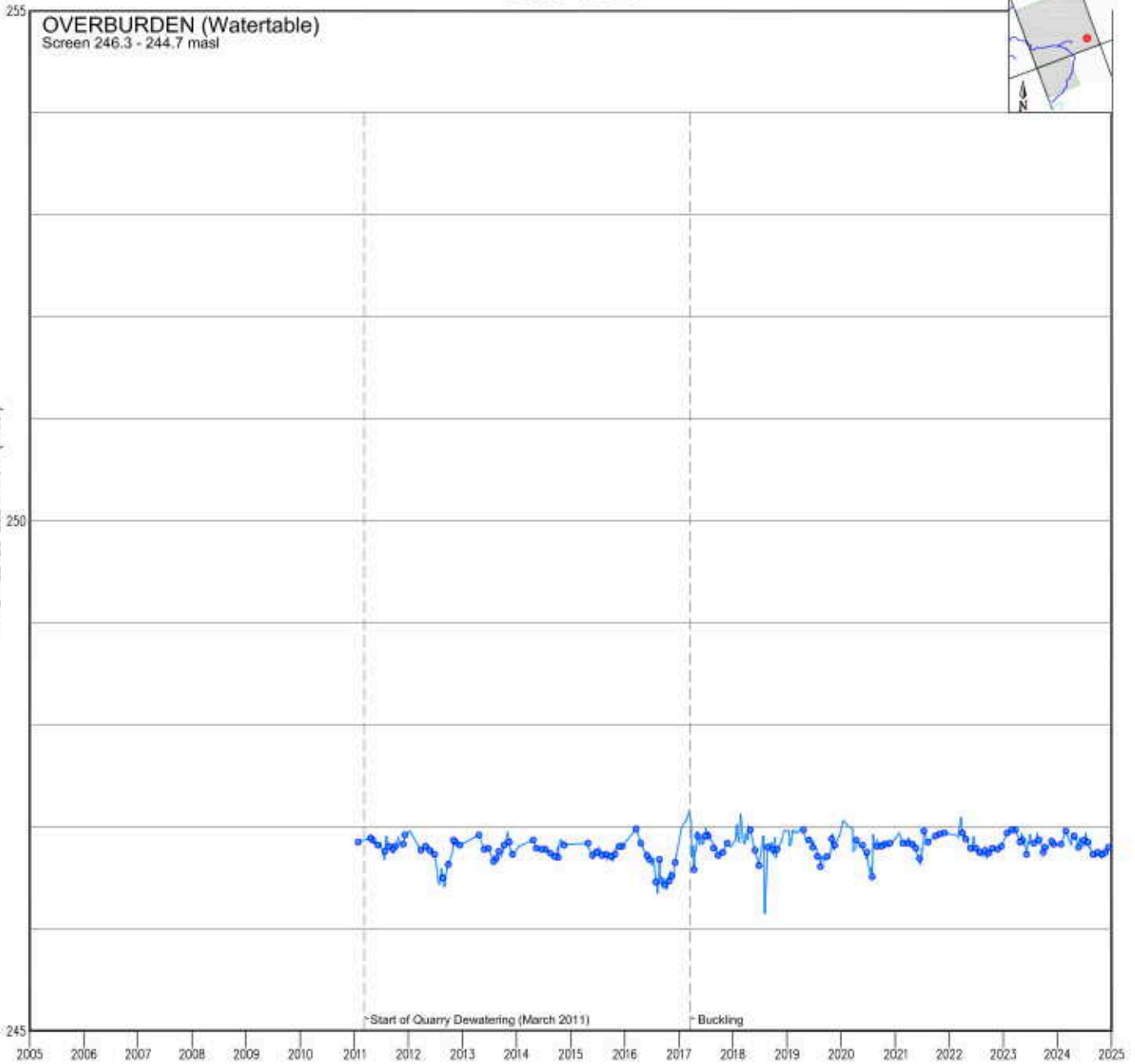
255  
BOBCAYGEON FORMATION (Upper)  
Screen 242.9 - 241.1 masl



MP Elevation 247.96 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
24-Apr-23	246.72	02-Aug-23	246.61	15-Nov-23	246.62	28-Feb-24	246.73	12-Jun-24	246.62	25-Sep-24	246.44
25-Apr-23	246.74	08-Aug-23	246.64	21-Nov-23	246.61	05-Mar-24	246.72	18-Jun-24	246.60	30-Sep-24	246.35
01-May-23	246.78	14-Aug-23	246.72	24-Nov-23	246.63	11-Mar-24	246.68	24-Jun-24	246.64	02-Oct-24	246.46
07-May-23	246.79	20-Aug-23	246.70	28-Nov-23	246.65	17-Mar-24	246.69	27-Jun-24	246.64	08-Oct-24	246.44
11-May-23	246.73	26-Aug-23	246.65	04-Dec-23	246.67	23-Mar-24	246.64	01-Jul-24	246.62	14-Oct-24	246.42
14-May-23	246.69	30-Aug-23	246.64	07-Dec-23	246.67	26-Mar-24	246.66	07-Jul-24	246.58	20-Oct-24	246.41
20-May-23	246.69	02-Sep-23	246.64	11-Dec-23	246.67	30-Mar-24	246.66	13-Jul-24	246.72	26-Oct-24	246.37
26-May-23	246.67	08-Sep-23	246.60	17-Dec-23	246.68	05-Apr-24	246.70	19-Jul-24	246.65	28-Oct-24	246.31
01-Jun-23	246.62	14-Sep-23	246.58	23-Dec-23	246.66	11-Apr-24	246.71	25-Jul-24	246.63	02-Nov-24	246.41
06-Jun-23	246.36	20-Sep-23	246.56	29-Dec-23	246.75	17-Apr-24	246.74	26-Jul-24	246.61	08-Nov-24	246.41
08-Jun-23	246.57	26-Sep-23	246.52	04-Jan-24	246.66	23-Apr-24	246.73	01-Aug-24	246.57	14-Nov-24	246.46
14-Jun-23	246.70	27-Sep-23	246.51	10-Jan-24	246.66	24-Apr-24	246.69	07-Aug-24	246.55	19-Nov-24	246.49
20-Jun-23	246.66	03-Oct-23	246.50	16-Jan-24	246.69	30-Apr-24	246.78	13-Aug-24	246.56	21-Nov-24	246.49
26-Jun-23	246.67	09-Oct-23	246.54	22-Jan-24	246.65	06-May-24	246.71	19-Aug-24	246.52	27-Nov-24	246.54
02-Jul-23	246.71	10-Oct-23	246.56	25-Jan-24	246.65	12-May-24	246.65	25-Aug-24	246.50	03-Dec-24	246.52
08-Jul-23	246.67	16-Oct-23	246.58	03-Feb-24	246.73	18-May-24	246.65	29-Aug-24	246.47	09-Dec-24	246.57
14-Jul-23	246.67	22-Oct-23	246.55	09-Feb-24	246.70	23-May-24	246.67	01-Sep-24	246.47	11-Dec-24	246.62
20-Jul-23	246.64	28-Oct-23	246.58	15-Feb-24	246.68	25-May-24	246.65	07-Sep-24	246.44	16-Dec-24	246.61
26-Jul-23	246.63	03-Nov-23	246.60	21-Feb-24	246.62	31-May-24	246.68	13-Sep-24	246.44	22-Dec-24	246.63
27-Jul-23	246.63	09-Nov-23	246.62	27-Feb-24	246.66	06-Jun-24	246.64	19-Sep-24	246.42	28-Dec-24	246.60

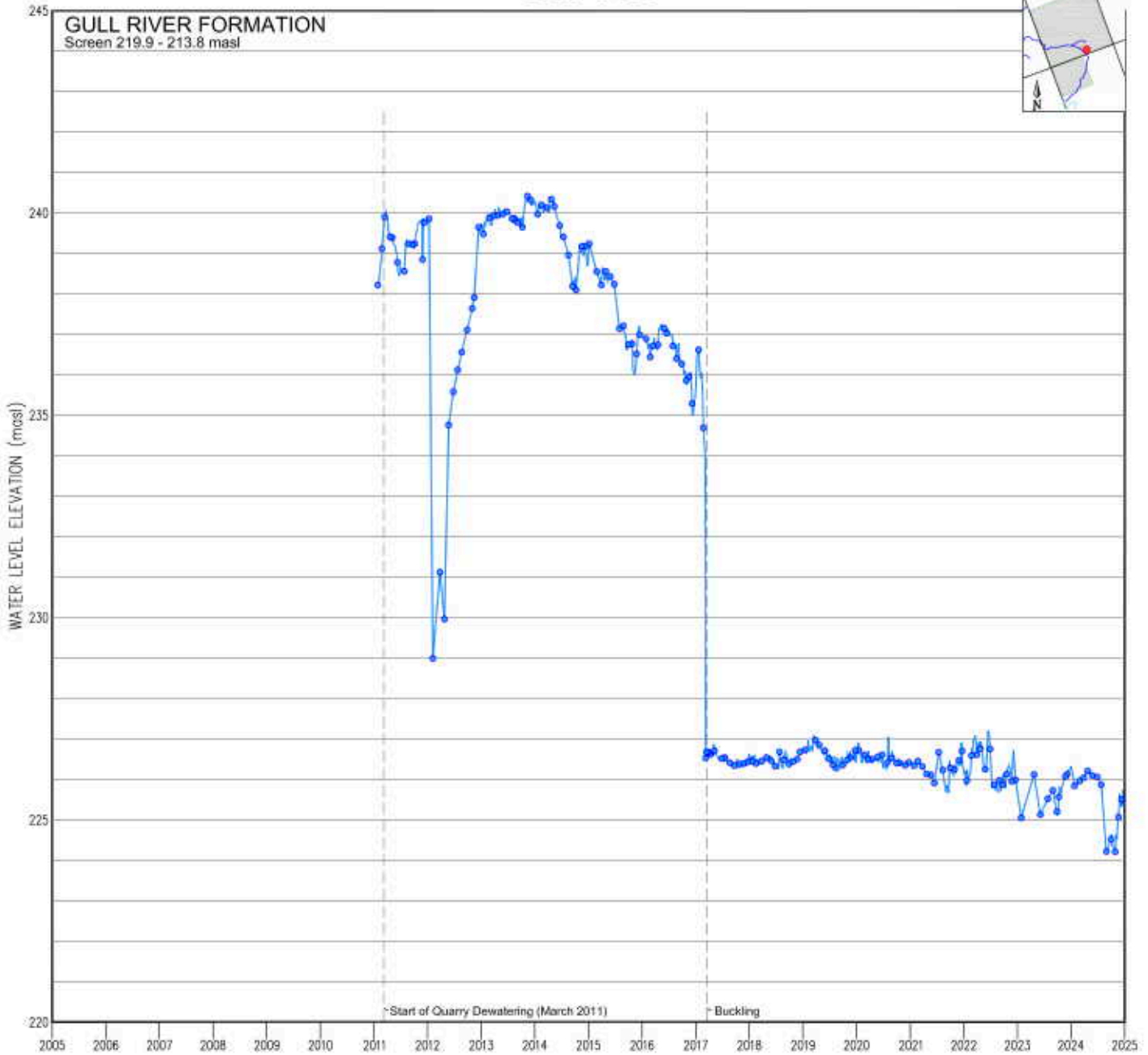
# OW-30D



MP Elevation 247.99 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
11-Jul-22	246.75	20-Oct-22	246.79	06-Jul-23	246.87	14-Oct-23	246.80	10-May-24	246.86	23-Aug-24	246.75
17-Jul-22	246.73	24-Nov-22	246.78	12-Jul-23	246.85	20-Oct-23	246.79	16-May-24	246.85	29-Aug-24	246.73
23-Jul-22	246.75	19-Dec-22	246.81	18-Jul-23	246.85	26-Oct-23	246.79	22-May-24	246.82	30-Aug-24	246.71
26-Jul-22	246.75	27-Jan-23	246.94	24-Jul-23	246.85	01-Nov-23	246.81	23-May-24	246.80	05-Sep-24	246.73
30-Jul-22	246.73	27-Feb-23	246.97	27-Jul-23	246.84	07-Nov-23	246.82	29-May-24	246.89	11-Sep-24	246.74
05-Aug-22	246.75	24-Mar-23	246.97	31-Jul-23	246.84	13-Nov-23	246.83	04-Jun-24	246.85	17-Sep-24	246.71
11-Aug-22	246.75	24-Apr-23	246.85	06-Aug-23	246.84	19-Nov-23	246.84	10-Jun-24	246.84	23-Sep-24	246.72
17-Aug-22	246.71	29-Apr-23	246.85	12-Aug-23	246.89	24-Nov-23	246.86	16-Jun-24	246.81	29-Sep-24	246.73
23-Aug-22	246.72	05-May-23	246.94	18-Aug-23	246.94	07-Dec-23	246.83	22-Jun-24	246.83	30-Sep-24	246.75
29-Aug-22	246.74	11-May-23	246.87	24-Aug-23	246.88	25-Jan-24	246.83	27-Jun-24	246.87	06-Oct-24	246.72
31-Aug-22	246.77	12-May-23	246.88	30-Aug-23	246.87	28-Feb-24	246.96	29-Jun-24	246.84	12-Oct-24	246.72
05-Sep-22	246.73	18-May-23	246.83	31-Aug-23	246.87	26-Mar-24	FRZ	05-Jul-24	246.81	18-Oct-24	246.71
11-Sep-22	246.70	24-May-23	246.85	06-Sep-23	246.83	28-Mar-24	246.83	11-Jul-24	246.94	24-Oct-24	246.70
17-Sep-22	246.73	30-May-23	246.81	12-Sep-23	246.83	03-Apr-24	246.82	17-Jul-24	246.89	28-Oct-24	246.73
23-Sep-22	246.74	05-Jun-23	246.77	18-Sep-23	246.81	09-Apr-24	246.87	23-Jul-24	246.84	31-Oct-24	246.71
24-Sep-22	246.75	06-Jun-23	246.73	24-Sep-23	246.79	15-Apr-24	246.93	25-Jul-24	246.85	06-Nov-24	246.73
30-Sep-22	246.77	12-Jun-23	246.80	27-Sep-23	246.75	21-Apr-24	246.89	30-Jul-24	246.80	12-Nov-24	246.73
06-Oct-22	246.76	18-Jun-23	246.86	01-Oct-23	246.76	23-Apr-24	246.91	05-Aug-24	246.79	18-Nov-24	246.72
12-Oct-22	246.75	24-Jun-23	246.83	07-Oct-23	246.79	28-Apr-24	246.87	11-Aug-24	246.80	19-Nov-24	246.75
18-Oct-22	246.78	30-Jun-23	246.93	10-Oct-23	246.80	04-May-24	246.91	17-Aug-24	246.77	11-Dec-24	246.80

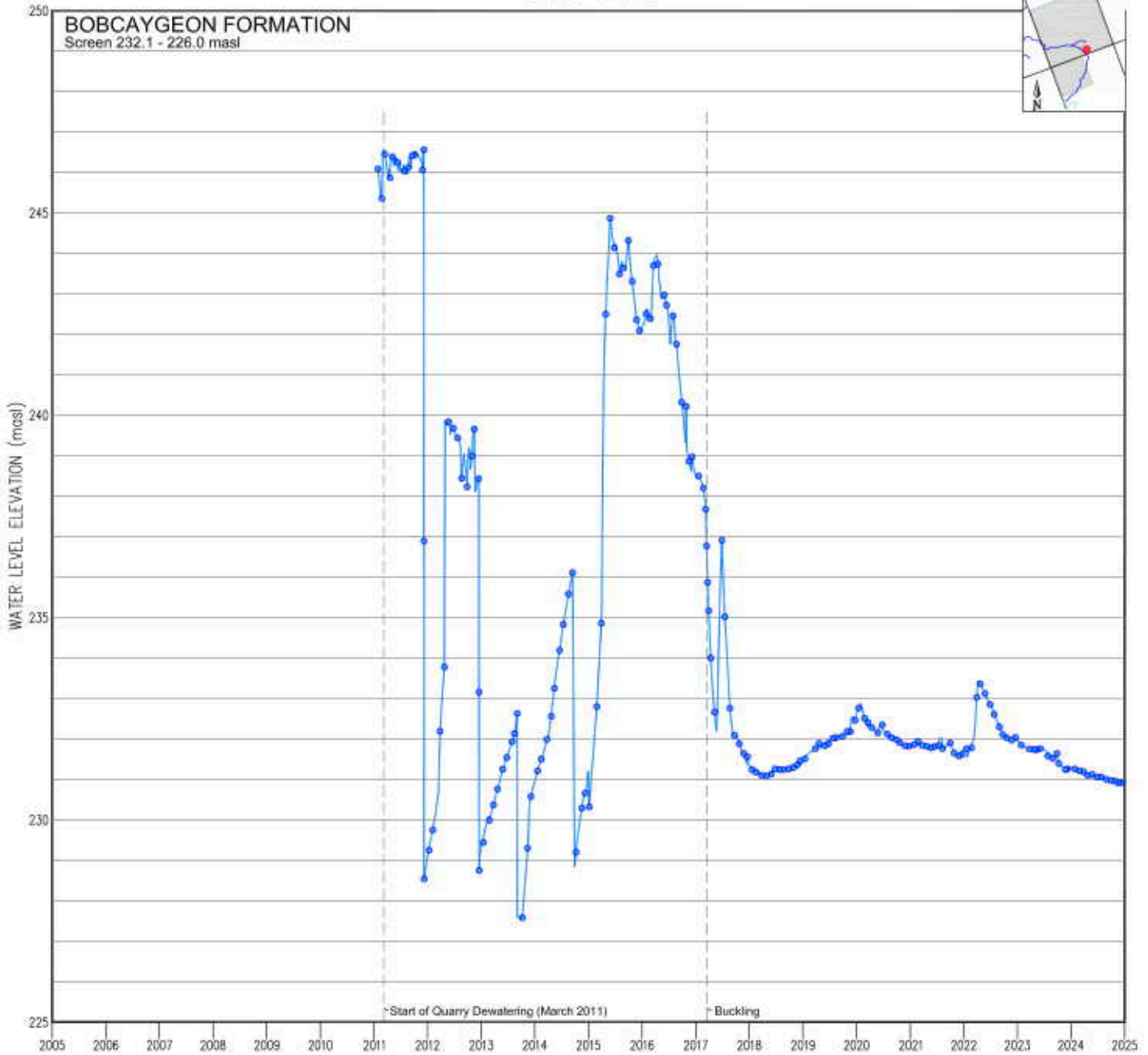
# OW-31A



MP Elevation 247.67 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
10-Feb-22	226.14	26-May-22	226.25	03-Sep-22	225.95	19-Dec-22	225.99	18-Nov-23	226.01	29-Aug-24	224.22
16-Feb-22	226.16	27-May-22	226.23	09-Sep-22	225.73	27-Jan-23	225.05	24-Nov-23	226.07	30-Sep-24	224.52
22-Feb-22	226.59	02-Jun-22	226.21	15-Sep-22	225.80	24-Apr-23	226.12	25-Nov-23	226.01	02-Oct-24	224.64
23-Feb-22	226.77	08-Jun-22	226.66	21-Sep-22	225.88	06-Jun-23	225.13	01-Dec-23	226.12	08-Oct-24	224.35
01-Mar-22	226.66	14-Jun-22	227.19	23-Sep-22	225.87	27-Jul-23	225.52	07-Dec-23	226.13	14-Oct-24	224.36
07-Mar-22	226.94	20-Jun-22	227.17	28-Sep-22	226.13	30-Aug-23	225.73	08-Dec-23	226.17	20-Oct-24	224.31
13-Mar-22	227.01	26-Jun-22	226.91	04-Oct-22	225.91	05-Sep-23	225.68	14-Dec-23	226.23	26-Oct-24	224.29
19-Mar-22	227.08	29-Jun-22	226.75	10-Oct-22	225.78	11-Sep-23	225.46	20-Dec-23	226.26	28-Oct-24	224.21
25-Mar-22	226.90	03-Jul-22	226.46	16-Oct-22	225.99	17-Sep-23	225.39	26-Dec-23	226.25	02-Nov-24	224.64
30-Mar-22	226.61	09-Jul-22	226.03	20-Oct-22	226.13	23-Sep-23	225.24	01-Jan-24	226.32	08-Nov-24	224.52
01-Apr-22	226.76	15-Jul-22	225.79	23-Oct-22	226.26	27-Sep-23	225.20	07-Jan-24	226.20	14-Nov-24	224.93
07-Apr-22	226.84	21-Jul-22	225.81	29-Oct-22	226.29	30-Sep-23	225.11	13-Jan-24	226.12	19-Nov-24	225.07
13-Apr-22	226.92	26-Jul-22	225.87	04-Nov-22	226.36	06-Oct-23	225.22	19-Jan-24	225.98	21-Nov-24	225.13
19-Apr-22	226.83	28-Jul-22	225.80	10-Nov-22	226.29	10-Oct-23	225.57	25-Jan-24	225.84	27-Nov-24	225.64
22-Apr-22	226.76	03-Aug-22	225.76	16-Nov-22	226.18	13-Oct-23	225.80	26-Feb-24	225.96	03-Dec-24	225.44
26-Apr-22	226.94	09-Aug-22	225.92	22-Nov-22	225.98	19-Oct-23	225.77	26-Mar-24	226.04	09-Dec-24	225.32
02-May-22	226.82	15-Aug-22	225.73	24-Nov-22	225.95	25-Oct-23	225.66	23-Apr-24	226.21	11-Dec-24	225.51
08-May-22	226.65	21-Aug-22	225.70	29-Nov-22	226.33	31-Oct-23	225.83	23-May-24	226.10	16-Dec-24	225.36
14-May-22	226.38	27-Aug-22	225.69	05-Dec-22	226.72	06-Nov-23	225.84	27-Jun-24	226.06	22-Dec-24	225.74
20-May-22	226.28	31-Aug-22	225.98	11-Dec-22	226.36	12-Nov-23	225.97	25-Jul-24	225.87	28-Dec-24	225.47

# OW-31B



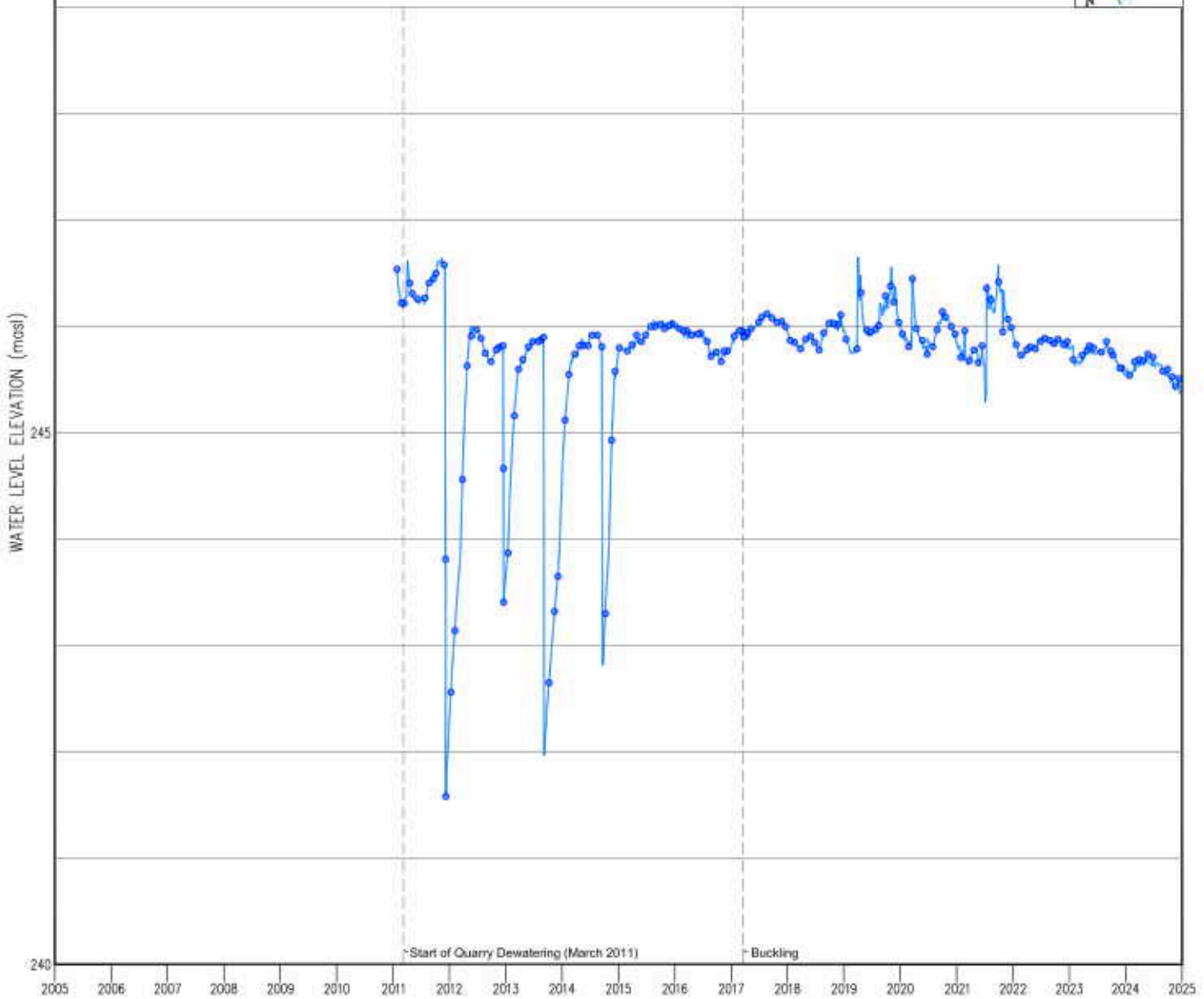
MP Elevation 247.67 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
07-Feb-23	231.81	24-May-23	231.75	10-Oct-23	231.39	02-Mar-24	231.19	15-Jun-24	231.07	28-Sep-24	230.97
13-Feb-23	231.81	30-May-23	231.75	24-Nov-23	231.24	08-Mar-24	231.18	21-Jun-24	231.06	30-Sep-24	230.97
19-Feb-23	231.79	05-Jun-23	231.74	25-Nov-23	231.24	14-Mar-24	231.17	27-Jun-24	231.06	05-Oct-24	230.96
25-Feb-23	231.78	06-Jun-23	231.76	01-Dec-23	231.25	20-Mar-24	231.18	28-Jun-24	231.05	11-Oct-24	230.95
04-Mar-23	231.79	12-Jun-23	231.75	07-Dec-23	231.26	26-Mar-24	231.19	04-Jul-24	231.05	17-Oct-24	230.95
10-Mar-23	231.77	18-Jun-23	231.75	08-Dec-23	231.26	27-Mar-24	231.17	10-Jul-24	231.04	23-Oct-24	230.95
16-Mar-23	231.76	24-Jun-23	231.75	14-Dec-23	231.27	02-Apr-24	231.14	16-Jul-24	231.04	28-Oct-24	230.96
22-Mar-23	231.76	30-Jun-23	231.74	20-Dec-23	231.29	08-Apr-24	231.13	22-Jul-24	231.03	30-Oct-24	230.93
24-Mar-23	231.75	06-Jul-23	231.73	26-Dec-23	231.28	14-Apr-24	231.13	25-Jul-24	231.06	05-Nov-24	230.93
29-Mar-23	231.76	12-Jul-23	231.72	01-Jan-24	231.28	20-Apr-24	231.12	29-Jul-24	231.03	11-Nov-24	230.92
04-Apr-23	231.76	18-Jul-23	231.70	07-Jan-24	231.28	23-Apr-24	231.10	04-Aug-24	231.02	17-Nov-24	230.91
10-Apr-23	231.75	24-Jul-23	231.67	13-Jan-24	231.27	27-Apr-24	231.11	10-Aug-24	231.03	19-Nov-24	230.91
16-Apr-23	231.75	27-Jul-23	231.58	19-Jan-24	231.27	03-May-24	231.11	16-Aug-24	231.01	24-Nov-24	230.91
22-Apr-23	231.75	31-Jul-23	231.64	25-Jan-24	231.26	09-May-24	231.11	22-Aug-24	231.01	30-Nov-24	230.90
24-Apr-23	231.74	06-Aug-23	231.61	31-Jan-24	231.23	15-May-24	231.10	28-Aug-24	231.00	06-Dec-24	230.90
29-Apr-23	231.74	12-Aug-23	231.58	06-Feb-24	231.23	21-May-24	231.10	29-Aug-24	231.00	11-Dec-24	230.92
05-May-23	231.75	18-Aug-23	231.56	12-Feb-24	231.22	23-May-24	231.12	04-Sep-24	230.99	13-Dec-24	230.90
11-May-23	231.73	24-Aug-23	231.54	18-Feb-24	231.22	28-May-24	231.09	10-Sep-24	230.98	19-Dec-24	230.90
12-May-23	231.75	30-Aug-23	231.52	24-Feb-24	231.20	03-Jun-24	231.08	16-Sep-24	230.98	25-Dec-24	230.89
18-May-23	231.74	27-Sep-23	231.64	28-Feb-24	231.21	09-Jun-24	231.07	22-Sep-24	230.97	31-Dec-24	230.88

# OW-31C



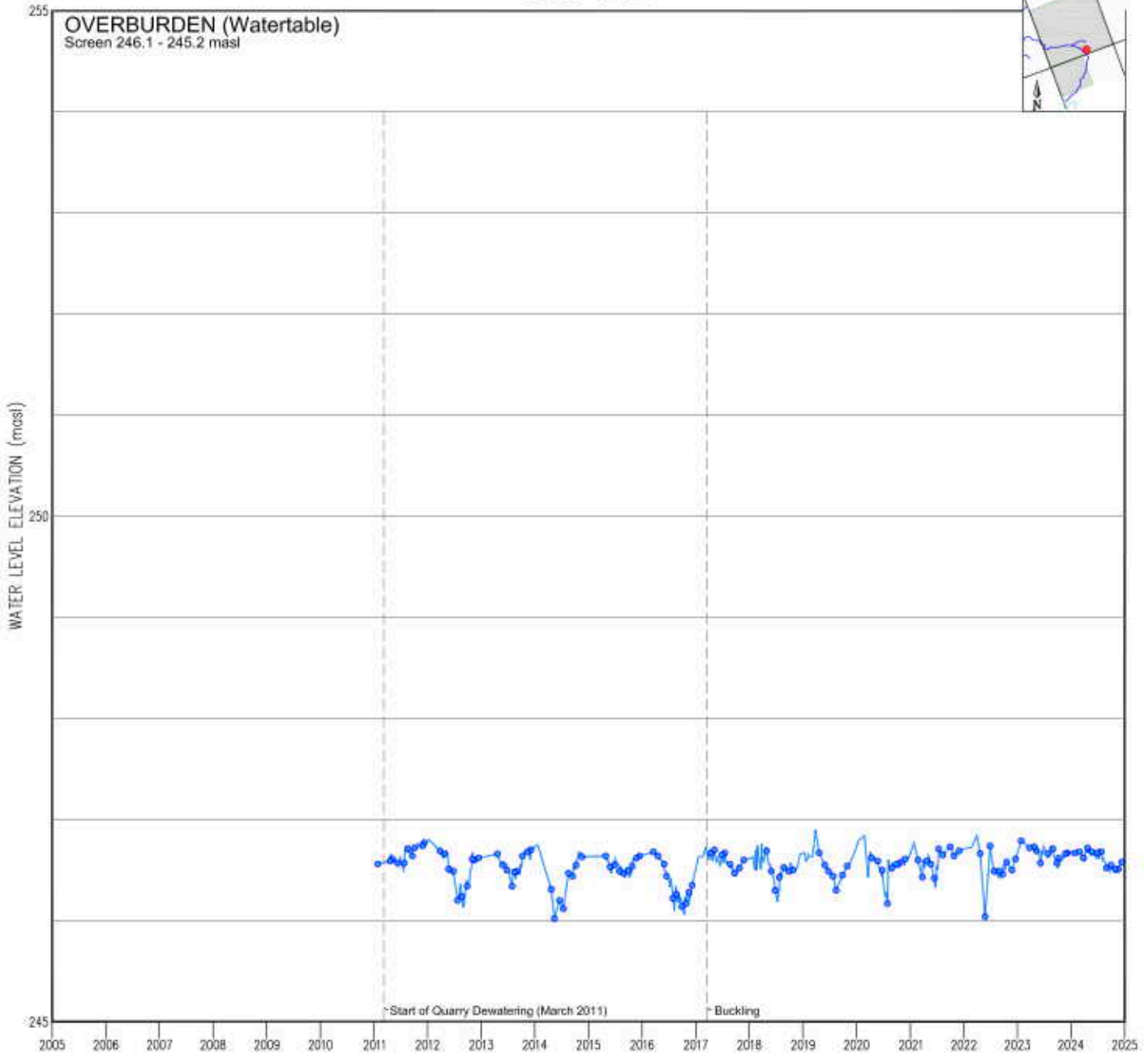
**BOBCAYGEON FORMATION (Upper)**  
Screen 243.7 - 240.9 masl



MP Elevation 247.68 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
17-Apr-23	245.80	27-Jul-23	245.76	08-Nov-23	245.66	26-Feb-24	245.60	05-Jun-24	245.66	24-Sep-24	245.55
23-Apr-23	245.79	01-Aug-23	245.75	14-Nov-23	245.64	28-Feb-24	245.67	11-Jun-24	245.66	30-Sep-24	245.60
24-Apr-23	245.77	07-Aug-23	245.77	20-Nov-23	245.64	04-Mar-24	245.58	17-Jun-24	245.63	01-Oct-24	245.53
30-Apr-23	245.78	13-Aug-23	245.79	24-Nov-23	245.61	10-Mar-24	245.62	23-Jun-24	245.63	07-Oct-24	245.52
06-May-23	245.77	19-Aug-23	245.80	27-Nov-23	245.62	16-Mar-24	245.63	27-Jun-24	245.71	13-Oct-24	245.52
11-May-23	245.82	25-Aug-23	245.81	03-Dec-23	245.61	22-Mar-24	245.63	30-Jun-24	245.63	19-Oct-24	245.48
13-May-23	245.78	30-Aug-23	245.86	07-Dec-23	245.61	26-Mar-24	245.69	06-Jul-24	245.64	25-Oct-24	245.48
19-May-23	245.77	01-Sep-23	245.80	10-Dec-23	245.61	29-Mar-24	245.63	12-Jul-24	245.62	28-Oct-24	245.53
25-May-23	245.75	07-Sep-23	245.82	16-Dec-23	245.56	04-Apr-24	245.66	18-Jul-24	245.66	01-Nov-24	245.48
31-May-23	245.75	13-Sep-23	245.79	22-Dec-23	245.55	10-Apr-24	245.64	24-Jul-24	245.66	07-Nov-24	245.44
06-Jun-23	245.80	19-Sep-23	245.78	28-Dec-23	245.57	16-Apr-24	245.66	31-Jul-24	245.65	13-Nov-24	245.41
07-Jun-23	245.75	25-Sep-23	245.75	03-Jan-24	245.58	22-Apr-24	245.67	06-Aug-24	245.64	19-Nov-24	245.44
13-Jun-23	245.75	27-Sep-23	245.77	09-Jan-24	245.57	23-Apr-24	245.68	12-Aug-24	245.64	20-Nov-24	245.44
19-Jun-23	245.75	02-Oct-23	245.71	15-Jan-24	245.59	29-Apr-24	245.64	18-Aug-24	245.64	26-Nov-24	245.45
25-Jun-23	245.74	08-Oct-23	245.74	21-Jan-24	245.56	05-May-24	245.67	24-Aug-24	245.59	02-Dec-24	245.43
01-Jul-23	245.76	10-Oct-23	245.73	25-Jan-24	245.54	11-May-24	245.70	29-Aug-24	245.58	08-Dec-24	245.45
07-Jul-23	245.77	15-Oct-23	245.72	02-Feb-24	245.55	17-May-24	245.69	31-Aug-24	245.58	11-Dec-24	245.51
13-Jul-23	245.78	21-Oct-23	245.74	08-Feb-24	245.54	23-May-24	245.74	06-Sep-24	245.57	15-Dec-24	245.38
19-Jul-23	245.77	27-Oct-23	245.69	14-Feb-24	245.58	24-May-24	245.67	12-Sep-24	245.56	21-Dec-24	245.39
25-Jul-23	245.76	02-Nov-23	245.66	20-Feb-24	245.57	30-May-24	245.66	18-Sep-24	245.54	27-Dec-24	245.39

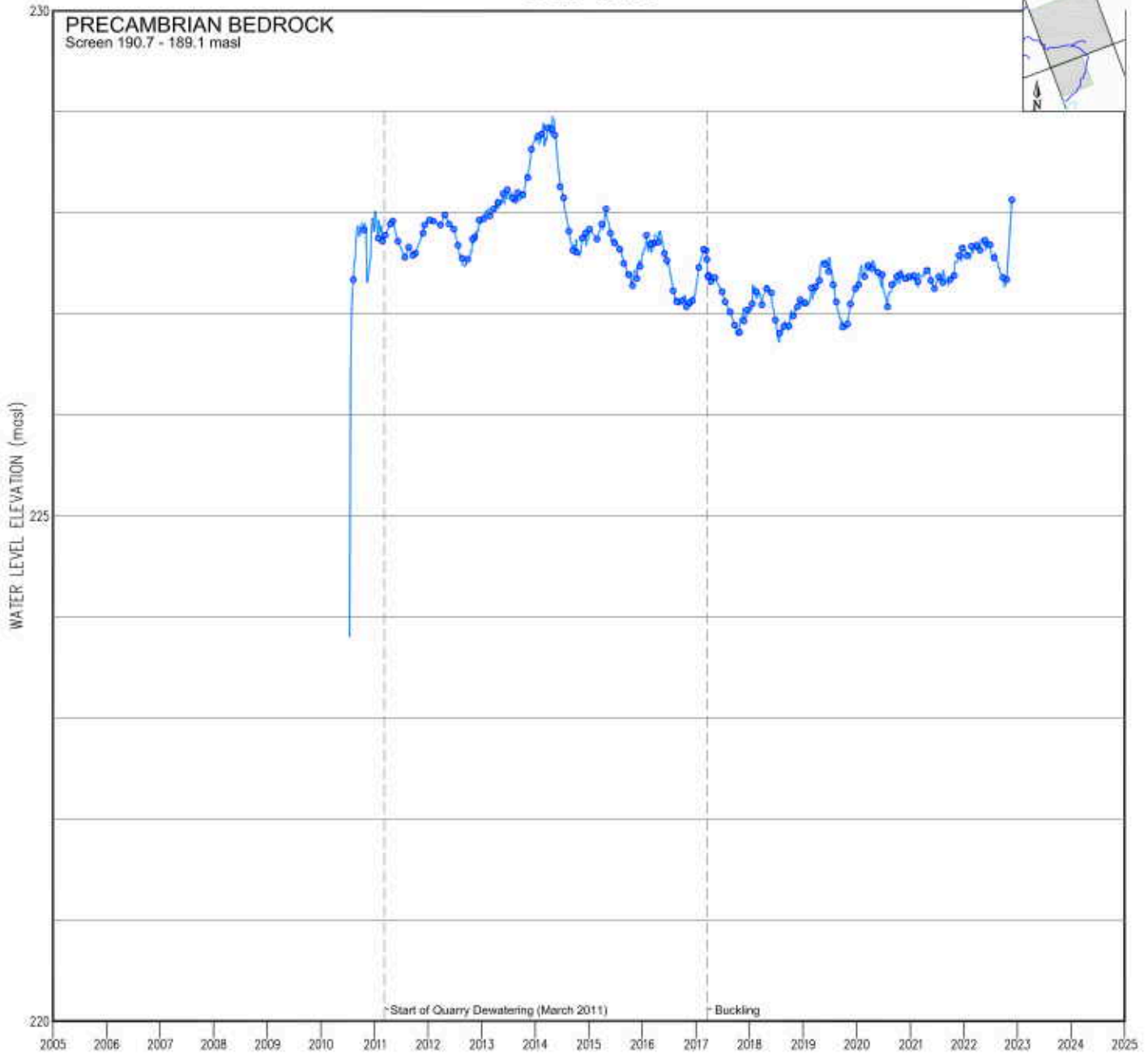
# OW-31D



MP Elevation 247.79 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
03-Jul-22	246.68	16-Oct-22	246.56	04-Jul-23	246.72	12-Oct-23	246.62	08-May-24	246.67	21-Aug-24	246.56
09-Jul-22	246.64	20-Oct-22	246.58	10-Jul-23	246.69	18-Oct-23	246.60	14-May-24	246.68	27-Aug-24	246.53
15-Jul-22	246.57	24-Nov-22	246.50	16-Jul-23	246.69	24-Oct-23	246.59	20-May-24	246.64	29-Aug-24	246.52
21-Jul-22	246.52	19-Dec-22	246.61	22-Jul-23	246.68	30-Oct-23	246.62	23-May-24	246.68	03-Sep-24	246.54
26-Jul-22	246.49	27-Jan-23	246.79	27-Jul-23	246.66	05-Nov-23	246.61	27-May-24	246.65	09-Sep-24	246.53
28-Jul-22	246.50	24-Mar-23	246.72	29-Jul-23	246.63	11-Nov-23	246.64	02-Jun-24	246.68	15-Sep-24	246.52
03-Aug-22	246.46	24-Apr-23	246.73	04-Aug-23	246.63	17-Nov-23	246.64	08-Jun-24	246.65	21-Sep-24	246.49
09-Aug-22	246.52	27-Apr-23	246.68	10-Aug-23	246.65	23-Nov-23	246.68	14-Jun-24	246.64	27-Sep-24	246.52
15-Aug-22	246.47	03-May-23	246.73	16-Aug-23	246.73	24-Nov-23	246.66	20-Jun-24	246.62	30-Sep-24	246.55
21-Aug-22	246.43	09-May-23	246.74	22-Aug-23	246.74	07-Dec-23	246.67	26-Jun-24	246.66	04-Oct-24	246.53
27-Aug-22	246.43	11-May-23	246.69	28-Aug-23	246.69	25-Jan-24	246.67	27-Jun-24	246.67	10-Oct-24	246.53
31-Aug-22	246.49	16-May-23	246.68	30-Aug-23	246.71	28-Feb-24	246.68	03-Jul-24	246.63	16-Oct-24	246.50
03-Sep-22	246.48	22-May-23	246.70	04-Sep-23	246.66	26-Mar-24	246.62	09-Jul-24	246.61	22-Oct-24	246.49
09-Sep-22	246.43	28-May-23	246.66	10-Sep-23	246.62	01-Apr-24	246.60	15-Jul-24	246.71	28-Oct-24	246.51
15-Sep-22	246.46	03-Jun-23	246.62	16-Sep-23	246.60	07-Apr-24	246.66	21-Jul-24	246.67	29-Oct-24	246.47
21-Sep-22	246.49	06-Jun-23	246.57	22-Sep-23	246.56	13-Apr-24	246.71	25-Jul-24	246.68	04-Nov-24	246.49
23-Sep-22	246.46	10-Jun-23	246.56	27-Sep-23	246.57	19-Apr-24	246.67	28-Jul-24	246.63	10-Nov-24	246.49
28-Sep-22	246.56	16-Jun-23	246.69	29-Sep-23	246.55	23-Apr-24	246.72	03-Aug-24	246.60	16-Nov-24	246.50
04-Oct-22	246.53	22-Jun-23	246.66	05-Oct-23	246.52	26-Apr-24	246.67	09-Aug-24	246.62	19-Nov-24	246.51
10-Oct-22	246.50	28-Jun-23	246.73	10-Oct-23	246.62	02-May-24	246.72	15-Aug-24	246.60	11-Dec-24	246.58

# OW-32A



MP Elevation 237.28 masl

						Removed from Schedule					
DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION		
22-Dec-20	227.37	12-Apr-21	227.41	06-Sep-21	227.33	20-Dec-21	227.65	30-Mar-22	227.68	13-Jul-22	227.57
28-Dec-20	227.37	18-Apr-21	227.40	12-Sep-21	227.31	21-Dec-21	227.68	05-Apr-22	227.66	19-Jul-22	227.54
03-Jan-21	227.36	23-Apr-21	227.43	18-Sep-21	227.29	27-Dec-21	227.68	11-Apr-22	227.69	25-Jul-22	227.54
09-Jan-21	227.34	25-Apr-21	227.45	24-Sep-21	227.36	02-Jan-22	227.68	17-Apr-22	227.67	26-Jul-22	227.55
15-Jan-21	227.36	01-May-21	227.45	30-Sep-21	227.34	08-Jan-22	227.63	22-Apr-22	227.63	01-Aug-22	227.60
21-Jan-21	227.38	07-May-21	227.45	01-Oct-21	227.34	14-Jan-22	227.63	24-Apr-22	227.73	07-Aug-22	227.56
27-Jan-21	227.38	13-May-21	227.40	07-Oct-21	227.33	20-Jan-22	227.61	30-Apr-22	227.72	13-Aug-22	227.53
28-Jan-21	227.33	19-May-21	227.37	13-Oct-21	227.36	21-Jan-22	227.57	06-May-22	227.74	19-Aug-22	227.51
03-Feb-21	227.36	21-May-21	227.33	19-Oct-21	227.39	27-Jan-22	227.60	12-May-22	227.69	25-Aug-22	227.45
09-Feb-21	227.31	14-Jun-21	227.25	25-Oct-21	227.40	02-Feb-22	227.59	18-May-22	227.70	01-Sep-22	227.46
15-Feb-21	227.29	14-Jul-21	227.37	27-Oct-21	227.38	08-Feb-22	227.60	24-May-22	227.67	07-Sep-22	227.40
21-Feb-21	227.27	19-Jul-21	227.33	01-Nov-21	227.52	14-Feb-22	227.56	26-May-22	227.73	13-Sep-22	227.40
22-Feb-21	227.32	25-Jul-21	227.36	07-Nov-21	227.51	20-Feb-22	227.59	31-May-22	227.64	19-Sep-22	227.38
28-Feb-21	227.41	31-Jul-21	227.35	13-Nov-21	227.52	22-Feb-22	227.67	06-Jun-22	227.66	23-Sep-22	227.36
06-Mar-21	227.38	06-Aug-21	227.36	19-Nov-21	227.52	27-Feb-22	227.64	12-Jun-22	227.71	26-Sep-22	227.37
12-Mar-21	227.37	10-Aug-21	227.31	25-Nov-21	227.56	05-Mar-22	227.61	18-Jun-22	227.71	02-Oct-22	227.27
18-Mar-21	227.36	13-Aug-21	227.43	29-Nov-21	227.58	11-Mar-22	227.64	24-Jun-22	227.67	08-Oct-22	227.27
25-Mar-21	227.38	19-Aug-21	227.39	02-Dec-21	227.57	17-Mar-22	227.65	29-Jun-22	227.68	14-Oct-22	227.30
31-Mar-21	227.40	25-Aug-21	227.36	08-Dec-21	227.56	23-Mar-22	227.64	01-Jul-22	227.65	20-Oct-22	227.34
06-Apr-21	227.38	31-Aug-21	227.35	14-Dec-21	227.52	29-Mar-22	227.64	07-Jul-22	227.59	24-Nov-22	228.13

# OW-32B



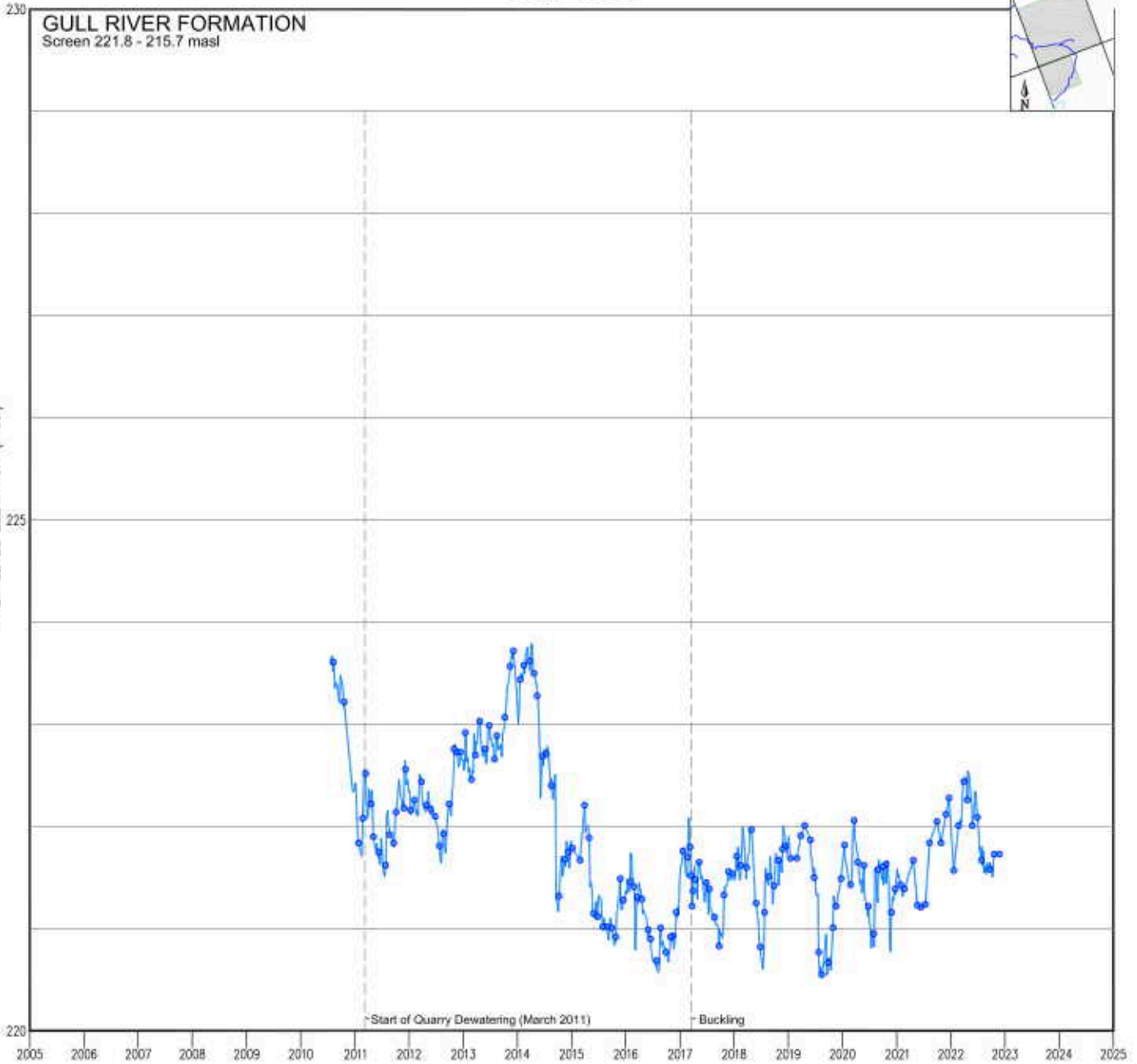
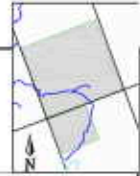
235  
**SHADOW LAKE / PRECAMBRIAN FORMATION**  
 Screen 200.4 - 197.4 masl



MP Elevation 237.33 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
09-Dec-20	227.64	25-Mar-21	227.58	10-Sep-21	227.51	20-Dec-21	227.85	03-Apr-22	227.82	17-Jul-22	227.81
15-Dec-20	227.60	31-Mar-21	227.61	16-Sep-21	227.48	25-Dec-21	227.88	09-Apr-22	227.87	23-Jul-22	227.79
21-Dec-20	227.65	06-Apr-21	227.60	22-Sep-21	227.51	31-Dec-21	227.87	15-Apr-22	227.87	26-Jul-22	227.78
22-Dec-20	227.60	12-Apr-21	227.63	28-Sep-21	227.54	06-Jan-22	227.87	21-Apr-22	227.85	30-Jul-22	227.82
28-Dec-20	227.66	18-Apr-21	227.62	30-Sep-21	227.53	12-Jan-22	227.85	22-Apr-22	227.90	05-Aug-22	227.79
03-Jan-21	227.66	23-Apr-21	227.61	05-Oct-21	227.53	18-Jan-22	227.86	28-Apr-22	227.89	11-Aug-22	227.78
09-Jan-21	227.64	25-Apr-21	227.64	11-Oct-21	227.56	21-Jan-22	227.80	04-May-22	227.92	17-Aug-22	227.75
15-Jan-21	227.67	01-May-21	227.65	17-Oct-21	227.59	25-Jan-22	227.76	10-May-22	227.89	23-Aug-22	227.72
21-Jan-21	227.68	07-May-21	227.66	23-Oct-21	227.59	31-Jan-22	227.72	16-May-22	227.92	29-Aug-22	227.70
27-Jan-21	227.60	13-May-21	227.62	27-Oct-21	227.63	06-Feb-22	227.70	22-May-22	227.89	05-Sep-22	227.64
28-Jan-21	227.62	19-May-21	227.60	30-Oct-21	227.70	12-Feb-22	227.71	26-May-22	227.93	11-Sep-22	227.61
03-Feb-21	227.65	21-May-21	227.34	05-Nov-21	227.66	18-Feb-22	227.72	29-May-22	227.89	17-Sep-22	227.58
09-Feb-21	227.61	14-Jun-21	227.47	11-Nov-21	227.88	22-Feb-22	227.76	04-Jun-22	227.89	23-Sep-22	227.57
15-Feb-21	227.59	14-Jul-21	227.56	17-Nov-21	227.71	25-Feb-22	227.75	10-Jun-22	227.92	24-Sep-22	227.59
21-Feb-21	227.57	10-Aug-21	227.56	23-Nov-21	227.73	03-Mar-22	227.76	16-Jun-22	227.94	30-Sep-22	227.58
22-Feb-21	227.58	11-Aug-21	227.59	29-Nov-21	227.80	09-Mar-22	227.78	22-Jun-22	227.92	06-Oct-22	227.59
28-Feb-21	227.52	17-Aug-21	227.56	30-Nov-21	227.77	15-Mar-22	227.77	28-Jun-22	227.88	12-Oct-22	227.57
06-Mar-21	227.57	23-Aug-21	227.56	06-Dec-21	227.83	21-Mar-22	227.78	29-Jun-22	227.88	18-Oct-22	227.63
12-Mar-21	227.57	29-Aug-21	227.53	12-Dec-21	227.83	27-Mar-22	227.82	05-Jul-22	227.87	20-Oct-22	227.63
18-Mar-21	227.56	04-Sep-21	227.51	18-Dec-21	227.82	30-Mar-22	227.88	11-Jul-22	227.85	24-Nov-22	227.65

# OW-32C



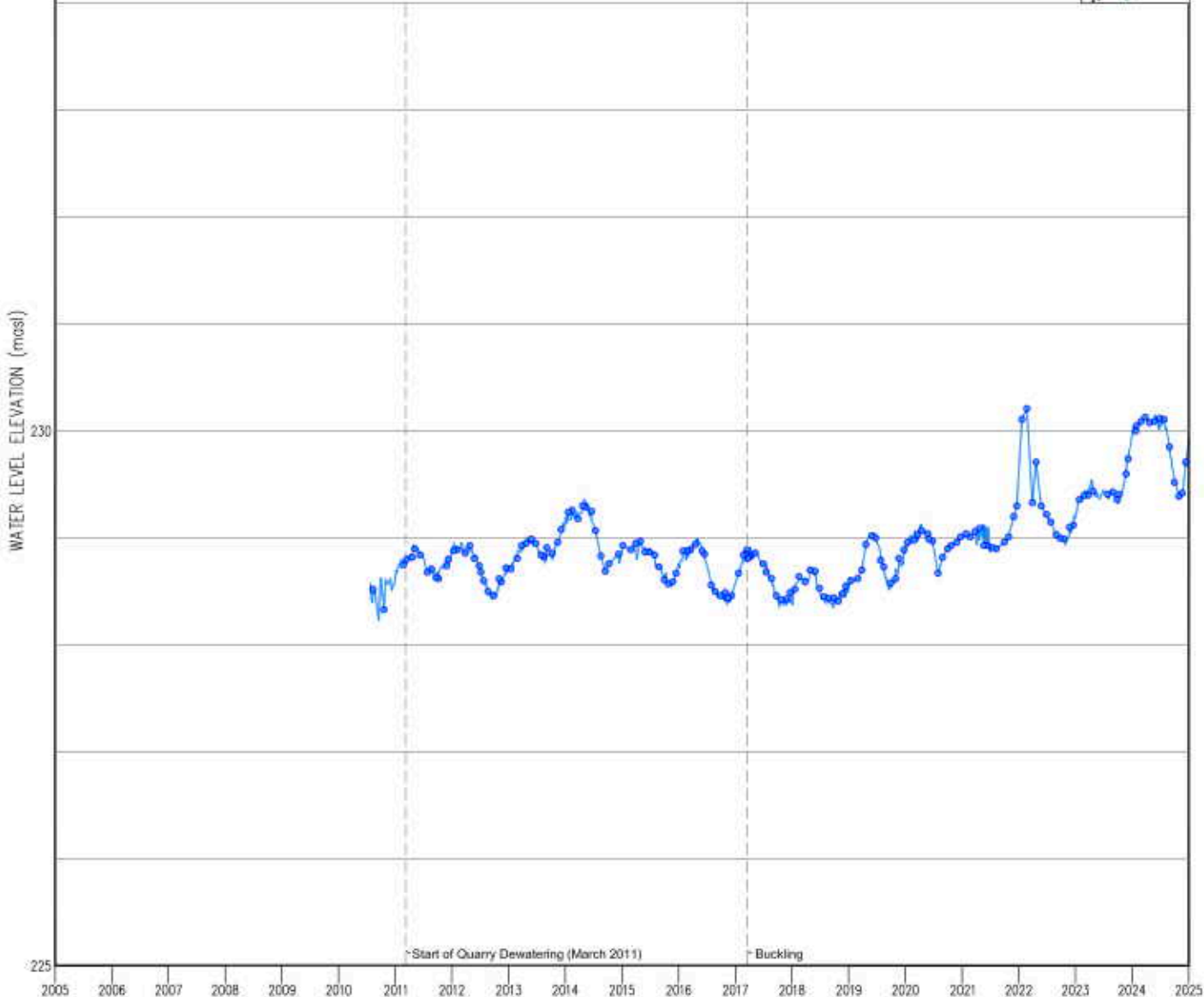
MP Elevation 237.24 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
06-Apr-20	221.77	20-Jul-20	220.98	28-Oct-20	221.67	10-Feb-21	221.31	30-Mar-22	222.44	14-Jul-22	221.75
12-Apr-20	221.73	26-Jul-20	220.94	03-Nov-20	221.58	16-Feb-21	221.38	01-Apr-22	222.46	20-Jul-22	221.74
14-Apr-20	221.65	30-Jul-20	220.95	09-Nov-20	221.46	22-Feb-21	221.39	07-Apr-22	222.48	26-Jul-22	221.67
19-Apr-20	221.63	02-Aug-20	220.82	15-Nov-20	220.88	23-Apr-21	221.67	18-Apr-22	222.46	27-Jul-22	221.81
25-Apr-20	221.47	08-Aug-20	221.59	21-Nov-20	220.77	21-May-21	221.23	22-Apr-22	222.26	02-Aug-22	221.62
01-May-20	221.44	14-Aug-20	221.54	27-Nov-20	221.16	14-Jun-21	221.21	25-Apr-22	222.54	08-Aug-22	221.76
07-May-20	221.48	20-Aug-20	221.40	28-Nov-20	221.18	14-Jul-21	221.24	01-May-22	222.53	14-Aug-22	221.55
13-May-20	221.35	26-Aug-20	221.25	04-Dec-20	221.31	10-Aug-21	221.84	07-May-22	222.47	20-Aug-22	221.61
19-May-20	221.48	28-Aug-20	221.58	10-Dec-20	221.27	30-Sep-21	222.05	13-May-22	222.35	26-Aug-22	221.54
25-May-20	221.62	02-Sep-20	221.68	16-Dec-20	221.38	27-Oct-21	221.84	19-May-22	222.25	02-Sep-22	221.64
26-May-20	221.42	08-Sep-20	221.58	22-Dec-20	221.39	29-Nov-21	222.12	25-May-22	222.18	08-Sep-22	221.57
01-Jun-20	221.32	14-Sep-20	221.54	23-Dec-20	221.33	20-Dec-21	222.28	26-May-22	222.01	14-Sep-22	221.56
07-Jun-20	221.22	20-Sep-20	221.52	29-Dec-20	221.45	21-Jan-22	221.57	01-Jun-22	222.11	20-Sep-22	221.65
13-Jun-20	221.22	26-Sep-20	221.48	04-Jan-21	221.58	22-Feb-22	222.01	07-Jun-22	222.12	23-Sep-22	221.58
19-Jun-20	221.12	30-Sep-20	221.61	10-Jan-21	221.50	23-Feb-22	222.04	13-Jun-22	222.35	27-Sep-22	221.62
24-Jun-20	221.22	03-Oct-20	221.43	16-Jan-21	221.53	01-Mar-22	222.00	19-Jun-22	222.31	03-Oct-22	221.60
26-Jun-20	221.16	09-Oct-20	221.48	22-Jan-21	221.47	07-Mar-22	222.07	25-Jun-22	222.18	09-Oct-22	221.50
02-Jul-20	221.07	15-Oct-20	221.47	27-Jan-21	221.43	13-Mar-22	222.04	29-Jun-22	222.09	15-Oct-22	221.63
08-Jul-20	221.00	21-Oct-20	221.63	29-Jan-21	221.44	19-Mar-22	222.25	02-Jul-22	222.06	20-Oct-22	221.73
14-Jul-20	220.81	22-Oct-20	221.44	04-Feb-21	221.38	25-Mar-22	222.46	08-Jul-22	221.93	24-Nov-22	221.73

# OW-33A



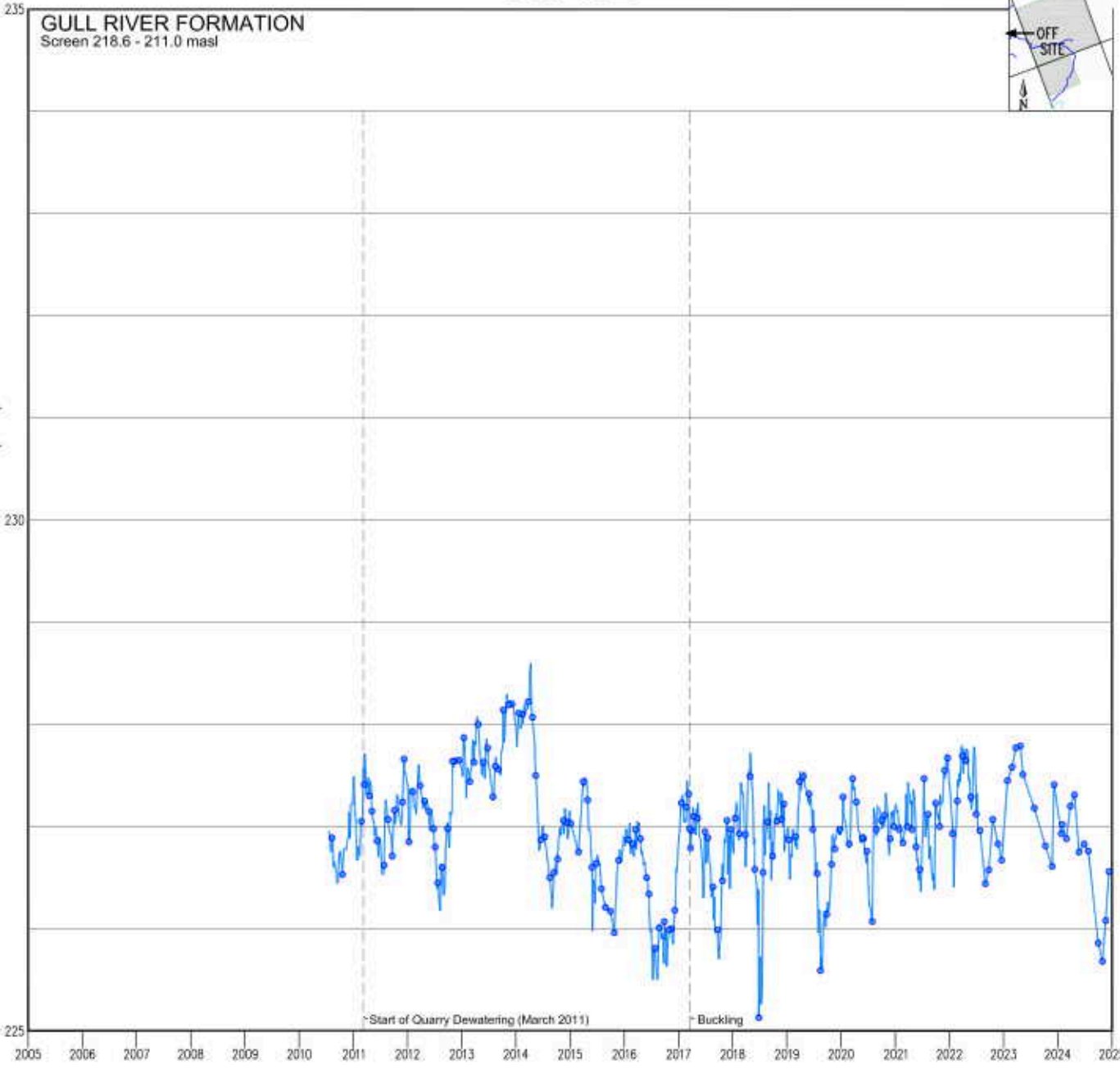
235  
**SHADOW LAKE / PRECAMBRIAN FORMATION**  
 Screen 202.2 - 194.6 masl



MP Elevation 242.61 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
11-Jan-23	229.25	24-Apr-23	229.44	20-Aug-23	229.44	04-Dec-23	229.75	15-Jun-24	230.08	28-Sep-24	229.56
17-Jan-23	229.34	01-May-23	229.45	26-Aug-23	229.44	07-Dec-23	229.74	21-Jun-24	230.01	30-Sep-24	229.52
23-Jan-23	229.35	07-May-23	229.39	30-Aug-23	229.43	11-Dec-23	229.81	27-Jun-24	230.12	05-Oct-24	229.52
27-Jan-23	229.36	14-May-23	229.39	08-Sep-23	229.38	17-Dec-23	229.84	28-Jun-24	230.07	11-Oct-24	229.50
30-Jan-23	229.35	20-May-23	229.43	14-Sep-23	229.36	23-Dec-23	229.86	04-Jul-24	230.04	17-Oct-24	229.46
05-Feb-23	229.37	26-May-23	229.39	20-Sep-23	229.39	29-Dec-23	229.95	10-Jul-24	230.07	23-Oct-24	229.44
11-Feb-23	229.36	01-Jun-23	229.37	26-Sep-23	229.36	04-Jan-24	229.96	16-Jul-24	230.09	28-Oct-24	229.39
17-Feb-23	229.38	08-Jun-23	229.37	27-Sep-23	229.36	10-Jan-24	230.05	22-Jul-24	230.07	30-Oct-24	229.37
23-Feb-23	229.40	14-Jun-23	229.41	03-Oct-23	229.32	16-Jan-24	230.03	25-Jul-24	230.11	05-Nov-24	229.37
27-Feb-23	229.40	20-Jun-23	229.41	09-Oct-23	229.39	22-Jan-24	230.00	29-Jul-24	230.06	11-Nov-24	229.39
02-Mar-23	229.44	26-Jun-23	229.44	10-Oct-23	229.41	25-Jan-24	230.00	04-Aug-24	230.02	17-Nov-24	229.39
08-Mar-23	229.42	02-Jul-23	229.43	16-Oct-23	229.40	29-Jan-24	230.04	10-Aug-24	230.03	19-Nov-24	229.42
14-Mar-23	229.44	08-Jul-23	229.43	22-Oct-23	229.41	31-Jan-24	230.05	16-Aug-24	229.96	24-Nov-24	229.45
20-Mar-23	229.44	14-Jul-23	229.44	28-Oct-23	229.41	28-Feb-24	230.09	22-Aug-24	229.93	30-Nov-24	229.55
24-Mar-23	229.40	20-Jul-23	229.42	03-Nov-23	229.45	26-Mar-24	230.13	28-Aug-24	229.85	06-Dec-24	229.61
27-Mar-23	229.46	26-Jul-23	229.40	09-Nov-23	229.51	23-Apr-24	230.08	29-Aug-24	229.85	11-Dec-24	229.71
02-Apr-23	229.49	27-Jul-23	229.41	15-Nov-23	229.53	23-May-24	230.09	04-Sep-24	229.77	13-Dec-24	229.66
08-Apr-23	229.48	02-Aug-23	229.36	21-Nov-23	229.57	28-May-24	230.15	10-Sep-24	229.75	19-Dec-24	229.76
14-Apr-23	229.55	08-Aug-23	229.41	24-Nov-23	229.60	03-Jun-24	230.10	16-Sep-24	229.64	25-Dec-24	229.83
20-Apr-23	229.52	14-Aug-23	229.41	28-Nov-23	229.71	09-Jun-24	230.13	22-Sep-24	229.63	31-Dec-24	229.93

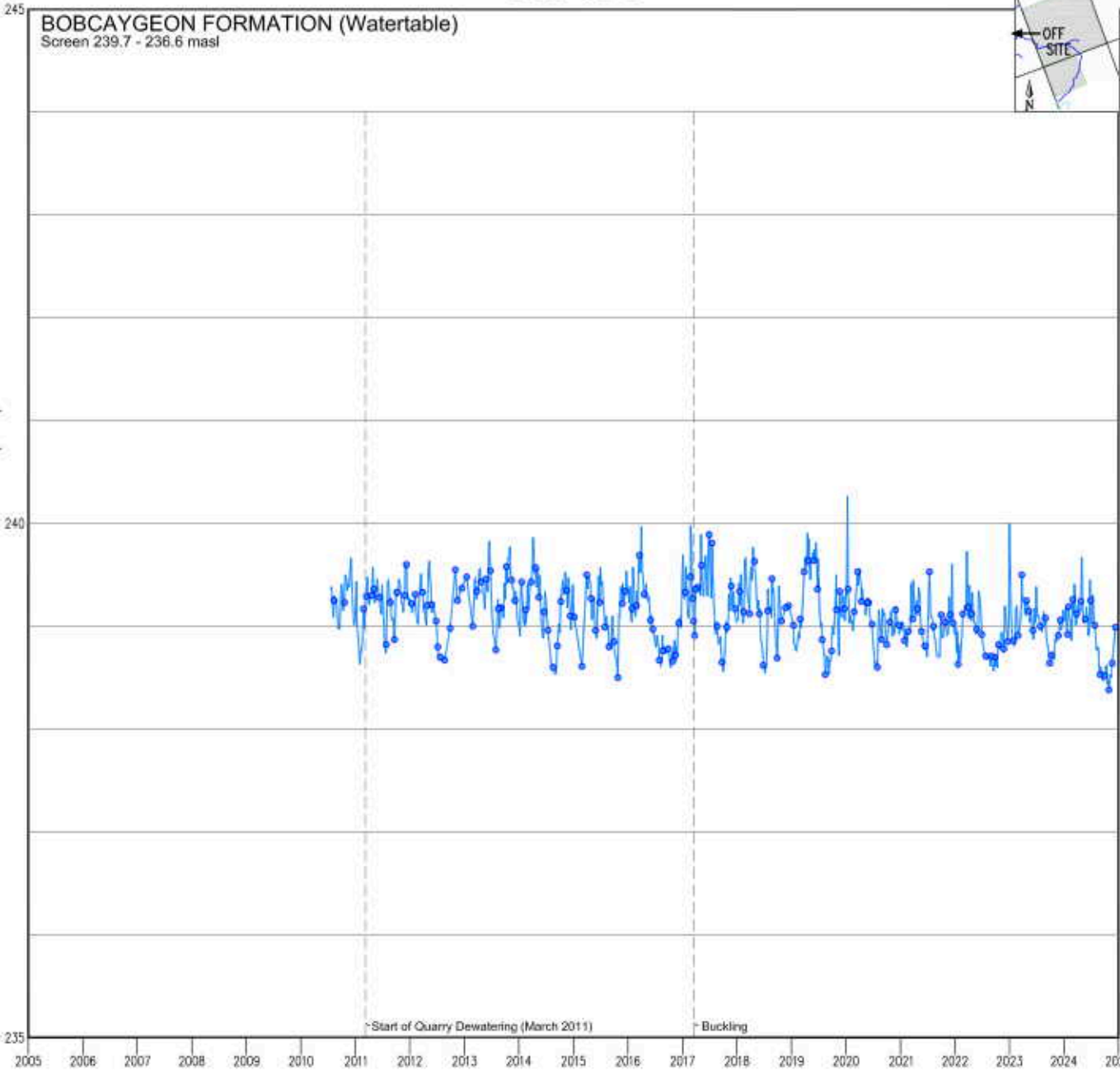
# OW-33B



MP Elevation 242.68 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
02-Apr-21	227.33	14-Jul-21	227.47	27-Oct-21	227.00	06-Feb-22	226.88	22-May-22	227.23	27-Feb-23	227.58
08-Apr-21	227.32	17-Jul-21	227.15	30-Oct-21	227.32	12-Feb-22	226.90	26-May-22	227.29	24-Mar-23	227.77
14-Apr-21	227.22	23-Jul-21	226.90	05-Nov-21	227.25	18-Feb-22	227.10	29-May-22	227.17	24-Apr-23	227.79
20-Apr-21	227.25	29-Jul-21	227.09	11-Nov-21	227.22	22-Feb-22	227.25	04-Jun-22	227.26	11-May-23	227.51
23-Apr-21	226.97	04-Aug-21	226.98	17-Nov-21	227.25	25-Feb-22	227.46	10-Jun-22	227.56	27-Jul-23	227.18
27-Apr-21	227.17	10-Aug-21	227.12	23-Nov-21	227.48	03-Mar-22	227.39	16-Jun-22	227.78	10-Oct-23	226.81
03-May-21	227.36	11-Aug-21	226.98	29-Nov-21	227.55	09-Mar-22	227.52	22-Jun-22	227.70	24-Nov-23	226.61
09-May-21	227.30	17-Aug-21	226.68	30-Nov-21	227.47	15-Mar-22	227.44	28-Jun-22	227.32	07-Dec-23	227.41
15-May-21	227.13	23-Aug-21	226.81	06-Dec-21	227.53	21-Mar-22	227.77	29-Jun-22	227.12	25-Jan-24	226.93
21-May-21	226.80	29-Aug-21	226.71	12-Dec-21	227.71	27-Mar-22	227.78	05-Jul-22	227.32	31-Jan-24	227.02
22-May-21	226.90	04-Sep-21	226.54	18-Dec-21	227.58	30-Mar-22	227.69	11-Jul-22	226.95	28-Feb-24	226.88
28-May-21	226.67	10-Sep-21	226.47	20-Dec-21	227.67	03-Apr-22	227.52	17-Jul-22	226.94	26-Mar-24	227.20
03-Jun-21	226.68	16-Sep-21	226.53	25-Dec-21	227.57	09-Apr-22	227.76	23-Jul-22	226.95	23-Apr-24	227.31
09-Jun-21	226.47	22-Sep-21	226.38	31-Dec-21	227.42	15-Apr-22	227.72	26-Jul-22	226.96	23-May-24	226.75
14-Jun-21	226.58	28-Sep-21	227.21	06-Jan-22	227.35	21-Apr-22	227.61	31-Aug-22	226.44	27-Jun-24	226.83
16-Jun-21	226.53	30-Sep-21	227.23	12-Jan-22	227.20	22-Apr-22	227.64	23-Sep-22	226.57	25-Jul-24	226.76
22-Jun-21	226.36	05-Oct-21	227.20	18-Jan-22	227.07	28-Apr-22	227.76	20-Oct-22	227.07	30-Sep-24	225.86
28-Jun-21	226.72	11-Oct-21	227.12	21-Jan-22	226.93	04-May-22	227.73	24-Nov-22	226.83	28-Oct-24	225.68
04-Jul-21	226.90	17-Oct-21	227.07	25-Jan-22	227.01	10-May-22	227.46	19-Dec-22	226.67	19-Nov-24	226.08
10-Jul-21	227.18	23-Oct-21	227.13	31-Jan-22	226.41	16-May-22	227.47	27-Jan-23	227.45	11-Dec-24	226.56

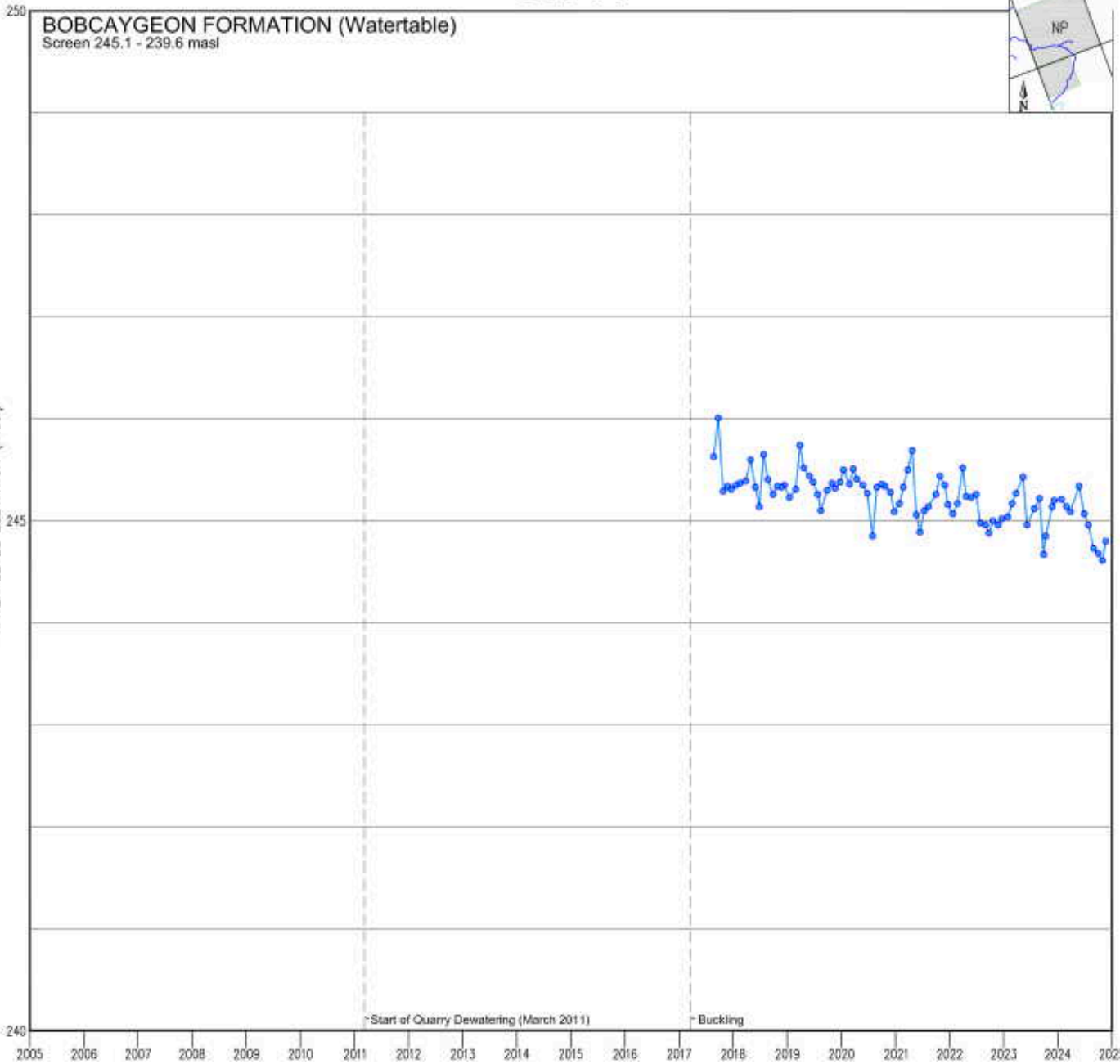
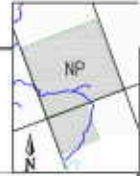
# OW-33C



MP Elevation 242.68 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
24-Mar-23	239.50	05-Jul-23	239.14	13-Oct-23	238.71	26-Jan-24	239.01	05-May-24	239.15	18-Aug-24	238.79
28-Mar-23	239.28	11-Jul-23	239.09	19-Oct-23	238.74	31-Jan-24	239.19	11-May-24	239.03	24-Aug-24	238.60
03-Apr-23	239.28	17-Jul-23	239.10	25-Oct-23	238.67	02-Feb-24	239.12	17-May-24	239.05	29-Aug-24	238.53
09-Apr-23	239.23	23-Jul-23	239.03	31-Oct-23	238.83	08-Feb-24	239.08	23-May-24	239.07	31-Aug-24	238.60
15-Apr-23	239.13	27-Jul-23	239.00	06-Nov-23	238.88	14-Feb-24	239.05	24-May-24	239.05	06-Sep-24	238.60
21-Apr-23	239.10	30-Jul-23	239.00	12-Nov-23	238.84	20-Feb-24	238.86	30-May-24	239.19	12-Sep-24	238.48
24-Apr-23	239.25	05-Aug-23	238.94	18-Nov-23	238.93	26-Feb-24	239.03	05-Jun-24	239.09	18-Sep-24	238.48
28-Apr-23	239.20	11-Aug-23	239.01	24-Nov-23	238.91	28-Feb-24	239.26	11-Jun-24	238.91	24-Sep-24	238.47
04-May-23	239.24	17-Aug-23	239.14	25-Nov-23	238.92	04-Mar-24	239.13	17-Jun-24	238.91	30-Sep-24	238.52
10-May-23	239.17	23-Aug-23	239.10	01-Dec-23	239.03	10-Mar-24	239.41	23-Jun-24	239.45	01-Oct-24	238.54
11-May-23	239.15	29-Aug-23	239.01	07-Dec-23	239.06	16-Mar-24	239.30	27-Jun-24	239.25	07-Oct-24	238.61
17-May-23	239.03	30-Aug-23	239.08	08-Dec-23	239.02	22-Mar-24	239.01	30-Jun-24	239.12	13-Oct-24	238.62
23-May-23	239.14	05-Sep-23	238.90	14-Dec-23	238.96	26-Mar-24	239.12	06-Jul-24	239.03	19-Oct-24	238.43
29-May-23	239.08	11-Sep-23	238.81	20-Dec-23	239.02	29-Mar-24	239.08	12-Jul-24	239.31	25-Oct-24	238.48
04-Jun-23	238.93	17-Sep-23	238.81	26-Dec-23	239.16	04-Apr-24	239.21	18-Jul-24	239.11	28-Oct-24	238.38
06-Jun-23	238.96	23-Sep-23	238.69	01-Jan-24	239.09	10-Apr-24	239.14	24-Jul-24	238.99	01-Nov-24	238.47
11-Jun-23	238.87	27-Sep-23	238.64	07-Jan-24	239.05	16-Apr-24	239.16	25-Jul-24	239.01	07-Nov-24	238.53
17-Jun-23	239.17	30-Sep-23	238.62	13-Jan-24	239.19	22-Apr-24	239.14	31-Jul-24	238.91	13-Nov-24	238.50
23-Jun-23	239.03	06-Oct-23	238.66	19-Jan-24	238.97	23-Apr-24	239.24	06-Aug-24	238.77	19-Nov-24	238.64
29-Jun-23	239.38	10-Oct-23	238.72	25-Jan-24	238.92	29-Apr-24	239.67	12-Aug-24	238.79	11-Dec-24	238.99

# OW-34



MP Elevation 247.32 masl

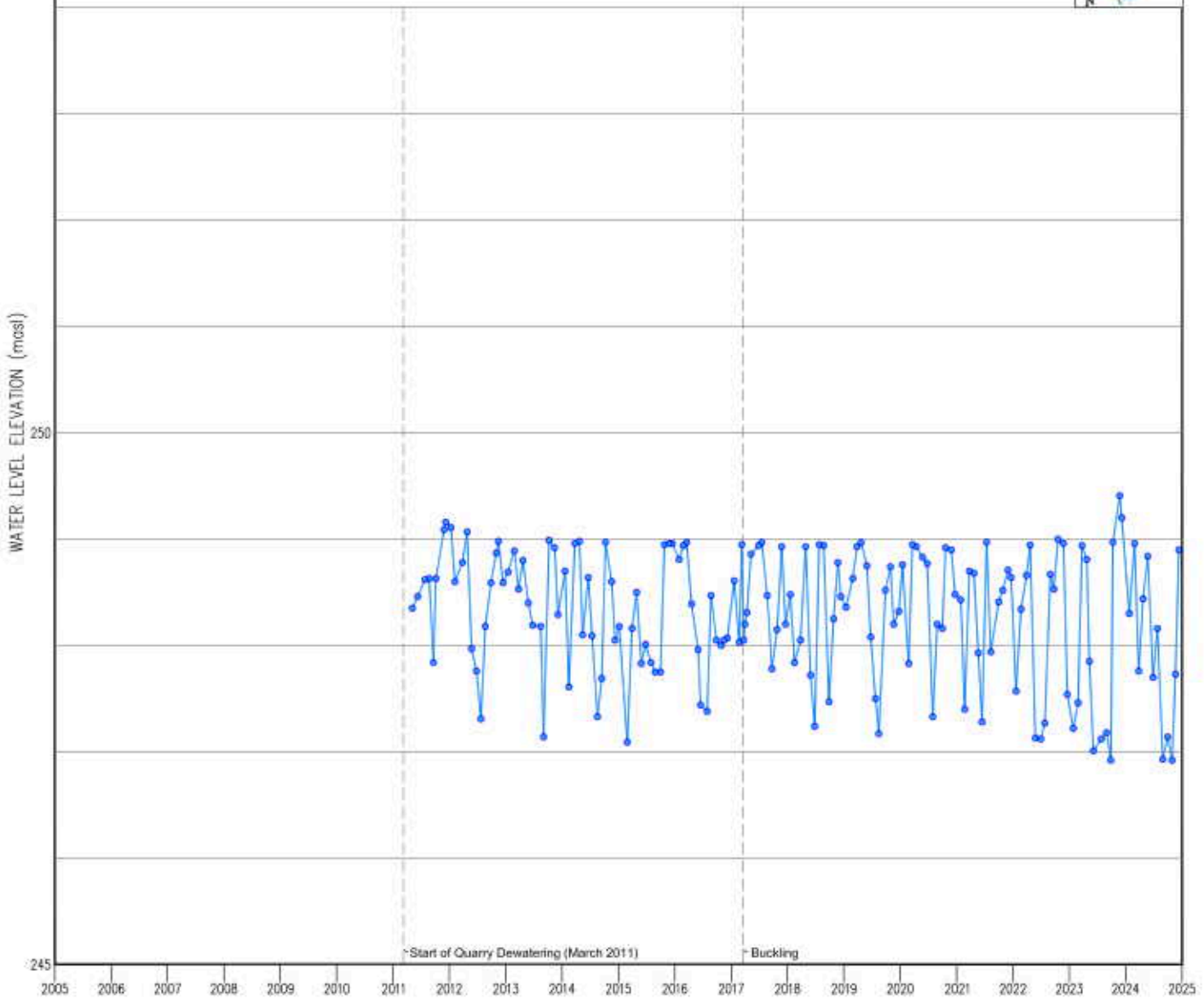
Grade 246.3 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
22-Aug-17	245.63	22-Apr-19	245.52	22-Dec-20	245.09	31-Aug-22	244.96	27-Jun-24	245.07		
22-Sep-17	246.01	30-May-19	245.44	27-Jan-21	245.17	23-Sep-22	244.88	25-Jul-24	244.96		
25-Oct-17	245.29	24-Jun-19	245.38	22-Feb-21	245.33	20-Oct-22	245.00	29-Aug-24	244.73		
24-Nov-17	245.34	25-Jul-19	245.26	24-Mar-21	245.50	24-Nov-22	244.96	30-Sep-24	244.68		
19-Dec-17	245.31	15-Aug-19	245.10	23-Apr-21	245.69	19-Dec-22	245.02	28-Oct-24	244.61		
19-Jan-18	245.35	27-Sep-19	245.30	21-May-21	245.06	27-Jan-23	245.04	19-Nov-24	244.80		
15-Feb-18	245.37	30-Oct-19	245.37	14-Jun-21	244.89	27-Feb-23	245.17				
26-Mar-18	245.39	20-Nov-19	245.32	14-Jul-21	245.10	24-Mar-23	245.27				
28-Apr-18	245.60	23-Dec-19	245.38	10-Aug-21	245.14	11-May-23	245.43				
30-May-18	245.33	15-Jan-20	245.50	30-Sep-21	245.26	06-Jun-23	244.96				
26-Jun-18	245.14	25-Feb-20	245.36	27-Oct-21	245.44	27-Jul-23	245.12				
25-Jul-18	245.65	20-Mar-20	245.51	29-Nov-21	245.35	30-Aug-23	245.22				
23-Aug-18	245.40	14-Apr-20	245.41	20-Dec-21	245.16	27-Sep-23	244.67				
27-Sep-18	245.26	25-May-20	245.35	21-Jan-22	245.07	10-Oct-23	244.85				
26-Oct-18	245.34	24-Jun-20	245.27	22-Feb-22	245.17	24-Nov-23	245.14				
23-Nov-18	245.33	30-Jul-20	244.85	30-Mar-22	245.52	07-Dec-23	245.20				
12-Dec-18	245.35	28-Aug-20	245.33	22-Apr-22	245.24	25-Jan-24	245.21				
15-Jan-19	245.23	30-Sep-20	245.36	26-May-22	245.23	28-Feb-24	245.14				
28-Feb-19	245.31	21-Oct-20	245.34	29-Jun-22	245.26	26-Mar-24	245.09				
27-Mar-19	245.74	27-Nov-20	245.28	26-Jul-22	244.98	23-May-24	245.34				

# PW-3A



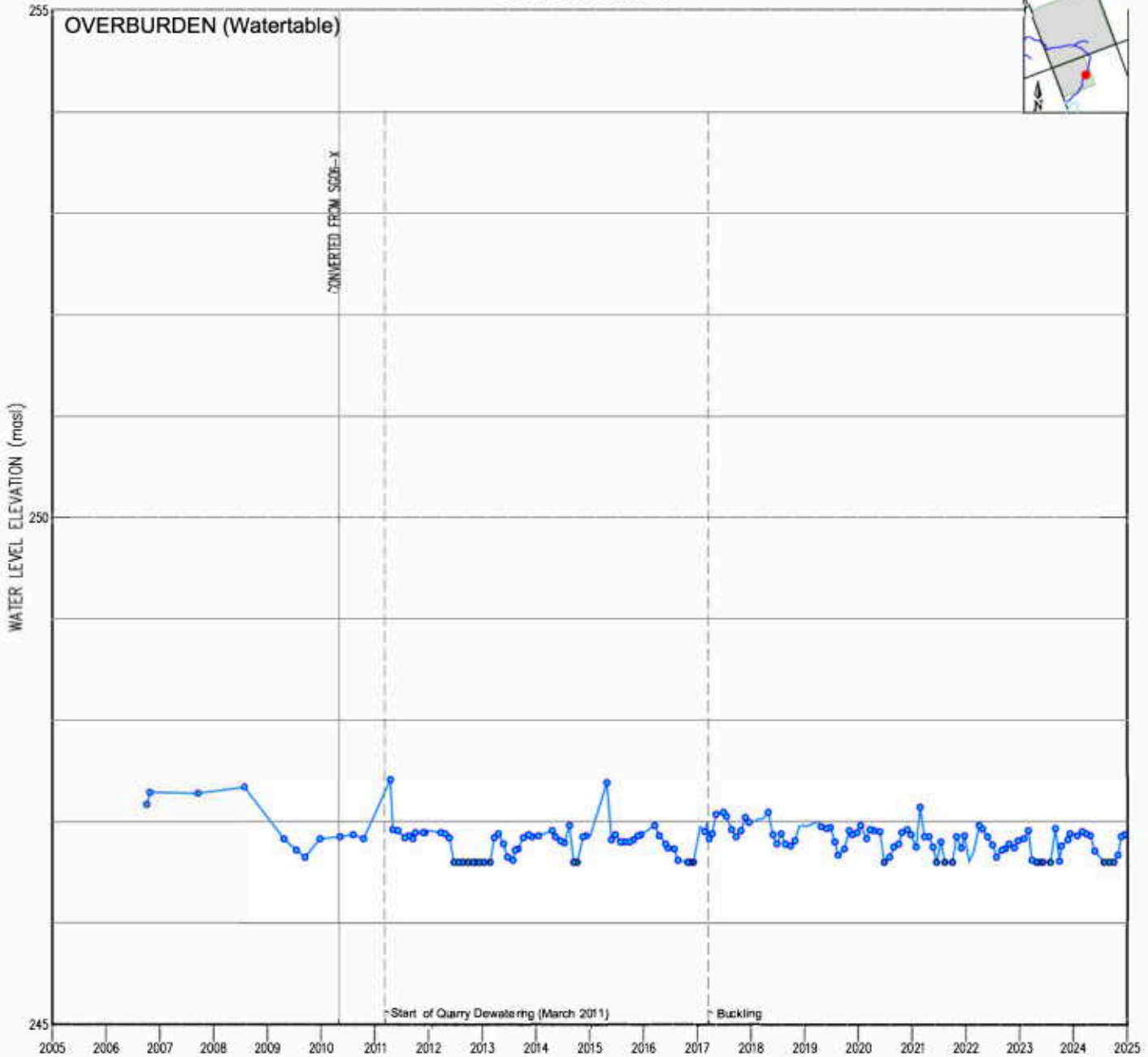
255  
BOBCAYGEON FORMATION (Watertable)  
Screen 247.9 - 244.8 masl



MP Elevation 250.59 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
30-Mar-15	248.16	15-Nov-16	248.05	30-May-18	247.72	15-Jan-20	248.76	30-Sep-21	248.41	11-May-23	247.85
29-Apr-15	248.50	07-Dec-16	248.07	26-Jun-18	247.24	25-Feb-20	247.83	27-Oct-21	248.52	06-Jun-23	247.01
29-May-15	247.83	20-Jan-17	248.61	25-Jul-18	248.95	20-Mar-20	248.95	29-Nov-21	248.71	27-Jul-23	247.12
26-Jun-15	248.01	22-Feb-17	248.03	23-Aug-18	248.94	14-Apr-20	248.93	20-Dec-21	248.64	30-Aug-23	247.18
31-Jul-15	247.84	10-Mar-17	248.95	27-Sep-18	247.47	25-May-20	248.83	21-Jan-22	247.57	27-Sep-23	246.92
27-Aug-15	247.75	23-Mar-17	248.05	26-Oct-18	248.25	24-Jun-20	248.77	22-Feb-22	248.34	10-Oct-23	248.97
30-Sep-15	247.75	30-Mar-17	248.20	23-Nov-18	248.78	30-Jul-20	247.33	30-Mar-22	248.66	24-Nov-23	249.41
26-Oct-15	248.95	13-Apr-17	248.31	12-Dec-18	248.46	28-Aug-20	248.20	22-Apr-22	248.94	07-Dec-23	249.20
25-Nov-15	248.96	09-May-17	248.86	15-Jan-19	248.36	30-Sep-20	248.16	26-May-22	247.13	25-Jan-24	248.30
16-Dec-15	248.96	28-Jun-17	248.94	28-Feb-19	248.63	21-Oct-20	248.92	29-Jun-22	247.12	28-Feb-24	248.96
29-Jan-16	248.81	18-Jul-17	248.97	27-Mar-19	248.93	27-Nov-20	248.90	26-Jul-22	247.27	26-Mar-24	247.76
26-Feb-16	248.94	22-Aug-17	248.47	22-Apr-19	248.97	22-Dec-20	248.48	31-Aug-22	248.67	23-Apr-24	248.44
18-Mar-16	248.97	22-Sep-17	247.78	30-May-19	248.75	27-Jan-21	248.43	23-Sep-22	248.53	23-May-24	248.84
19-Apr-16	248.39	25-Oct-17	248.15	24-Jun-19	248.08	22-Feb-21	247.40	20-Oct-22	249.00	27-Jun-24	247.70
31-May-16	247.96	24-Nov-17	248.93	25-Jul-19	247.50	24-Mar-21	248.70	24-Nov-22	248.96	25-Jul-24	248.16
16-Jun-16	247.44	19-Dec-17	248.20	15-Aug-19	247.17	23-Apr-21	248.68	19-Dec-22	247.54	29-Aug-24	246.93
29-Jul-16	247.38	19-Jan-18	248.48	27-Sep-19	248.52	21-May-21	247.93	27-Jan-23	247.22	30-Sep-24	247.14
23-Aug-16	248.47	15-Feb-18	247.84	30-Oct-19	248.74	14-Jun-21	247.28	27-Feb-23	247.46	28-Oct-24	246.92
27-Sep-16	248.05	26-Mar-18	248.05	20-Nov-19	248.20	14-Jul-21	248.97	24-Mar-23	248.94	19-Nov-24	247.73
28-Oct-16	248.00	28-Apr-18	248.93	23-Dec-19	248.32	10-Aug-21	247.94	24-Apr-23	248.81	11-Dec-24	248.90

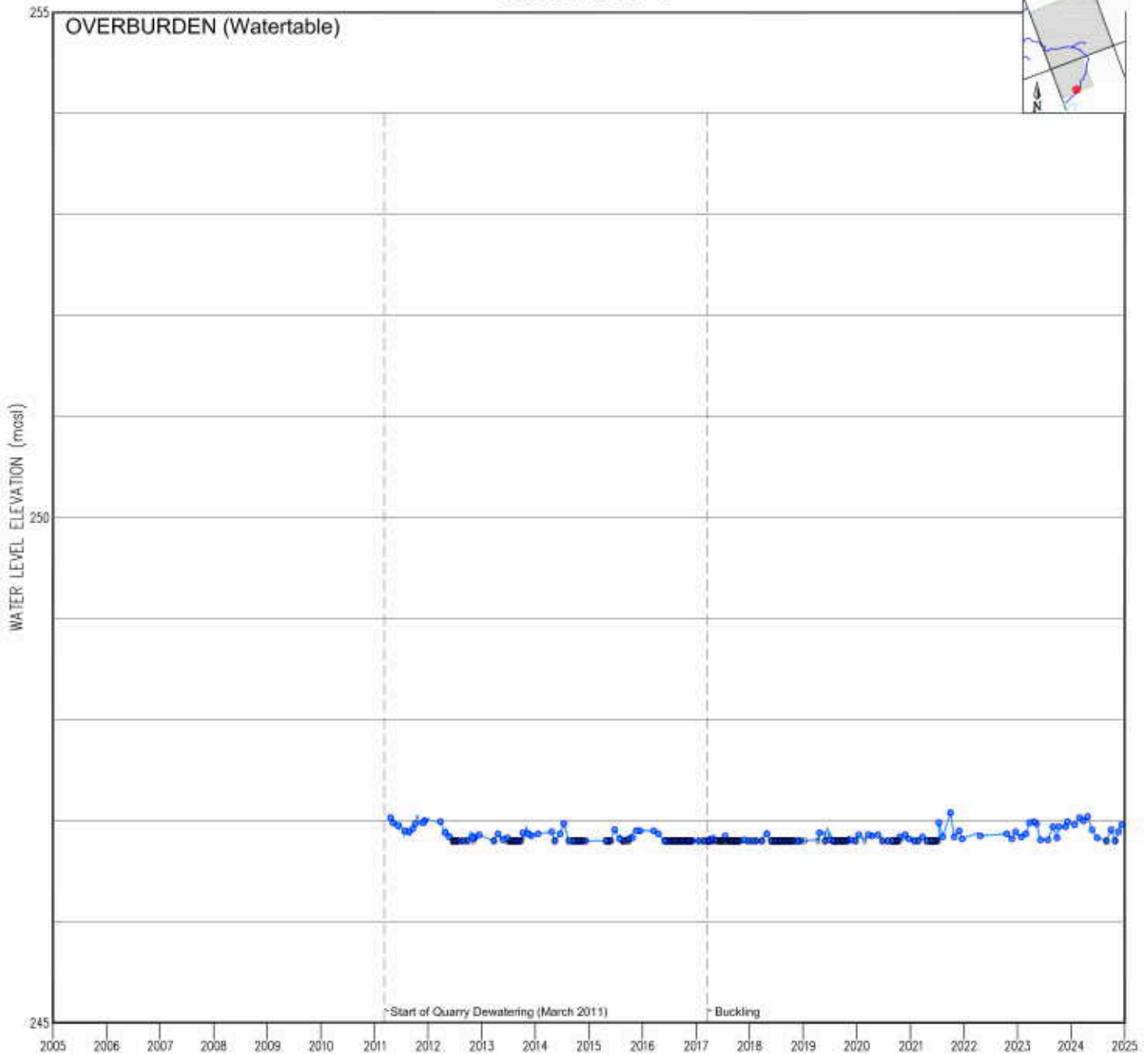
# MWPSW-3



MP Elevation 247.86 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
15-Sep-14	DRY	28-Oct-16	DRY	28-Apr-18	247.09	23-Dec-19	246.89	10-Aug-21	DRY	24-Apr-23	DRY
09-Oct-14	DRY	15-Nov-16	DRY	30-May-18	246.87	15-Jan-20	246.96	30-Sep-21	DRY	11-May-23	DRY
18-Nov-14	246.85	07-Dec-16	DRY	26-Jun-18	246.78	25-Feb-20	246.83	27-Oct-21	246.85	06-Jun-23	DRY
10-Dec-14	246.86	20-Jan-17	FRZ	25-Jul-18	246.88	20-Mar-20	246.92	29-Nov-21	246.74	27-Jul-23	DRY
06-Jan-15	FRZ	22-Feb-17	246.90	23-Aug-18	246.78	14-Apr-20	246.91	20-Dec-21	246.86	30-Aug-23	246.93
29-Apr-15	247.38	10-Mar-17	FRZ	27-Sep-18	246.76	25-May-20	246.90	21-Jan-22	FRZ	27-Sep-23	246.61
29-May-15	246.82	23-Mar-17	246.83	26-Oct-18	246.81	24-Jun-20	DRY	22-Feb-22	FRZ	10-Oct-23	246.76
26-Jun-15	246.87	30-Mar-17	FRZ	23-Nov-18	FRZ	30-Jul-20	246.65	30-Mar-22	246.96	24-Nov-23	246.82
31-Jul-15	246.80	13-Apr-17	246.88	12-Dec-18	FRZ	28-Aug-20	246.75	22-Apr-22	246.93	07-Dec-23	246.88
27-Aug-15	246.80	09-May-17	247.07	15-Jan-19	FRZ	30-Sep-20	246.78	26-May-22	246.85	25-Jan-24	246.86
30-Sep-15	246.80	28-Jun-17	247.09	28-Feb-19	FRZ	21-Oct-20	246.89	29-Jun-22	246.77	28-Feb-24	246.90
26-Oct-15	246.82	18-Jul-17	247.05	27-Mar-19	FRZ	27-Nov-20	246.92	26-Jul-22	246.65	26-Mar-24	246.88
25-Nov-15	246.86	22-Aug-17	246.92	22-Apr-19	246.95	22-Dec-20	246.87	31-Aug-22	246.72	23-Apr-24	246.86
16-Dec-15	246.87	22-Sep-17	246.85	30-May-19	246.93	27-Jan-21	246.75	23-Sep-22	246.73	23-May-24	246.71
18-Mar-16	246.96	25-Oct-17	246.91	24-Jun-19	246.94	22-Feb-21	247.14	20-Oct-22	246.78	25-Jul-24	246.45
19-Apr-16	246.86	24-Nov-17	247.04	25-Jul-19	246.80	24-Mar-21	246.85	24-Nov-22	246.74	29-Aug-24	246.47
31-May-16	246.78	19-Dec-17	246.99	15-Aug-19	246.67	23-Apr-21	246.85	19-Dec-22	246.81	30-Sep-24	246.57
16-Jun-16	246.74	19-Jan-18	FRZ	27-Sep-19	246.73	21-May-21	246.75	27-Jan-23	246.83	28-Oct-24	246.67
29-Jul-16	246.73	15-Feb-18	FRZ	30-Oct-19	246.91	14-Jun-21	DRY	27-Feb-23	246.91	19-Nov-24	246.85
23-Aug-16	246.62	26-Mar-18	FRZ	20-Nov-19	246.87	14-Jul-21	246.80	24-Mar-23	246.62	11-Dec-24	246.87

# MWPSW-4

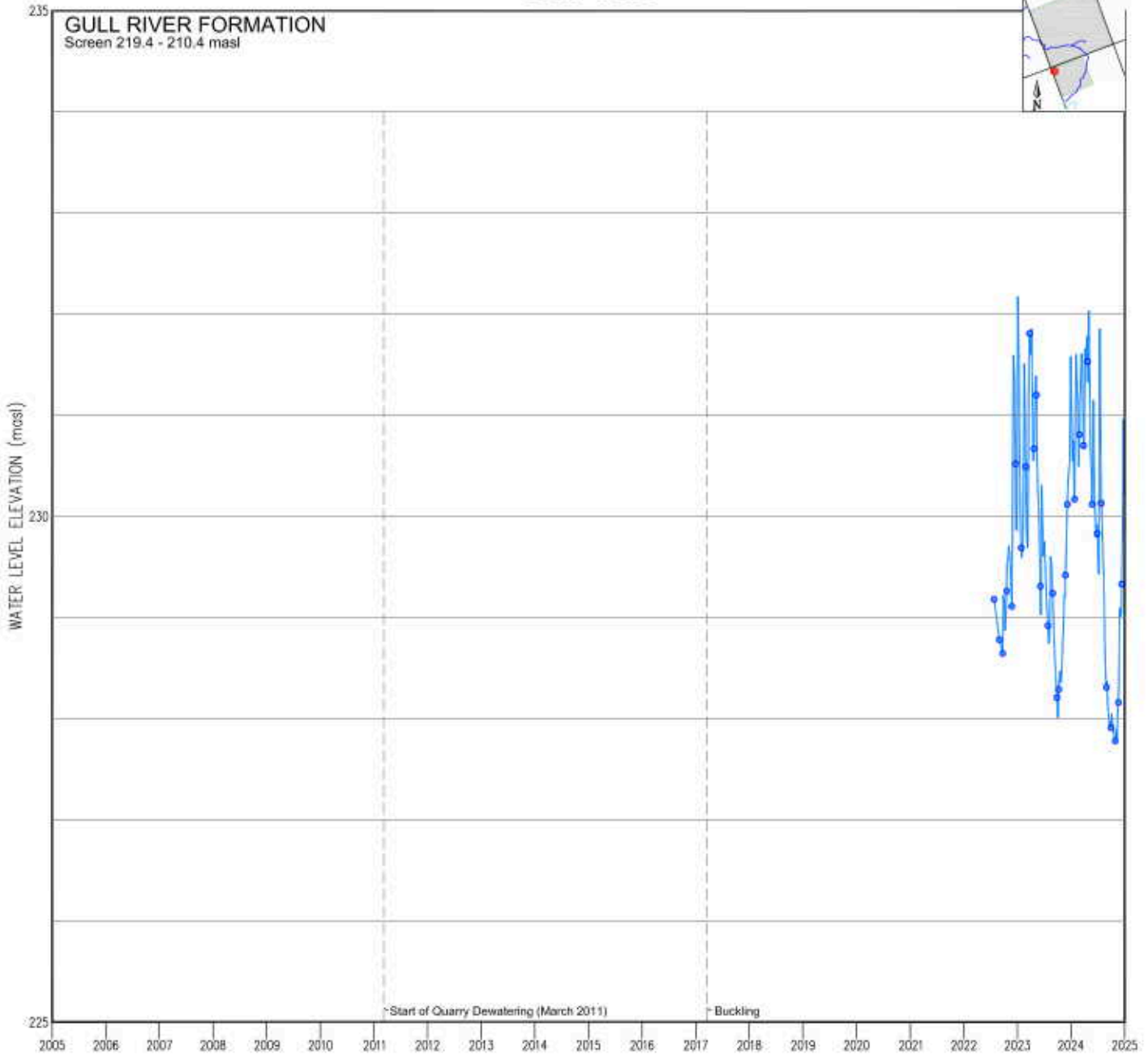


MP Elevation 248.67 masl

Grade 247.1 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
03-Jun-19	246.89	16-Sep-19	DRY	24-Jun-20	DRY	27-Nov-20	246.86	14-Jun-21	DRY	24-Apr-23	246.99
09-Jun-19	246.90	22-Sep-19	DRY	30-Jul-20	DRY	22-Dec-20	246.82	19-Jun-21	DRY	11-May-23	246.97
15-Jun-19	246.93	27-Sep-19	DRY	28-Aug-20	DRY	27-Jan-21	DRY	25-Jun-21	DRY	06-Jun-23	246.81
21-Jun-19	246.88	29-Sep-19	DRY	01-Sep-20	DRY	22-Feb-21	DRY	01-Jul-21	DRY	27-Jul-23	246.81
24-Jun-19	246.81	05-Oct-19	DRY	07-Sep-20	DRY	24-Mar-21	246.84	07-Jul-21	DRY	30-Aug-23	246.94
28-Jun-19	246.89	11-Oct-19	DRY	13-Sep-20	DRY	30-Mar-21	246.84	13-Jul-21	DRY	27-Sep-23	246.83
04-Jul-19	246.85	17-Oct-19	DRY	19-Sep-20	DRY	05-Apr-21	246.82	14-Jul-21	246.98	10-Oct-23	246.94
10-Jul-19	246.82	23-Oct-19	DRY	25-Sep-20	DRY	11-Apr-21	246.80	10-Aug-21	246.84	24-Nov-23	246.94
16-Jul-19	246.84	29-Oct-19	246.81	30-Sep-20	DRY	17-Apr-21	246.81	30-Sep-21	247.08	07-Dec-23	246.99
22-Jul-19	DRY	30-Oct-19	DRY	02-Oct-20	DRY	23-Apr-21	DRY	27-Oct-21	246.84	25-Jan-24	246.96
25-Jul-19	DRY	05-Nov-19	246.85	08-Oct-20	DRY	24-Apr-21	DRY	29-Nov-21	246.90	28-Feb-24	247.03
29-Jul-19	DRY	11-Nov-19	246.80	14-Oct-20	DRY	30-Apr-21	246.82	20-Dec-21	246.82	26-Mar-24	247.00
04-Aug-19	DRY	17-Nov-19	246.80	20-Oct-20	DRY	06-May-21	246.83	30-Mar-22	FRZ	23-Apr-24	247.04
10-Aug-19	DRY	20-Nov-19	246.81	21-Oct-20	246.84	12-May-21	DRY	22-Apr-22	246.85	23-May-24	246.91
15-Aug-19	DRY	23-Dec-19	DRY	27-Oct-20	246.82	18-May-21	DRY	20-Oct-22	246.87	27-Jun-24	246.83
17-Aug-19	DRY	15-Jan-20	246.86	02-Nov-20	246.82	21-May-21	DRY	24-Nov-22	246.82	29-Aug-24	DRY
23-Aug-19	DRY	25-Feb-20	DRY	08-Nov-20	246.81	25-May-21	DRY	19-Dec-22	246.89	30-Sep-24	246.91
29-Aug-19	DRY	20-Mar-20	246.86	14-Nov-20	246.80	31-May-21	DRY	27-Jan-23	246.84	28-Oct-24	DRY
04-Sep-19	DRY	14-Apr-20	246.85	20-Nov-20	246.82	06-Jun-21	DRY	27-Feb-23	246.87	19-Nov-24	246.89
10-Sep-19	DRY	25-May-20	246.86	26-Nov-20	246.88	12-Jun-21	DRY	24-Mar-23	246.98	11-Dec-24	246.96

# OW-38A



MP Elevation 254.65 masl  
Grade 254.4 masl

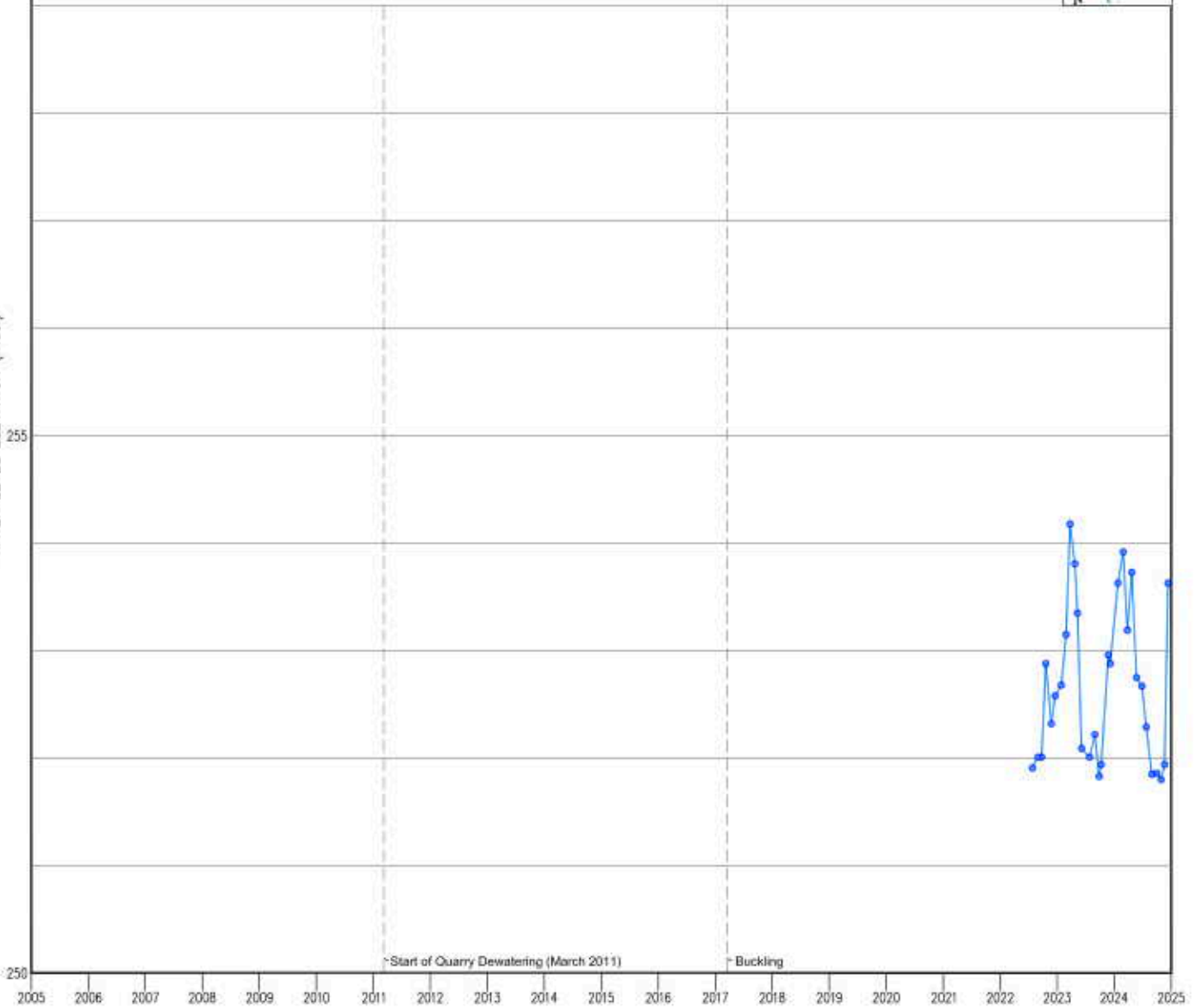
DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
24-Apr-23	230.67	03-Aug-23	228.74	16-Nov-23	229.22	29-Feb-24	231.09	13-Jun-24	230.06	26-Sep-24	227.97
26-Apr-23	230.75	09-Aug-23	228.79	22-Nov-23	229.21	06-Mar-24	231.29	19-Jun-24	229.79	30-Sep-24	227.91
02-May-23	231.31	15-Aug-23	229.60	24-Nov-23	229.42	12-Mar-24	231.60	25-Jun-24	229.92	03-Oct-24	228.05
08-May-23	231.39	21-Aug-23	229.53	29-Nov-23	229.65	18-Mar-24	231.60	27-Jun-24	229.63	09-Oct-24	227.94
11-May-23	231.20	27-Aug-23	229.24	05-Dec-23	230.01	24-Mar-24	230.94	02-Jul-24	229.71	15-Oct-24	227.88
15-May-23	230.55	30-Aug-23	229.24	07-Dec-23	230.12	26-Mar-24	230.70	08-Jul-24	229.43	21-Oct-24	227.82
21-May-23	230.23	03-Sep-23	229.01	12-Dec-23	230.36	31-Mar-24	230.67	14-Jul-24	231.86	27-Oct-24	227.76
27-May-23	230.01	09-Sep-23	228.73	18-Dec-23	230.46	06-Apr-24	231.68	20-Jul-24	230.87	28-Oct-24	227.78
02-Jun-23	229.60	15-Sep-23	228.53	24-Dec-23	230.57	12-Apr-24	231.57	25-Jul-24	230.13	03-Nov-24	227.89
06-Jun-23	229.31	21-Sep-23	228.37	30-Dec-23	231.58	18-Apr-24	231.78	27-Jul-24	230.12	09-Nov-24	227.81
09-Jun-23	229.02	27-Sep-23	228.21	05-Jan-24	231.01	23-Apr-24	231.53	02-Aug-24	229.80	15-Nov-24	228.11
15-Jun-23	230.31	28-Sep-23	228.14	11-Jan-24	230.54	25-Apr-24	231.32	08-Aug-24	229.50	19-Nov-24	228.16
21-Jun-23	229.92	04-Oct-23	228.01	17-Jan-24	230.75	01-May-24	232.03	14-Aug-24	229.22	22-Nov-24	228.40
27-Jun-23	229.61	10-Oct-23	228.29	23-Jan-24	230.20	07-May-24	231.34	20-Aug-24	228.62	28-Nov-24	229.09
03-Jul-23	229.75	11-Oct-23	228.32	25-Jan-24	230.17	13-May-24	230.63	26-Aug-24	228.39	04-Dec-24	229.01
09-Jul-23	229.56	17-Oct-23	228.47	04-Feb-24	231.60	19-May-24	230.46	29-Aug-24	228.31	10-Dec-24	229.05
15-Jul-23	229.31	23-Oct-23	228.36	10-Feb-24	231.35	23-May-24	230.12	02-Sep-24	228.37	11-Dec-24	229.33
21-Jul-23	229.08	29-Oct-23	228.44	16-Feb-24	231.17	26-May-24	230.32	08-Sep-24	228.12	17-Dec-24	229.88
27-Jul-23	228.92	04-Nov-23	228.70	22-Feb-24	230.49	01-Jun-24	231.15	14-Sep-24	228.02	23-Dec-24	230.96
28-Jul-23	228.88	10-Nov-23	228.89	28-Feb-24	230.81	07-Jun-24	230.40	20-Sep-24	227.91	29-Dec-24	230.22

# OW-38B



260  
**VERULAM FORMATION (Watertable)**  
 Screen 252.9 - 247.4 masl

WATER LEVEL ELEVATION (masl)



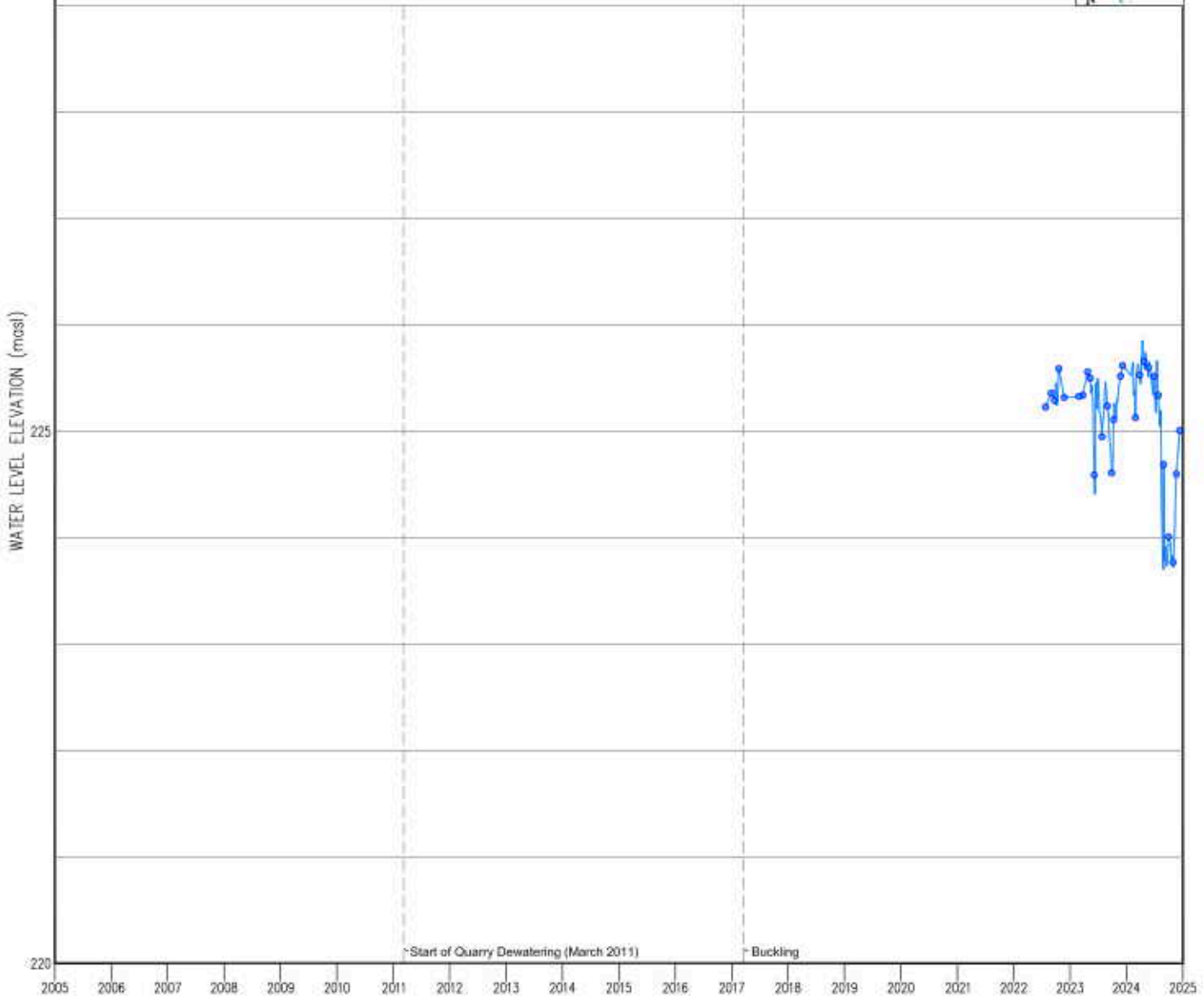
MP Elevation 254.67 masl  
 Grade 254.4 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
26-Jul-22	251.91	26-Mar-24	253.19						
31-Aug-22	252.01	23-Apr-24	253.73						
23-Sep-22	252.01	23-May-24	252.75						
20-Oct-22	252.88	27-Jun-24	252.67						
24-Nov-22	252.32	25-Jul-24	252.29						
19-Dec-22	252.58	29-Aug-24	251.85						
27-Jan-23	252.68	30-Sep-24	251.86						
27-Feb-23	253.15	28-Oct-24	251.80						
24-Mar-23	254.18	19-Nov-24	251.94						
24-Apr-23	253.81	11-Dec-24	253.63						
11-May-23	253.35								
06-Jun-23	252.09								
27-Jul-23	252.01								
30-Aug-23	252.22								
27-Sep-23	251.83								
10-Oct-23	251.94								
24-Nov-23	252.96								
07-Dec-23	252.88								
25-Jan-24	253.63								
28-Feb-24	253.92								

# OW-39



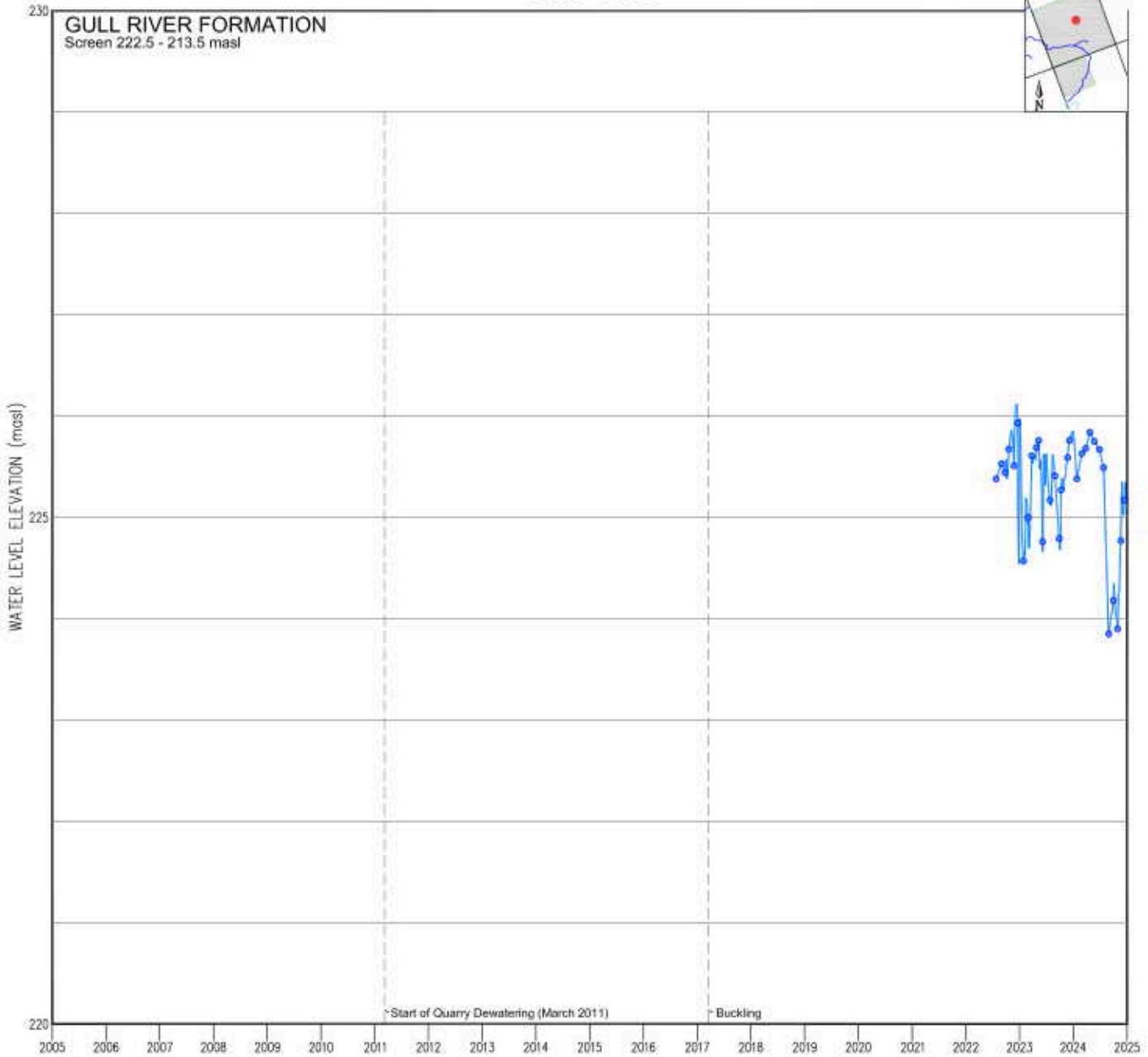
230  
**GULL RIVER FORMATION**  
 Screen 220.8 - 212.8 masl



MP Elevation 226.62 masl  
 Grade 225.3 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
26-Jul-22	225.23	23-Jun-23	225.21	06-Oct-23	224.74	20-Mar-24	225.62	28-Jun-24	225.44	11-Oct-24	223.96
31-Aug-22	225.36	29-Jun-23	225.50	10-Oct-23	225.11	26-Mar-24	225.53	04-Jul-24	225.32	17-Oct-24	223.80
23-Sep-22	225.29	05-Jul-23	225.37	13-Oct-23	225.27	27-Mar-24	225.50	10-Jul-24	225.18	23-Oct-24	223.83
01-Oct-22	225.46	11-Jul-23	225.17	19-Oct-23	225.24	02-Apr-24	225.45	16-Jul-24	225.67	28-Oct-24	223.77
07-Oct-22	225.24	17-Jul-23	225.16	25-Oct-23	225.12	08-Apr-24	225.64	22-Jul-24	225.40	30-Oct-24	223.72
13-Oct-22	225.33	23-Jul-23	225.07	31-Oct-23	225.30	14-Apr-24	225.86	25-Jul-24	225.34	05-Nov-24	223.95
19-Oct-22	225.51	27-Jul-23	224.95	06-Nov-23	225.29	20-Apr-24	225.74	29-Jul-24	225.22	11-Nov-24	224.17
20-Oct-22	225.59	30-Jul-23	225.07	12-Nov-23	225.42	23-Apr-24	225.68	04-Aug-24	225.05	17-Nov-24	224.52
24-Nov-22	225.32	05-Aug-23	225.15	18-Nov-23	225.45	27-Apr-24	225.59	10-Aug-24	225.20	19-Nov-24	224.60
27-Feb-23	225.33	11-Aug-23	225.26	24-Nov-23	225.52	03-May-24	225.74	16-Aug-24	224.26	11-Dec-24	225.01
24-Mar-23	225.34	17-Aug-23	225.47	07-Dec-23	225.62	09-May-24	225.60	22-Aug-24	223.82		
24-Apr-23	225.56	23-Aug-23	225.38	31-Jan-24	225.52	15-May-24	225.63	28-Aug-24	223.70		
11-May-23	225.50	29-Aug-23	225.26	06-Feb-24	225.56	21-May-24	225.51	29-Aug-24	224.69		
17-May-23	225.36	30-Aug-23	225.24	12-Feb-24	225.65	23-May-24	225.60	04-Sep-24	223.78		
23-May-23	225.43	05-Sep-23	225.18	18-Feb-24	225.34	28-May-24	225.66	10-Sep-24	223.92		
29-May-23	225.27	11-Sep-23	224.96	24-Feb-24	225.38	03-Jun-24	225.55	16-Sep-24	223.73		
04-Jun-23	224.78	17-Sep-23	224.89	28-Feb-24	225.13	09-Jun-24	225.48	22-Sep-24	223.76		
06-Jun-23	224.59	23-Sep-23	224.78	02-Mar-24	225.47	15-Jun-24	225.44	26-Sep-24	223.95		
11-Jun-23	224.41	27-Sep-23	224.61	08-Mar-24	225.56	21-Jun-24	225.34	30-Sep-24	224.01		
17-Jun-23	225.46	30-Sep-23	224.61	14-Mar-24	225.63	27-Jun-24	225.52	05-Oct-24	223.99		

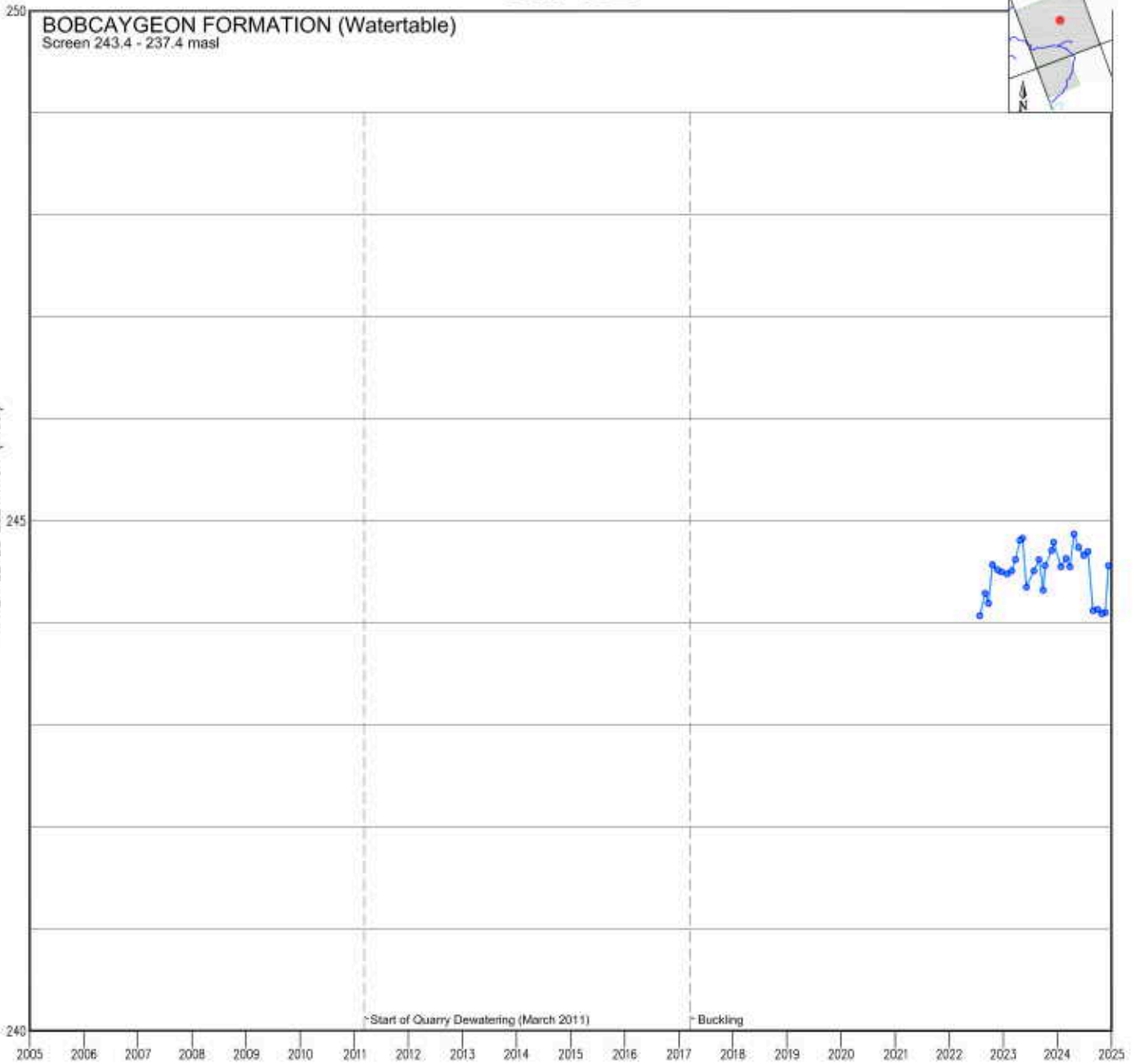
# OW-40A



MP Elevation 246.61 masl  
Grade 245.4 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
01-Oct-22	225.57	14-Jan-23	225.16	24-Apr-23	225.69	07-Aug-23	225.27	20-Nov-23	225.54	29-Aug-24	223.85
07-Oct-22	225.38	20-Jan-23	224.75	30-Apr-23	225.66	13-Aug-23	225.62	24-Nov-23	225.59	30-Sep-24	224.18
13-Oct-22	225.47	26-Jan-23	224.55	06-May-23	225.75	19-Aug-23	225.59	27-Nov-23	225.65	03-Oct-24	224.35
19-Oct-22	225.60	27-Jan-23	224.57	11-May-23	225.76	25-Aug-23	225.46	03-Dec-23	225.75	09-Oct-24	224.11
20-Oct-22	225.68	02-Feb-23	224.65	13-May-23	225.66	30-Aug-23	225.41	07-Dec-23	225.76	15-Oct-24	224.04
26-Oct-22	225.73	08-Feb-23	224.62	19-May-23	225.47	01-Sep-23	225.36	10-Dec-23	225.80	21-Oct-24	224.01
01-Nov-22	225.83	14-Feb-23	225.19	25-May-23	225.57	07-Sep-23	225.22	16-Dec-23	225.82	27-Oct-24	223.97
07-Nov-22	225.86	20-Feb-23	225.15	31-May-23	225.32	13-Sep-23	225.08	22-Dec-23	225.80	28-Oct-24	223.90
13-Nov-22	225.80	26-Feb-23	224.94	06-Jun-23	224.76	19-Sep-23	224.98	28-Dec-23	225.86	03-Nov-24	224.25
19-Nov-22	225.68	27-Feb-23	225.00	07-Jun-23	224.66	25-Sep-23	224.82	03-Jan-24	225.82	09-Nov-24	224.27
24-Nov-22	225.51	05-Mar-23	224.70	13-Jun-23	225.62	27-Sep-23	224.79	09-Jan-24	225.71	15-Nov-24	224.66
26-Nov-22	225.68	11-Mar-23	224.81	19-Jun-23	225.58	02-Oct-23	224.68	15-Jan-24	225.59	19-Nov-24	224.77
02-Dec-22	226.06	17-Mar-23	225.13	25-Jun-23	225.32	08-Oct-23	224.86	21-Jan-24	225.45	22-Nov-24	225.10
08-Dec-22	226.10	23-Mar-23	225.45	01-Jul-23	225.63	10-Oct-23	225.27	25-Jan-24	225.38	28-Nov-24	225.35
14-Dec-22	226.12	24-Mar-23	225.61	07-Jul-23	225.47	15-Oct-23	225.39	28-Feb-24	225.63	04-Dec-24	225.06
19-Dec-22	225.93	30-Mar-23	225.53	13-Jul-23	225.34	21-Oct-23	225.32	26-Mar-24	225.68	10-Dec-24	225.03
21-Dec-22	225.04	05-Apr-23	225.61	19-Jul-23	225.26	27-Oct-23	225.27	27-Oct-23	225.84	11-Dec-24	225.17
27-Dec-22	224.54	11-Apr-23	225.60	25-Jul-23	225.18	02-Nov-23	225.39	23-May-24	225.75	17-Dec-24	225.28
02-Jan-23	225.98	17-Apr-23	225.58	27-Jul-23	225.17	08-Nov-23	225.39	27-Jun-24	225.67	23-Dec-24	225.35
08-Jan-23	225.76	23-Apr-23	225.57	01-Aug-23	225.11	14-Nov-23	225.52	25-Jul-24	225.49	29-Dec-24	225.19

# OW-40B

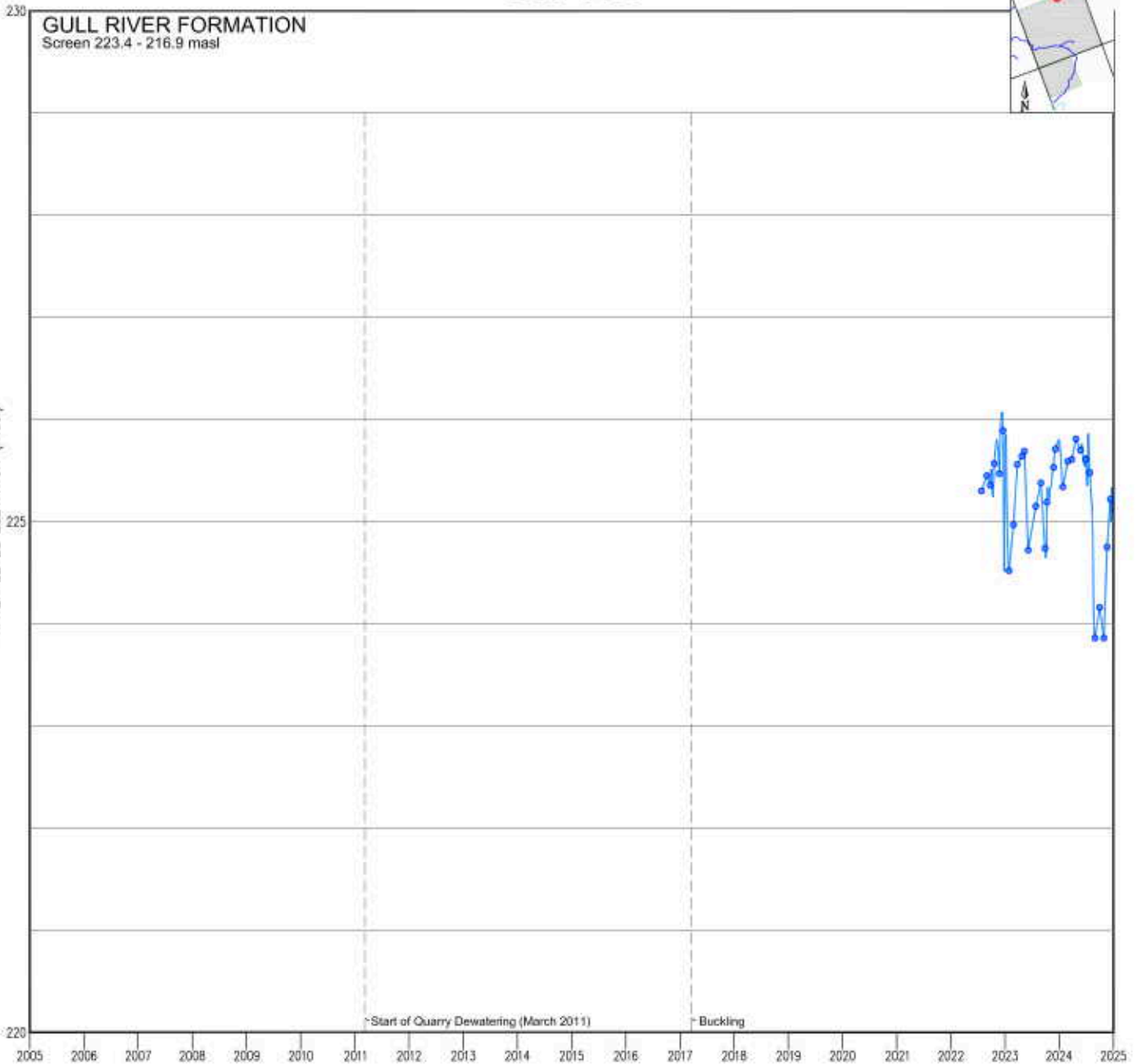


MP Elevation 246.60 masl

Grade 245.4 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
26-Jul-22	244.07	26-Mar-24	244.55						
31-Aug-22	244.29	23-Apr-24	244.87						
23-Sep-22	244.19	23-May-24	244.74						
20-Oct-22	244.57	27-Jun-24	244.66						
24-Nov-22	244.52	25-Jul-24	244.70						
19-Dec-22	244.50	29-Aug-24	244.12						
27-Jan-23	244.48	30-Sep-24	244.13						
27-Feb-23	244.51	28-Oct-24	244.09						
24-Mar-23	244.62	19-Nov-24	244.10						
24-Apr-23	244.81	11-Dec-24	244.56						
11-May-23	244.83								
06-Jun-23	244.35								
27-Jul-23	244.51								
30-Aug-23	244.62								
27-Sep-23	244.32								
10-Oct-23	244.56								
24-Nov-23	244.71								
07-Dec-23	244.79								
25-Jan-24	244.55								
28-Feb-24	244.63								

# OW-41A

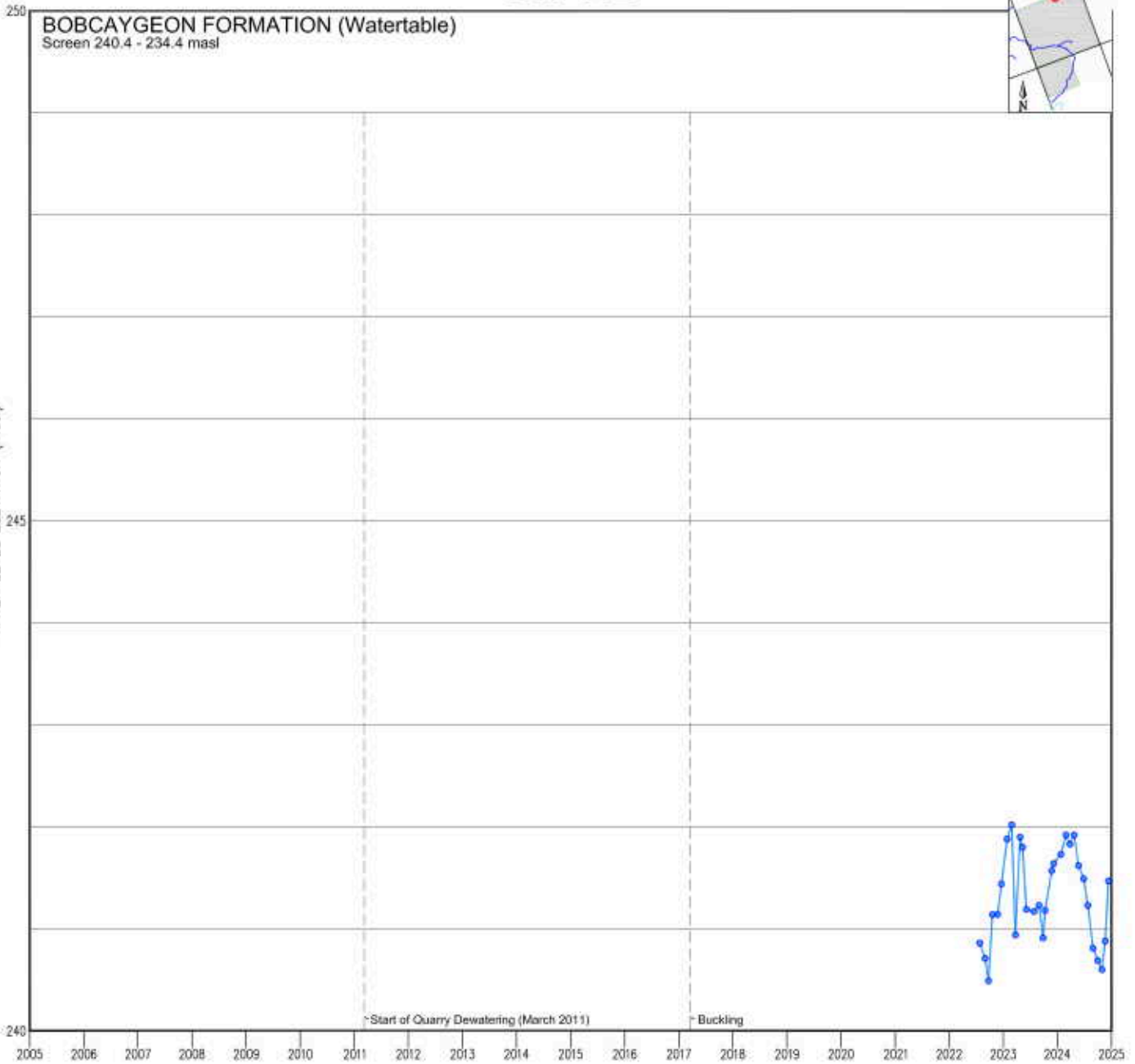


MP Elevation 243.65 masl

Grade 242.4 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
26-Jul-22	225.30	26-Dec-22	224.51	27-Oct-23	225.22	23-Apr-24	225.81	29-Aug-24	223.86		
31-Aug-22	225.45	01-Jan-23	225.80	02-Nov-23	225.34	23-May-24	225.70	30-Sep-24	224.16		
23-Sep-22	225.35	07-Jan-23	225.86	08-Nov-23	225.34	26-May-24	225.67	28-Oct-24	223.86		
30-Sep-22	225.52	13-Jan-23	225.17	14-Nov-23	225.46	01-Jun-24	225.76	19-Nov-24	224.75		
06-Oct-22	225.32	19-Jan-23	224.77	20-Nov-23	225.49	07-Jun-24	225.65	11-Dec-24	225.22		
12-Oct-22	225.24	25-Jan-23	224.52	24-Nov-23	225.53	13-Jun-24	225.61	15-Dec-24	225.00		
18-Oct-22	225.47	27-Jan-23	224.52	27-Nov-23	225.60	19-Jun-24	225.54	21-Dec-24	225.33		
20-Oct-22	225.57	27-Feb-23	224.97	03-Dec-23	225.70	25-Jun-24	225.65	27-Dec-24	225.09		
25-Oct-22	225.67	24-Mar-23	225.56	07-Dec-23	225.71	27-Jun-24	225.61				
31-Oct-22	225.76	24-Apr-23	225.64	10-Dec-23	225.74	02-Jul-24	225.54				
06-Nov-22	225.80	11-May-23	225.69	16-Dec-23	225.76	08-Jul-24	225.35				
12-Nov-22	225.73	06-Jun-23	224.72	22-Dec-23	225.75	14-Jul-24	225.86				
18-Nov-22	225.64	27-Jul-23	225.15	28-Dec-23	225.80	20-Jul-24	225.67				
24-Nov-22	225.47	30-Aug-23	225.38	03-Jan-24	225.78	25-Jul-24	225.48				
25-Nov-22	225.55	27-Sep-23	224.74	09-Jan-24	225.67	27-Jul-24	225.45				
01-Dec-22	225.93	02-Oct-23	224.65	15-Jan-24	225.54	02-Aug-24	225.28				
07-Dec-22	226.04	08-Oct-23	224.83	21-Jan-24	225.40	08-Aug-24	225.17				
13-Dec-22	226.07	10-Oct-23	225.19	25-Jan-24	225.34	14-Aug-24	224.92				
19-Dec-22	225.89	15-Oct-23	225.34	28-Feb-24	225.59	20-Aug-24	224.10				
20-Dec-22	225.69	21-Oct-23	225.28	26-Mar-24	225.61	26-Aug-24	223.90				

# OW-41B



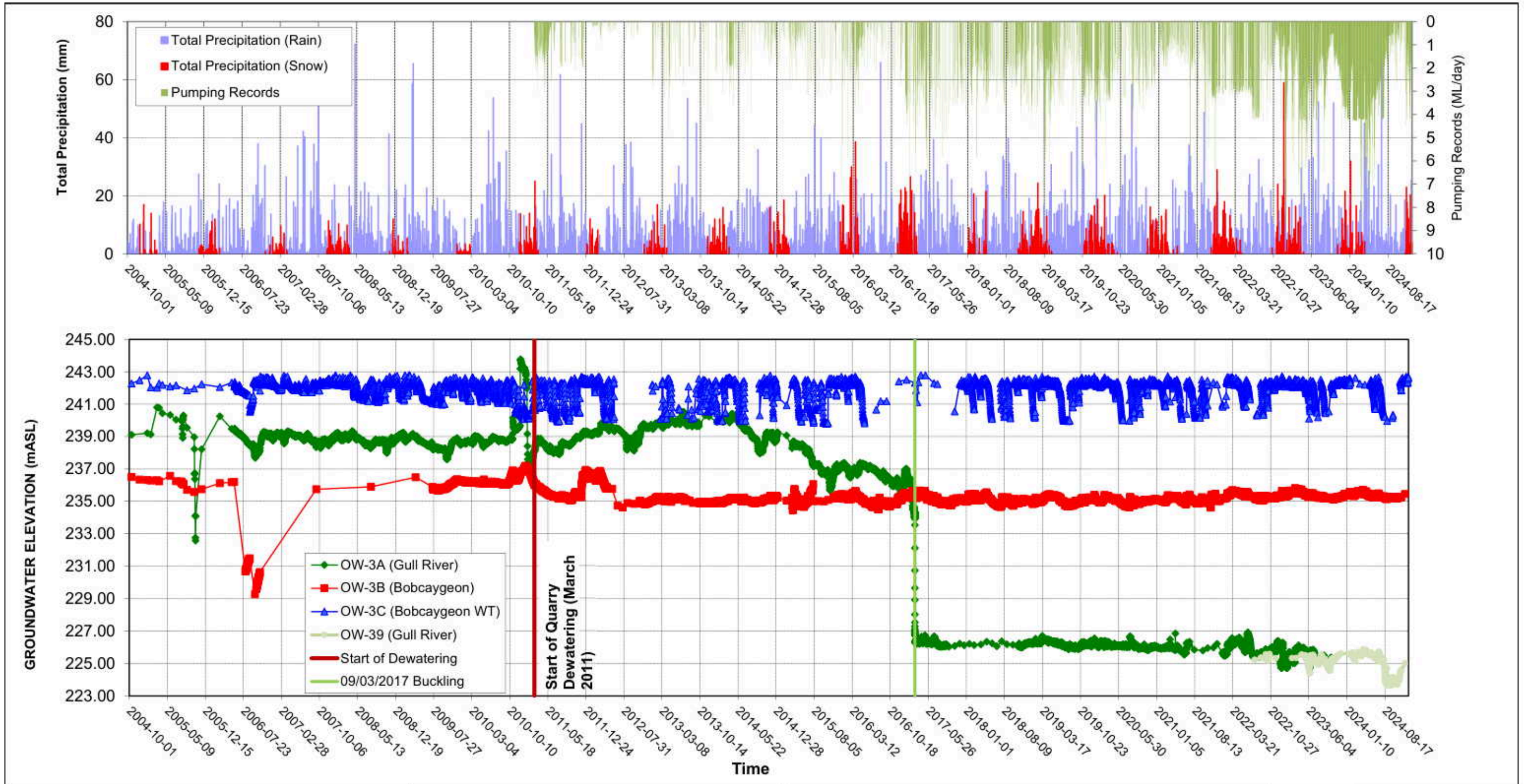
MP Elevation 243.67 masl

Grade 242.4 masl

DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION	DATE	ELEVATION
26-Jul-22	240.86	26-Mar-24	241.83						
31-Aug-22	240.71	23-Apr-24	241.92						
23-Sep-22	240.49	23-May-24	241.62						
20-Oct-22	241.14	27-Jun-24	241.49						
24-Nov-22	241.14	25-Jul-24	241.23						
19-Dec-22	241.44	29-Aug-24	240.81						
27-Jan-23	241.88	30-Sep-24	240.69						
27-Feb-23	242.02	28-Oct-24	240.60						
24-Mar-23	240.94	19-Nov-24	240.88						
24-Apr-23	241.90	11-Dec-24	241.47						
11-May-23	241.80								
06-Jun-23	241.19								
27-Jul-23	241.17								
30-Aug-23	241.23								
27-Sep-23	240.91								
10-Oct-23	241.18								
24-Nov-23	241.57								
07-Dec-23	241.64								
25-Jan-24	241.73								
28-Feb-24	241.92								

**APPENDIX D**

**Detailed Groundwater Elevations  
Plots (Locations with Data loggers)**



Date: April 2025

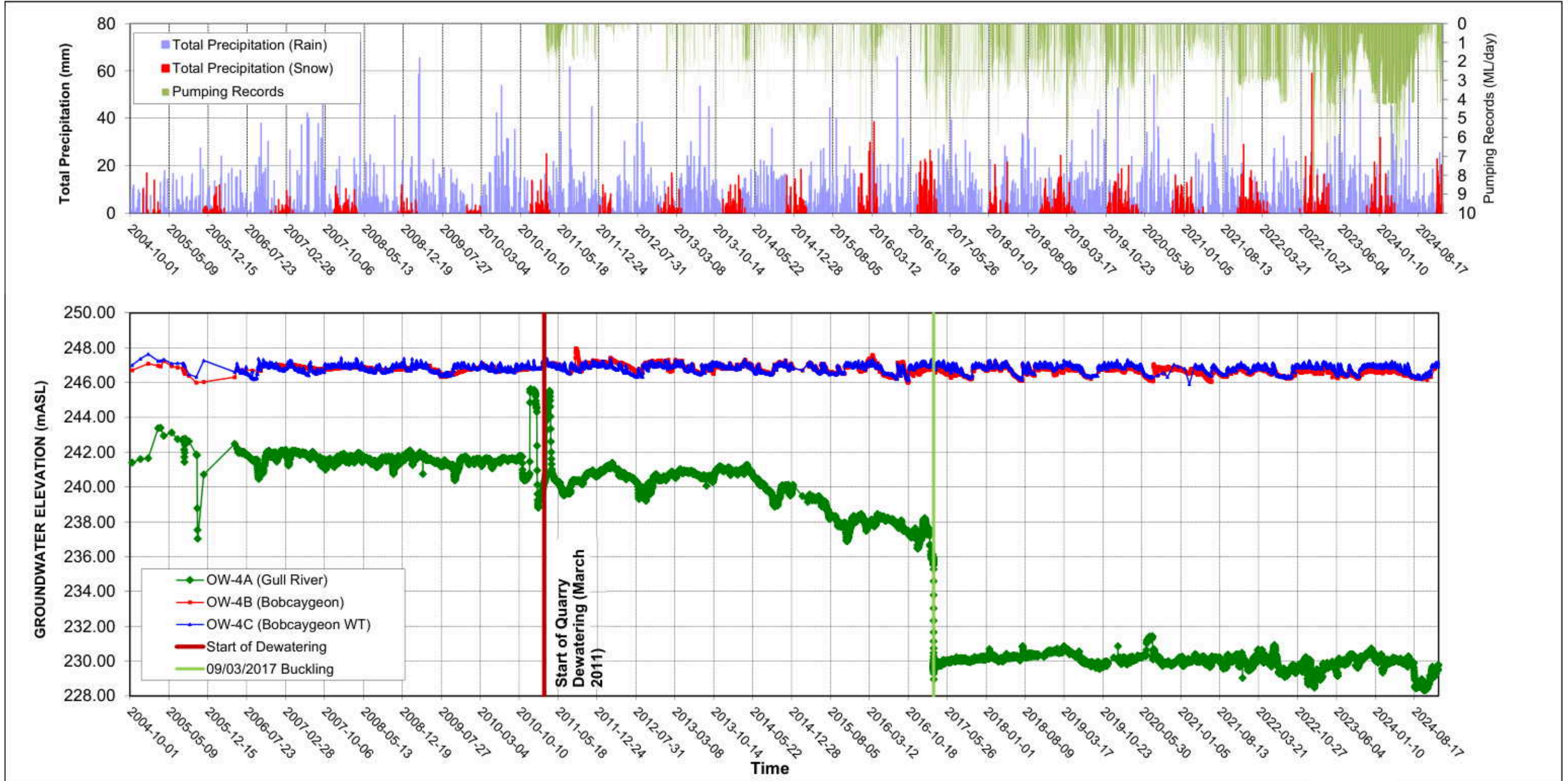
Drawn: JPAO

GROUNDWATER ELEVATIONS AND  
PRECIPITATION  
DATA FOR OW-3A, OW-3B, OW-3C AND OW39

FIGURE D1

Project: CA0024555

Chkd: KAM

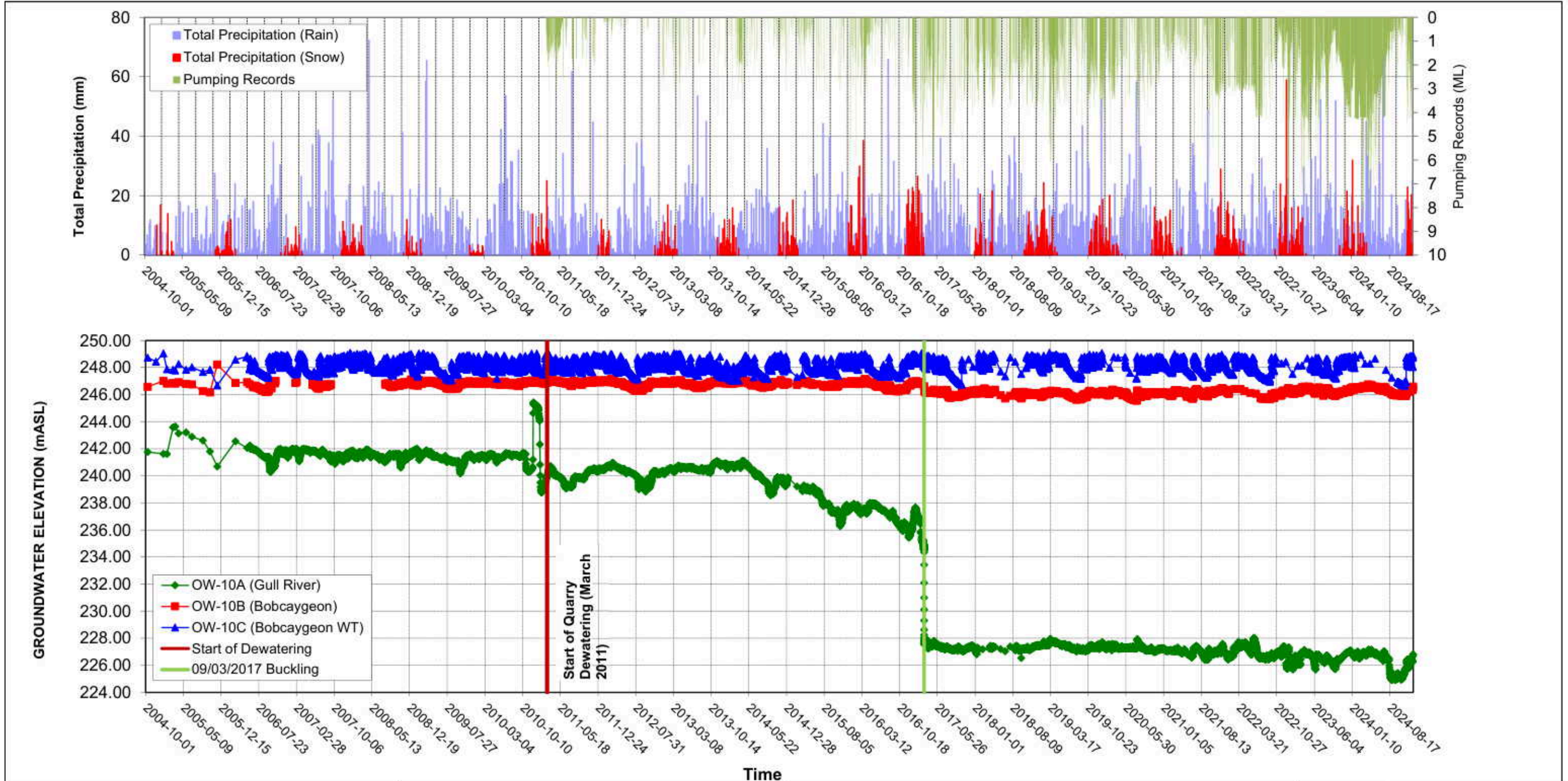


Date: April 2025  
Project: CA0024555

Drawn: JPAO  
Chkd: KAM

GROUNDWATER ELEVATIONS AND  
PRECIPITATION  
DATA FOR OW-4A, OW-4B AND OW-4C

FIGURE D2

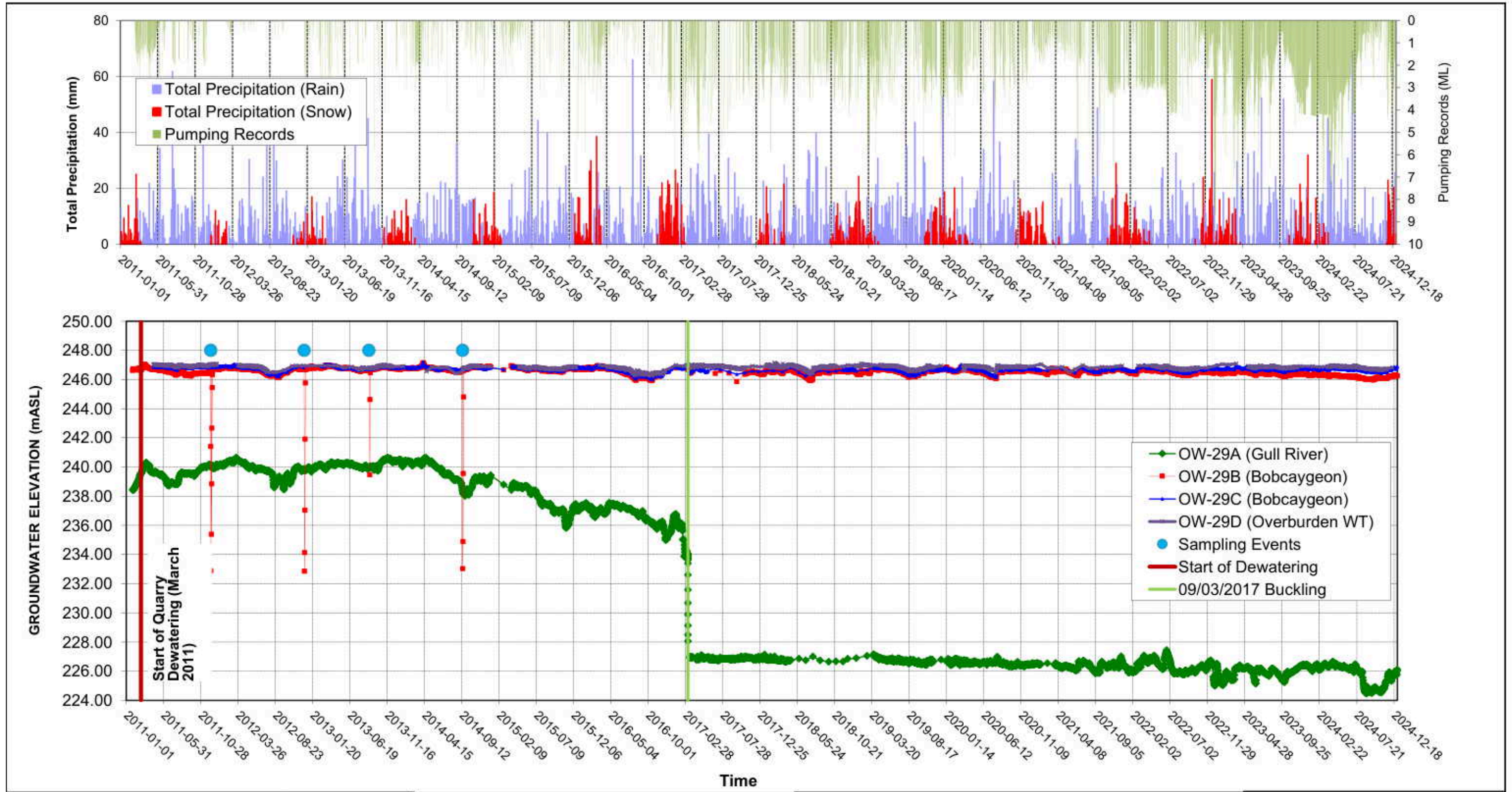


Date: April 2025  
 Project: CA0024555

Drawn: JPAO  
 Chkd: KAM

GROUNDWATER ELEVATIONS AND  
 PRECIPITATION  
 DATA FOR OW-10A, OW-10B AND OW-10C

FIGURE D3

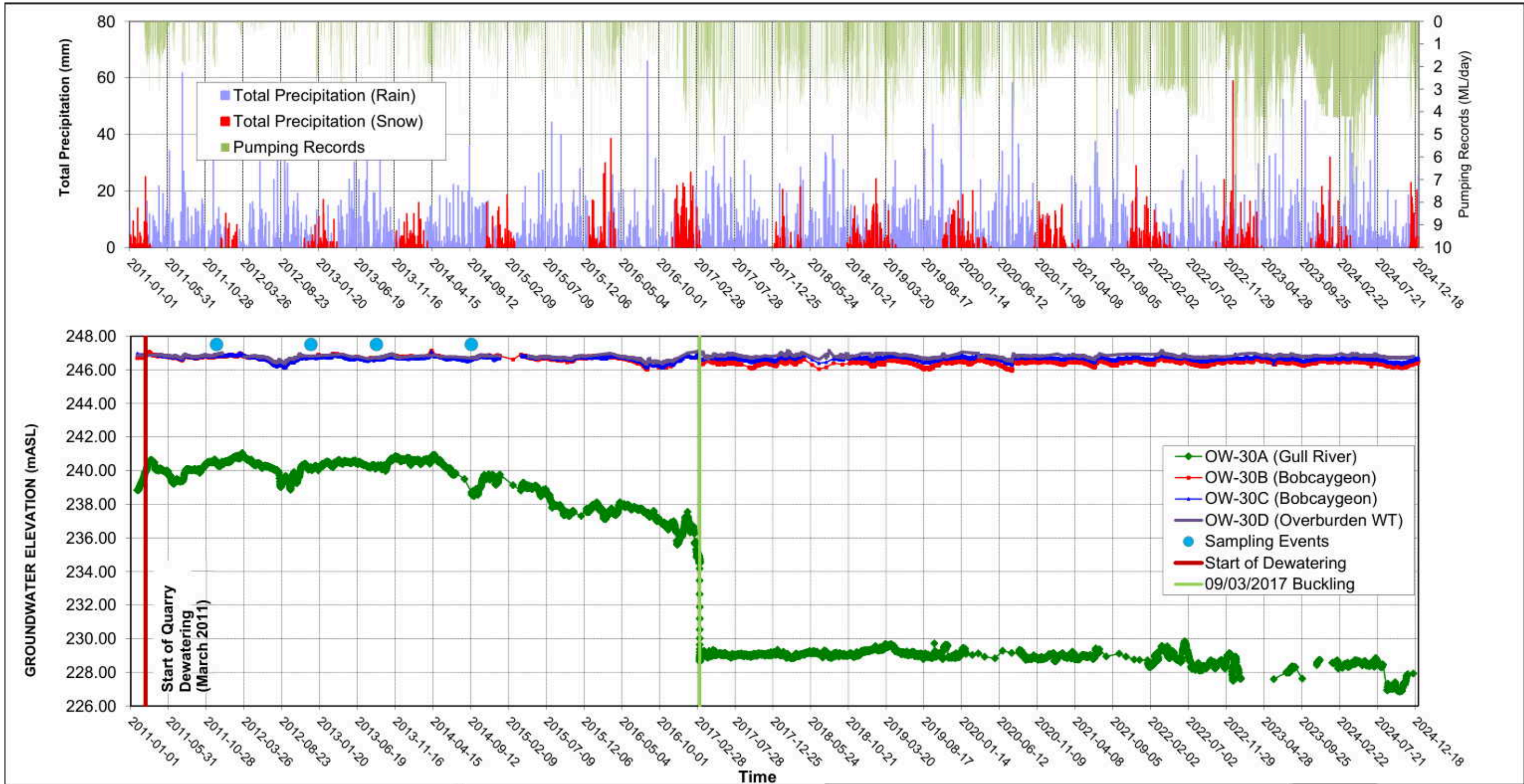


Date: April 2025  
Project: CA0024555

Drawn: JPAO  
Chkd: KAM

GROUNDWATER ELEVATIONS AND PRECIPITATION DATA FOR OW-29A, OW-29B, OW-29C AND OW-29D

FIGURE D4

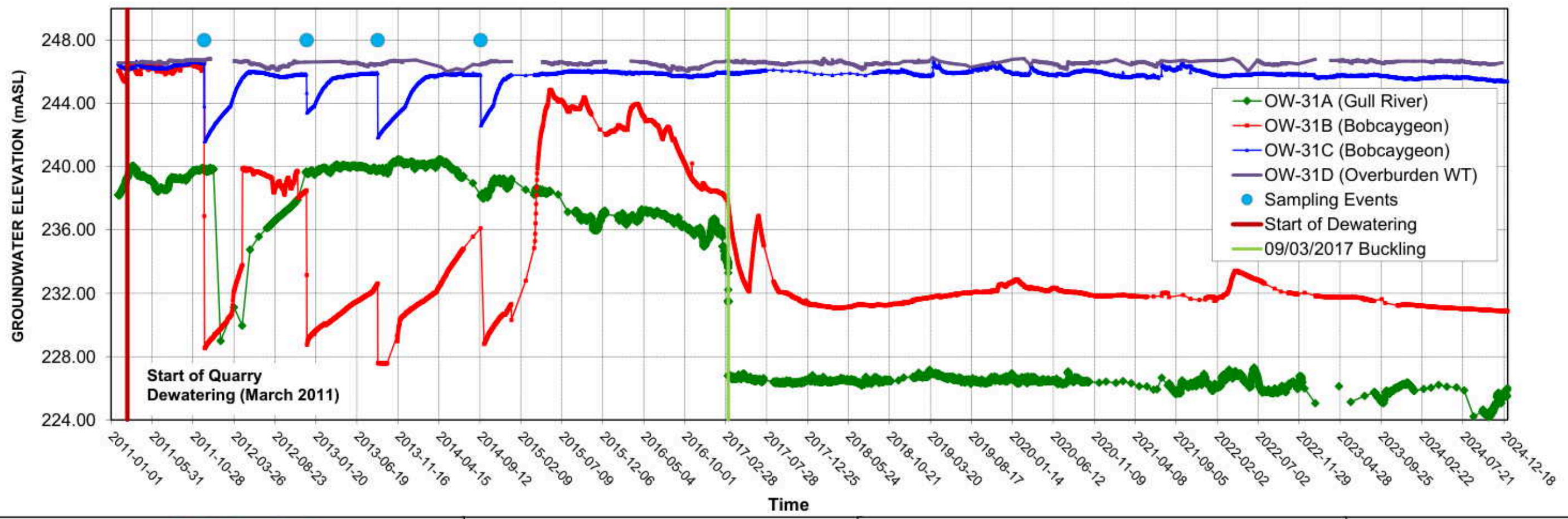
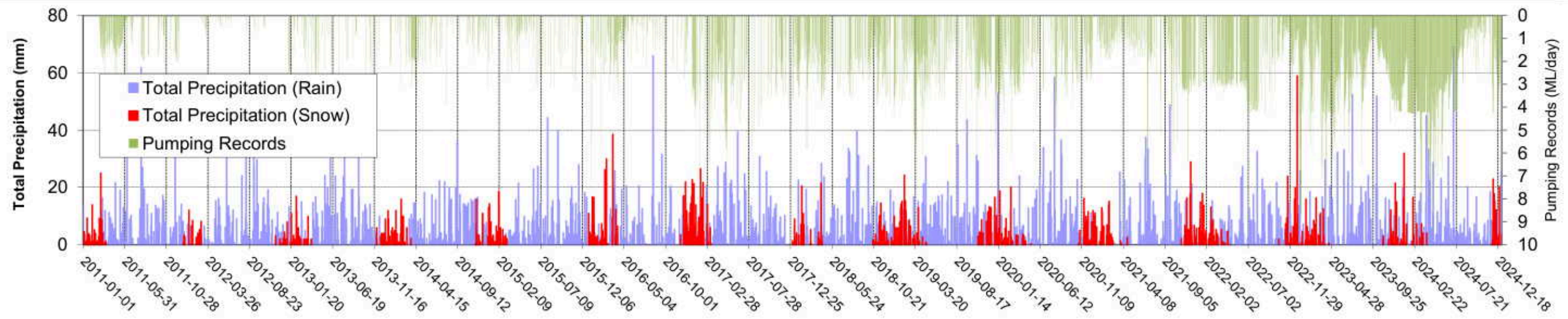


Date: April 2025  
Project: CA0024555

Drawn: JPAO  
Chkd: KAM

GROUNDWATER ELEVATIONS AND PRECIPITATION DATA FOR OW-30A, OW-30B, OW-30C AND OW-30D

FIGURE D5

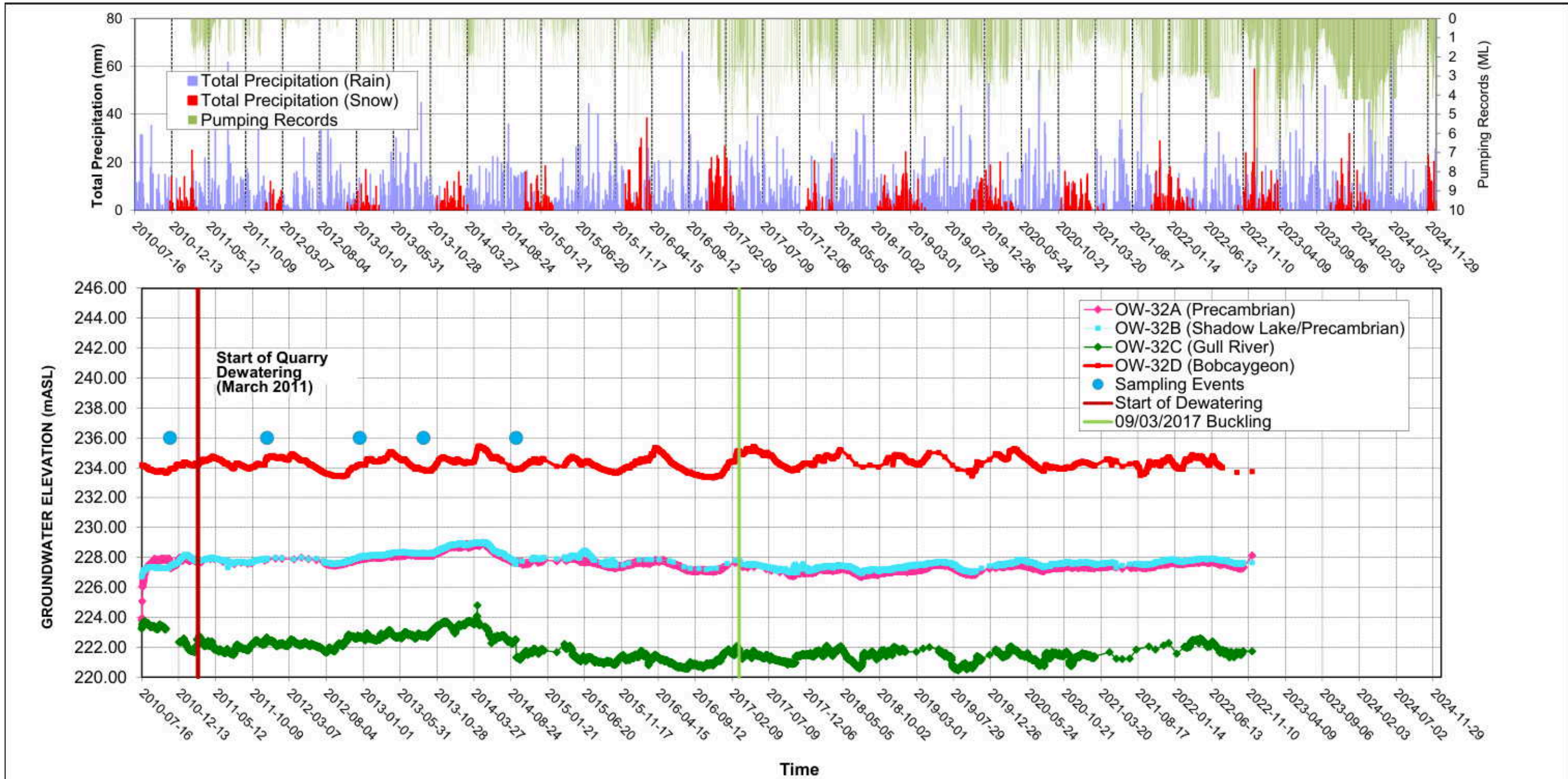


Date: April 2025  
Project: CA0024555

Drawn: JPAO  
Chkd: KAM

GROUNDWATER ELEVATIONS AND  
PRECIPITATION DATA FOR OW-31A, OW-31B,  
OW-31C AND OW-31D

FIGURE D6

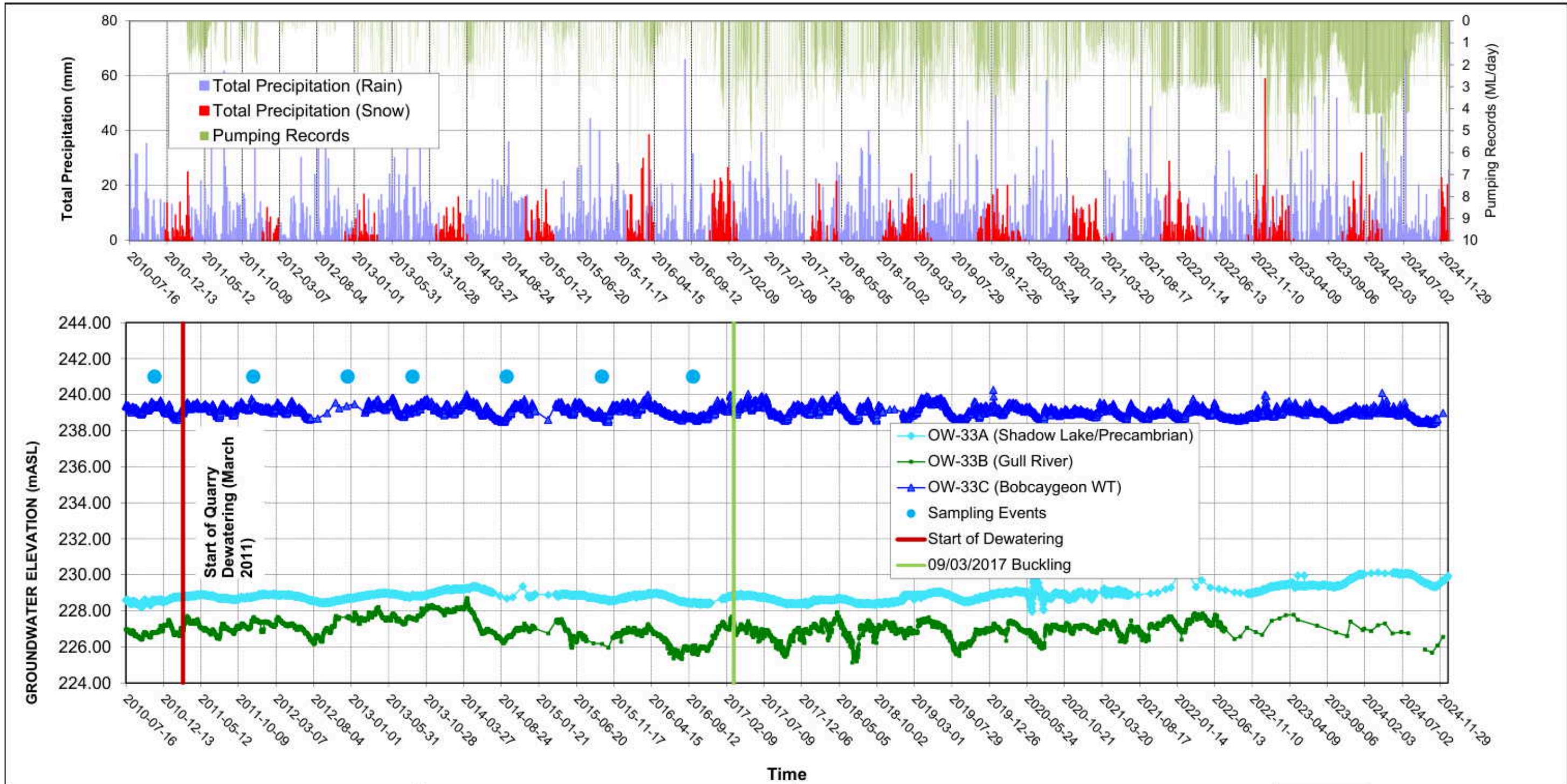


Date: April 2025  
Project: CA0024555

Drawn: JPAO  
Chkd: KAM

GROUNDWATER ELEVATIONS AND  
PRECIPITATION DATA FOR OW-32A, OW-32B,  
OW-32C AND OW-32D

FIGURE D7



Date: April 2025  
Project: CA0024555

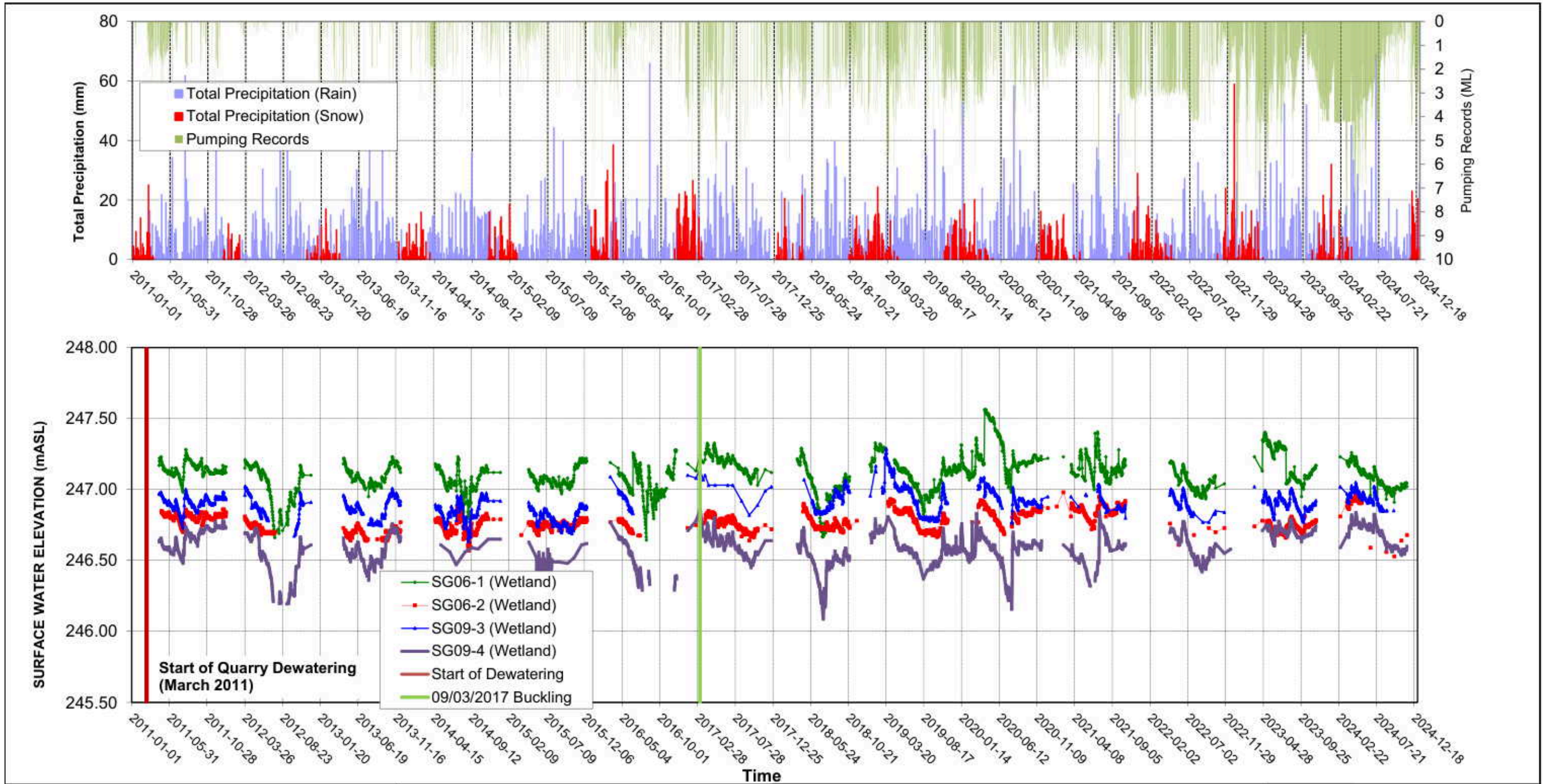
Drawn: JPAO  
Chkd: KAM

GROUNDWATER ELEVATIONS AND  
PRECIPITATION DATA FOR OW-33A, OW-33B  
AND OW-33C

FIGURE D8

**APPENDIX E**

**Surface Water Elevations**



Date: April 2025  
Project: CA0024555

Drawn: JPAO  
Chkd: KAM

SURFACE WATER ELEVATIONS AND  
PRECIPITATION DATA FOR SG06-1, SG06-2, SG09-3  
AND SG09-4

FIGURE E1

**APPENDIX F**

**Wetland Vegetation Monitoring  
Results (2021)**

**Vascular plants identified during wetland monitoring surveys  
at the Tomlinson Brechin Quarry from 2011 to 2021**

Scientific Name <sup>a</sup>	Common Name <sup>b</sup>	Origin <sup>b</sup>	S Rank <sup>c</sup>	2011	2012	2013	2015	2017	2021
<b>Trees (13 taxa)</b>									
<i>Abies balsamifera</i>	Balsam fir	N	S5	—	—	—	—	T	—
<i>Acer x freemanii</i>	Hybrid swamp maple	N	SNA	T <sup>d</sup>	T	T	T	—	T,P
<i>Acer rubrum</i>	Red maple	N	S5	T,P <sup>d</sup>	T,P	T,P	T,P	T,P	T,P
<i>Acer saccharinum</i>	Silver maple	N	S5	T	T	T	T	—	T
<i>Betula papyrifera</i>	White birch	N	S5	T	T	T	T	T	T
<i>Fraxinus nigra</i>	Black ash	N	S4	—	P	P	P	P	T,P
<i>Larix laricina</i>	Tamarack	N	S5	T,P	T	T	T	—	T,P
<i>Ostrya virginiana</i>	Hop-hornbeam	N	S5	T	—	—	—	—	T
<i>Picea glauca</i>	White spruce	N	S5	T	—	—	—	—	—
<i>Pinus strobus</i>	White pine	N	S5	—	T	—	—	T	—
<i>Quercus sp.</i>	Oak	N	—	—	—	—	—	—	T
<i>Thuja occidentalis</i>	Eastern white cedar	N	S5	T,P	T,P	T,P	T,P	T,P	T,P
<i>Ulmus americana</i>	White elm	N	S5	T,P	T,P	T	T,P	T,P	P
<b>Small trees, shrubs and woody vines (26 taxa)</b>									
<i>Alnus incana</i>	Speckled alder	N	S5	T,P	T,P	T,P	T,P	T,P	T,P
<i>Aronia melanocarpa</i>	Black chokeberry	N	S5	T	T	T	T	T	—
<i>Betula pumila</i>	Dwarf birch	N	S5	T,P	T,P	T	T,P	T,P	T,P
<i>Cornus canadensis</i>	Bunchberry	N	S5	T,P	T	T	T,P	T	T
<i>Cornus stolonifera</i>	Red osier dogwood	N	S5	T,P	T,P	T,P	T,P	T,P	T,P
<i>Ilex verticillata</i>	Winterberry	N	S5	T,P	T	T	T	T	P
<i>Linnaea borealis</i>	Twinflower	N	S5	T,P	T,P	T	T	—	—
<i>Lonicera dioica</i>	Limber honeysuckle	N	S5	—	—	—	—	—	P
<i>Lonicera oblongifolia</i>	Swamp fly-honeysuckle	N	S5	T,P	T,P	T	T	P	T,P
<i>Parthenocissus inserta</i>	Virginia creeper	N	S5	T,P	T,P	T	T,P	P	T,P
<i>Prunus virginiana</i>	Choke cherry	N	S5	—	T	—	T	—	—
<i>Rhamnus alnifolia</i>	Alder-leaved buckthorn	N	S5	T	T,P	T	T	T	T,P
<i>Rhamnus cathartica</i>	Common buckthorn	I	SNA	T	—	—	—	—	P
<i>Rhus radicans</i>	Poison-ivy	N	S5	T,P	T,P	T	T	T	T,P
<i>Ribes hirtellum</i>	Smooth gooseberry	N	S5	T,P	T	T	T	T	T,P
<i>Ribes triste</i>	Swamp red currant	N	S5	T	T	T	T	T	P
<i>Rubus idaeus</i>	Red raspberry	N	S5	T,P	T	T	T	T	P
<i>Rubus pubescens</i>	Dwarf raspberry	N	S5	T,P	T,P	T,P	T,P	P	T,P
<i>Salix bebbiana</i>	Beaked willow	N	S5	—	T	—	—	—	—
<i>Salix candida</i>	Hoary willow	N	S5	T	T	T	T	T	T
<i>Salix discolor</i>	Pussy willow	N	S5	T,P	T	T,P	T,P	T,P	T,P
<i>Salix lucida</i>	Shining willow	N	S5	T	—	T	—	—	—
<i>Salix petiolaris</i>	Slender willow	N	S5	T	T	T	T	T	—
<i>Solanum dulcamara</i>	Climbing nightshade	I	SNA	T,P	T,P	T,P	T,P	P	T,P
<i>Viburnum trilobum</i>	Highbush cranberry	N	S5	—	P	—	—	—	—
<i>Vitis riparia</i>	Riverbank grape	N	S5	T,P	—	P	T,P	P	T,P

Scientific Name <sup>a</sup>	Common Name <sup>b</sup>	Origin <sup>b</sup>	S Rank <sup>c</sup>	2011	2012	2013	2015	2017	2021
<b>Ferns and allies (8 taxa)</b>									
<i>Athyrium filix-femina</i>	Lady fern	N	S5	T	—	—	—	—	—
<i>Dryopteris cristata</i>	Crested fern	N	S5	T,P	T,P	T,P	T,P	T,P	P
<i>Dryopteris marginalis</i>	Marginal woodfern	N	S5	T	T	T	T	T	—
<i>Equisetum fluviatile</i>	Water horsetail	N	S5	T,P	T	T,P	T,P	T,P	T,P
<i>Onoclea sensibilis</i>	Sensitive fern	N	S5	T,P	T,P	T,P	T,P	T,P	T,P
<i>Osmunda cinnamomea</i>	Cinnamon fern	N	S5	T,P	T,P	T,P	T,P	T,P	T,P
<i>Osmunda regalis</i>	Royal fern	N	S5	T	T,P	T,P	T,P	T	T
<i>Thelypteris palustris</i>	Marsh fern	N	S5	T,P	T,P	T,P	T,P	T,P	T,P
<b>Graminoids (13 taxa)</b>									
<i>Bromus ciliatus</i>	Fringed brome	N	S5	P	T	T,P	T	T	T
<i>Calamagrostis canadensis</i>	Canada blue-joint	N	S5	T,P	T,P	T,P	T,P	T,P	T,P
<i>Carex disperma</i>	Sedge	N	S5	T,P	T,P	T	T,P	T,P	T,P
<i>Carex gracillima</i>	Sedge	N	S5	P	—	—	—	—	—
<i>Carex pseudocyperus</i>	Sedge	N	S5	T,P	T,P	T,P	T,P	P	T,P
<i>Carex stricta</i>	Sedge	N	S5	T,P	T,P	T	T,P	T,P	T,P
<i>Carex utriculata</i>	Sedge	N	S5	T,P	T,P	T,P	T,P	T,P	T,P
<i>Dulichium arundinaceum</i>	Three-way Sedge	N	S5	—	—	—	—	—	T
<i>Elymus riparius</i>	Riverbank wild-rye	N	S4	T,P	T	T,P	T,P	T,P	—
<i>Glyceria striata</i>	Fowl manna grass	N	S4S5	T,P	T,P	T	T,P	T,P	T,P
<i>Leersia oryzoides</i>	Rice cut-grass	N	S5	T	—	—	—	—	—
<i>Muhlenbergia glomerata</i>	Muhly grass	N	S5	T	—	T	T	T	—
<i>Typha latifolia</i>	Common cattail	N	S5	T	T	T	T	T	T
<b>Forbs (51 taxa)</b>									
<i>Actaea rubra</i>	Red baneberry	N	S5	T	—	T	—	—	—
<i>Aralia nudicaulis</i>	Wild sarsaparilla	N	S5	T,P	T,P	T	T	T	T,P
<i>Asclepias incarnata</i>	Swamp milkweed	N	S5	T	—	T	—	—	—
<i>Bidens cernua</i>	Beggar-ticks	N	S5	T,P	T,P	T,P	T,P	T,P	T
<i>Boehmeria cylindrica</i>	False nettle	N	S5	T,P	—	T	T	T	—
<i>Caltha palustris</i>	Marsh-marigold	N	S5	T,P	T,P	T	T	T	T,P
<i>Campanula aparinoides</i>	Marsh bellflower	N	S5	T	—	T	T	T	T,P
<i>Chelone glabra</i>	Turtlehead	N	S5	T,P	T	T	T	T,P	T,P
<i>Cicuta bulbifera</i>	Bulb-bearing water-hemlock	N	S5	T	T,P	T	T	T,P	T,P
<i>Clematis virginiana</i>	Virgin's-bower	N	S5	T,P	T	T,P	T,P	T,P	T
<i>Coptis trifolia</i>	Goldthread	N	S5	T	T	T,P	T	—	T
<i>Cypripedium calceolus</i>	Large yellow lady's slipper	N	S5	T	—	—	—	—	T,P
<i>Doellingeria umbellata</i>	Flat-topped aster	N	S5	T	T	T	T	T	T
<i>Epilobium ciliatum</i>	Willowherb	N	S5	T,P	T,P	T,P	T,P	T,P	T
<i>Epilobium leptophyllum</i>	Narrow-leaved willow-herb	N	S5	T	—	—	—	T	T,P
<i>Eupatorium perfoliatum</i>	Bone-set	N	S5	T	—	T	T	—	—
<i>Eutrochium maculatum</i>	Joe-pye weed	N	S5	T,P	T,P	T,P	T,P	T,P	T,P
<i>Fragaria virginiana</i>	Common strawberry	N	S5	T,P	—	T	T	T	T,P
<i>Galium asprellum</i>	Bedstraw	N	S5	—	—	—	—	T	—
<i>Galium obtusum</i>	Blunt-leaved bedstraw	N	S5	—	T	—	—	—	—
<i>Galium palustre</i>	Marsh bedstraw	N	S5	T,P	T,P	T,P	T,P	T,P	T,P
<i>Galium triflorum</i>	Sweet-scented bedstraw	N	S5	T,P	T,P	T	T,P	T,P	T,P
<i>Geum canadense</i>	White avens	N	S5	P	—	—	—	—	T,P
<i>Impatiens capensis</i>	Spotted jewelweed	N	S5	T,P	T,P	T,P	T,P	T,P	T,P
<i>Isis versicolor</i>	Blue-flag	N	S5	T,P	T	T	T	—	T
<i>Lemna minor</i>	Duckweed	N	S5	T	T	T	T	—	—

Scientific Name <sup>a</sup>	Common Name <sup>b</sup>	Origin <sup>b</sup>	S Rank <sup>c</sup>	2011	2012	2013	2015	2017	2021
<i>Liparis loeselii</i>	Loesel's Twayblade	N	S4S5	—	—	—	—	—	P
<i>Lycopus uniflorus</i>	Northern water-horehound	N	S5	T,P	T	T	T	T,P	T,P
<i>Lysimachia ciliata</i>	Yellow loosestrife	N	S5	T	—	T	T	—	—
<i>Lysimachia thrysiflora</i>	Tufted loosestrife	N	S5	T,P	T,P	T	T	T	T,P
<i>Maianthemum canadense</i>	Canada mayflower	N	S5	T,P	T,P	T,P	T,P	T	T,P
<i>Maianthemum trifolium</i>	Three-leaved Solomon's-seal	N	S5	T,P	T,P	T	T,P	T,P	T,P
<i>Mentha arvensis</i>	Field mint	N	S5	T	T	T	T	T	T
<i>Menyanthes trifoliata</i>	Bog-bean	N	S5	T	T,P	—	—	T	T
<i>Mitella nuda</i>	Naked mitrewort	N	S5	T,P	T	T,P	T,P	T,P	T,P
<i>Persicaria amphibium</i>	Water smartweed	N	S5	T	T	T,P	T	T,P	T,P
<i>Persicaria lapathifolia</i>	Pale smartweed	N	S5	T	T	T	T	—	—
<i>Pilea pumila</i>	Clearweed	N	S5	—	T	—	T	T	—
<i>Ranunculus</i> sp.	Buttercup	N	—	T	—	—	—	—	—
<i>Rumex obtusifolius</i>	Bitter dock	I	SNA	T	T	T	T	—	T,P
<i>Rumex triangulivalvis</i>	Narrow-leaved dock	N	S5	T,P	T	T,P	T	—	—
<i>Sagittaria latifolia</i>	Broad-leaved arrowhead	N	S5	—	—	—	—	T	P
<i>Scutellaria galericulata</i>	Marsh scullicap	N	S5	T,P	T	T,P	T,P	T	—
<i>Sium suave</i>	Water parsnip	N	S5	T	—	T,P	T,P	T,P	T,P
<i>Solidago rugosa</i>	Rough goldenrod	N	S5	T,P	T,P	T,P	T,P	T,P	T,P
<i>Solidago uliginosa</i>	Bog goldenrod	N	S5	T	T,P	T,P	T,P	T,P	T,P
<i>Symphyotrichum lateriflorum</i>	Calico aster	N	S5	T,P	T,P	T,P	T,P	T,P	T,P
<i>Symphyotrichum puniceum</i>	Red-stemmed aster	N	S5	T,P	T,P	T,P	T,P	T,P	T,P
<i>Thalictrum pubescens</i>	Tall meadow-rue	N	S5	T,P	T,P	T,P	T,P	T,P	T,P
<i>Trientalis borealis</i>	Starflower	N	S5	T,P	T	T	T	T	P
<i>Viola</i> sp.	Violet	N	—	T,P	T	T,P	T,P	T,P	—

<sup>a</sup> Scientific names after Morton & Venn (1990) and published vols. of *Flora of North America* (1993-2010).

<sup>b</sup> Common names and origin based upon Varga *et al.* (2000) and NHIC (2012).

Origin: N = Native; I = Introduced.

<sup>c</sup> S-Ranks based upon determinations made by the Natural Heritage Information Centre (2017).

S = Provincial; Ranks 1-3 are considered imperiled or rare; Ranks 4 and 5 are considered secure.

SNA = Non-native species are generally assigned provincial abundance ranks.

<sup>d</sup> Survey occurrences: T = vegetation transect; P = fixed plots.



Photograph 1. At the center of Plot #1 looking north.



Photograph 2. At the center of Plot #1 looking east.



Photograph 3. At the center of Plot #1 looking south.



Photograph 4. At the center of Plot #1 looking west.



Photograph 5. At the center of Plot #2 looking north.



Photograph 6. At the center of Plot #2 looking east.



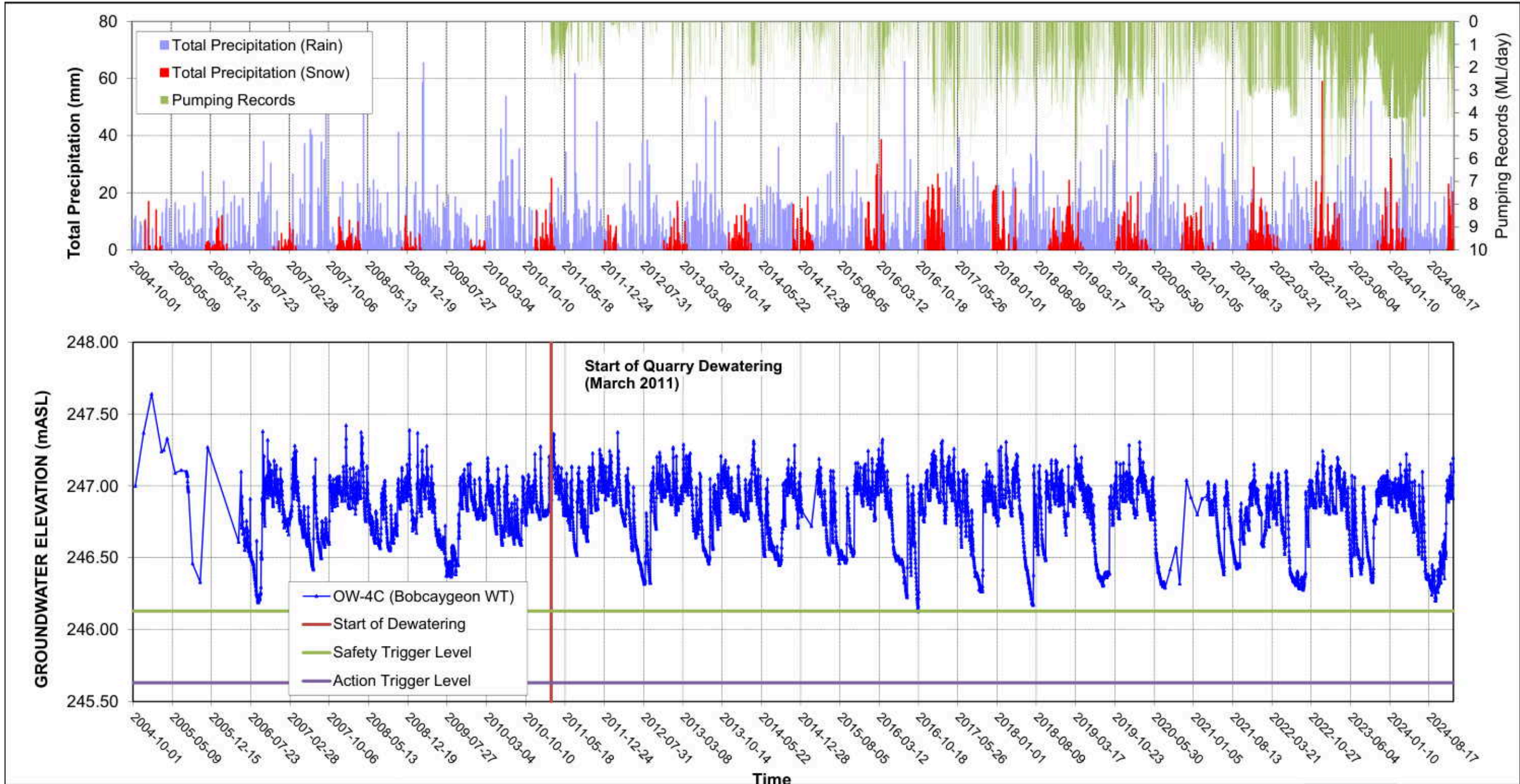
Photograph 7. At the center of Plot #2 looking south.



Photograph 8. At the center of Plot #2 looking west.

**APPENDIX G**

**Trigger Locations - Water Elevation  
Plots**

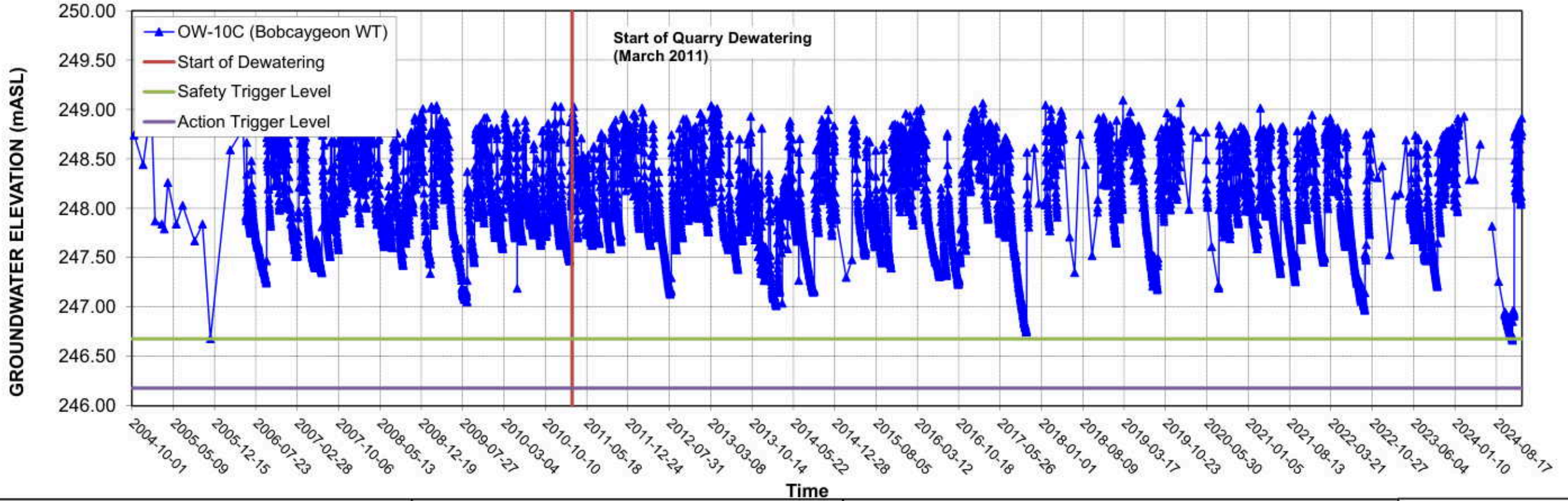
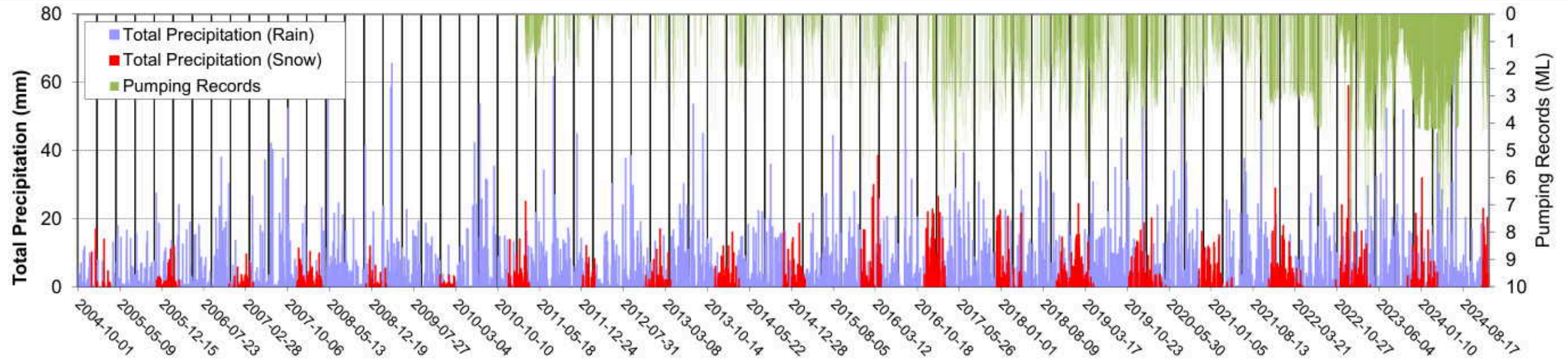


Date: April 2025  
Project: CA0024555

Drawn: JPAO  
Chkd: KAM

GROUNDWATER TRIGGER LEVELS FOR OW-4C

FIGURE G1

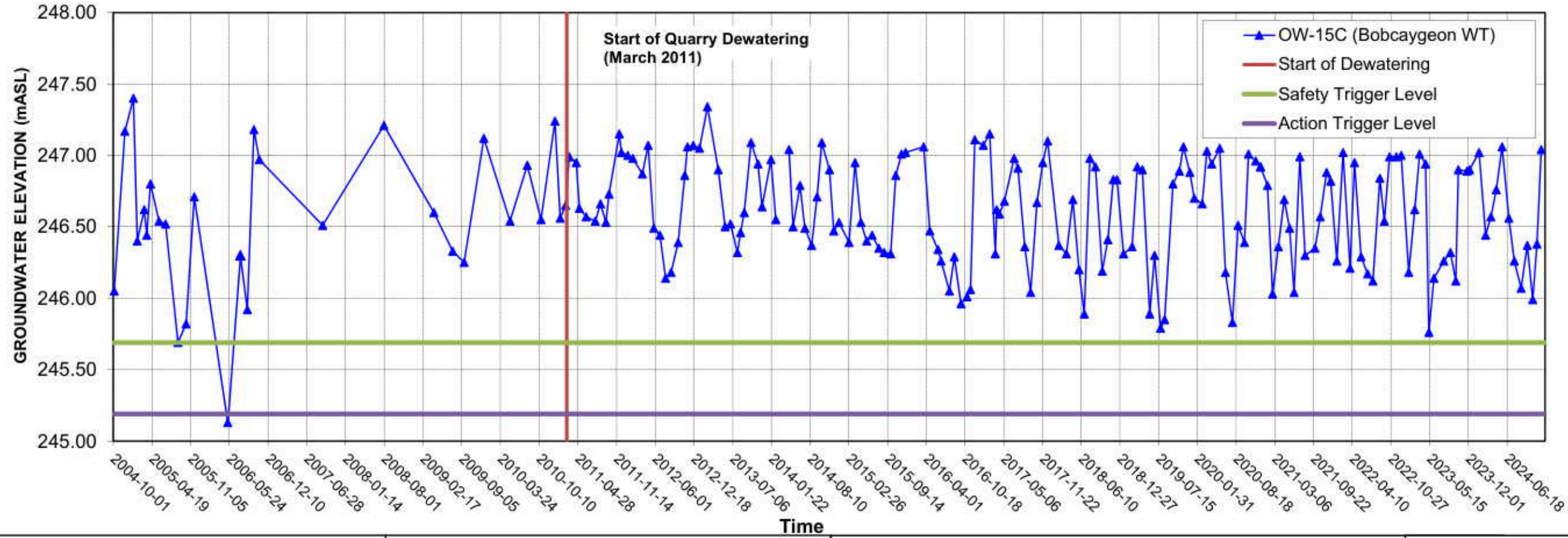
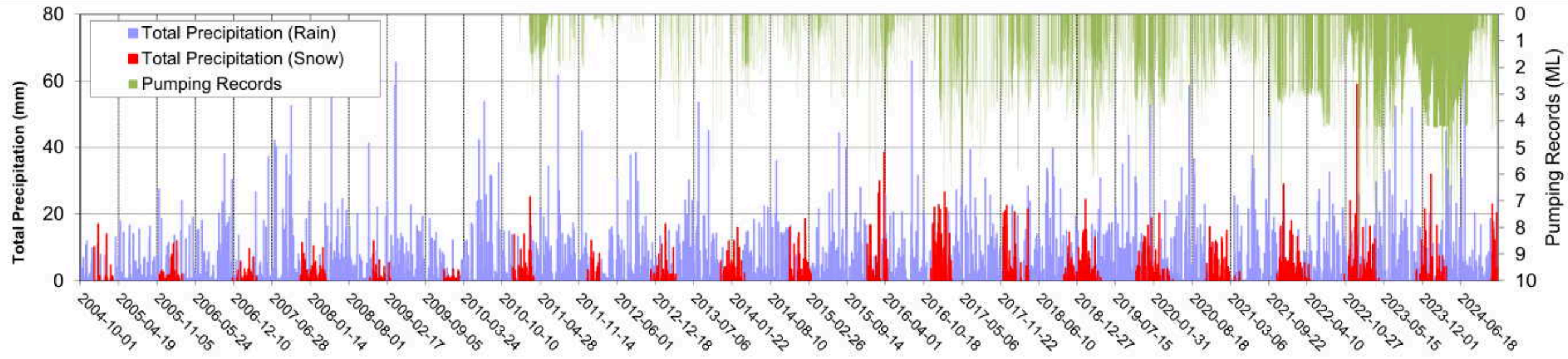


Date: April 2025  
Project: CA0024555

Drawn: JPAO  
Chkd: KAM

GROUNDWATER TRIGGER LEVELS OW-10C

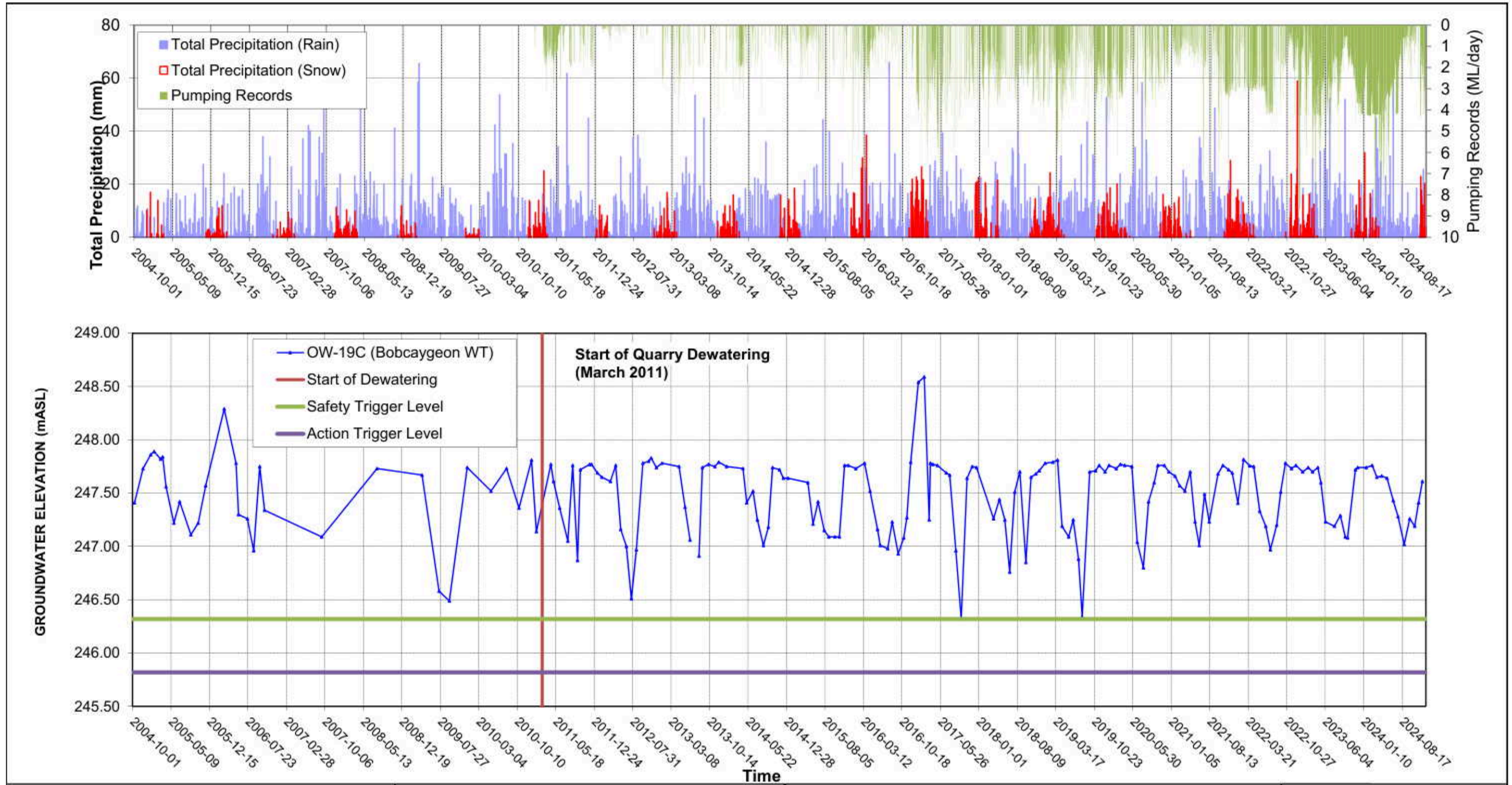
FIGURE G2



Date: April 2025  
 Project: CA0024555  
 Drawn: JPAO  
 Chkd: KAM

GROUNDWATER TRIGGER LEVELS OW-15C

FIGURE G3

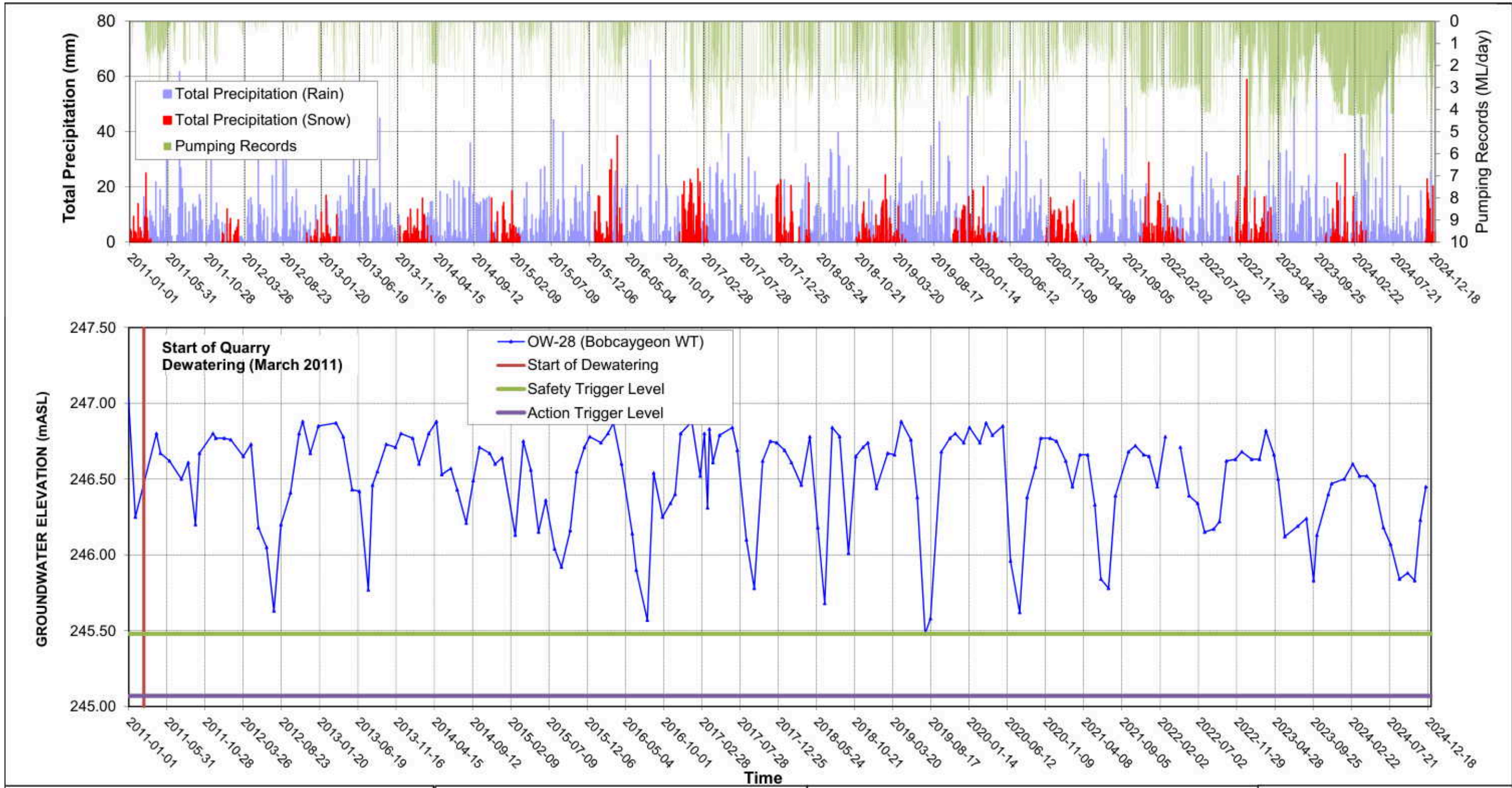


Date: April 2025  
Project: CA0024555

Drawn: JPAO  
Chkd: KAM

GROUNDWATER TRIGGER LEVELS FOR OW-19C

FIGURE G4

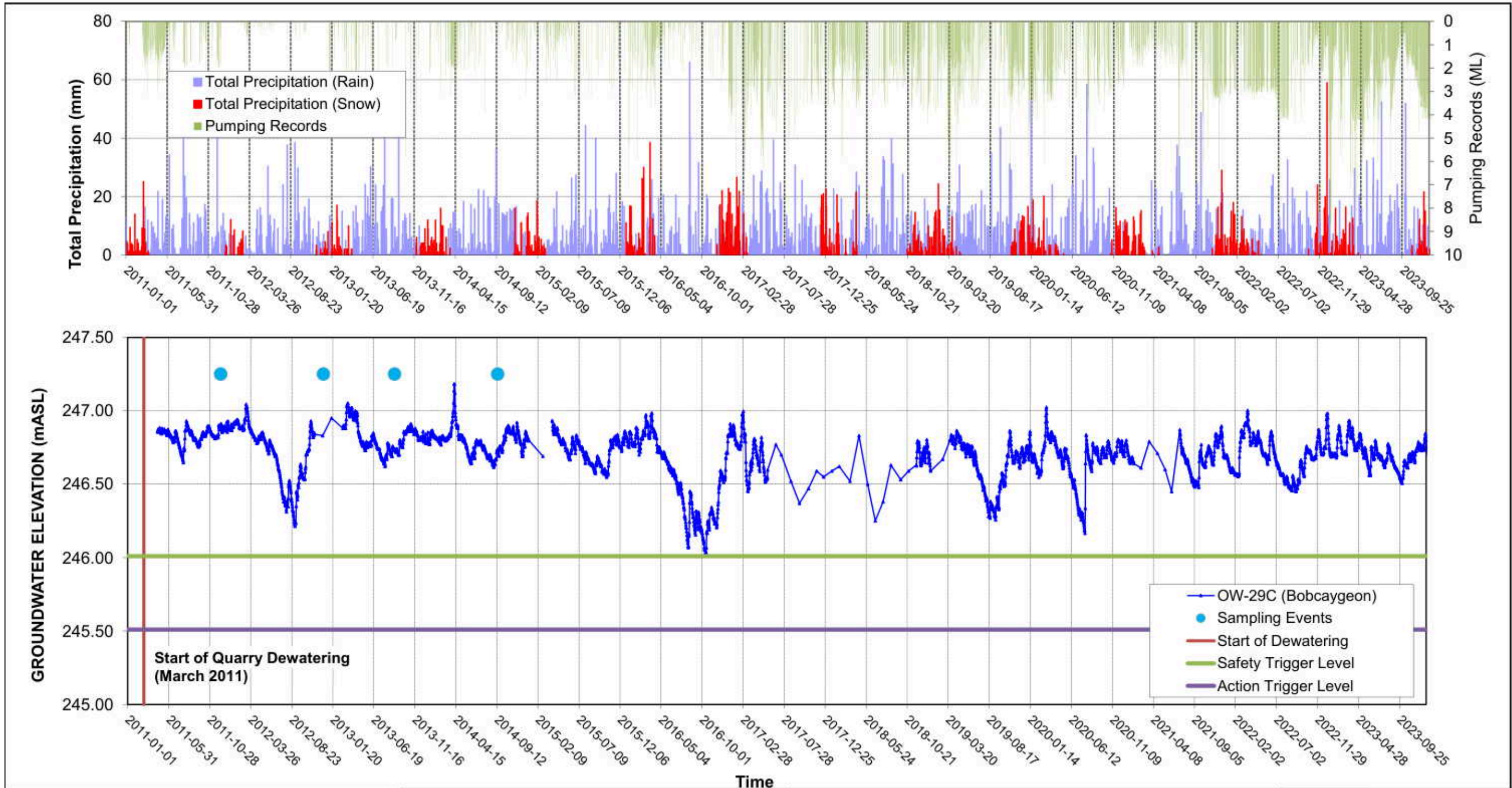


Date: April 2025  
 Project: CA0024555

Drawn: JPAO  
 Chkd: KAM

GROUNDWATER TRIGGER LEVELS OW-28

FIGURE G5



Date: April 2025

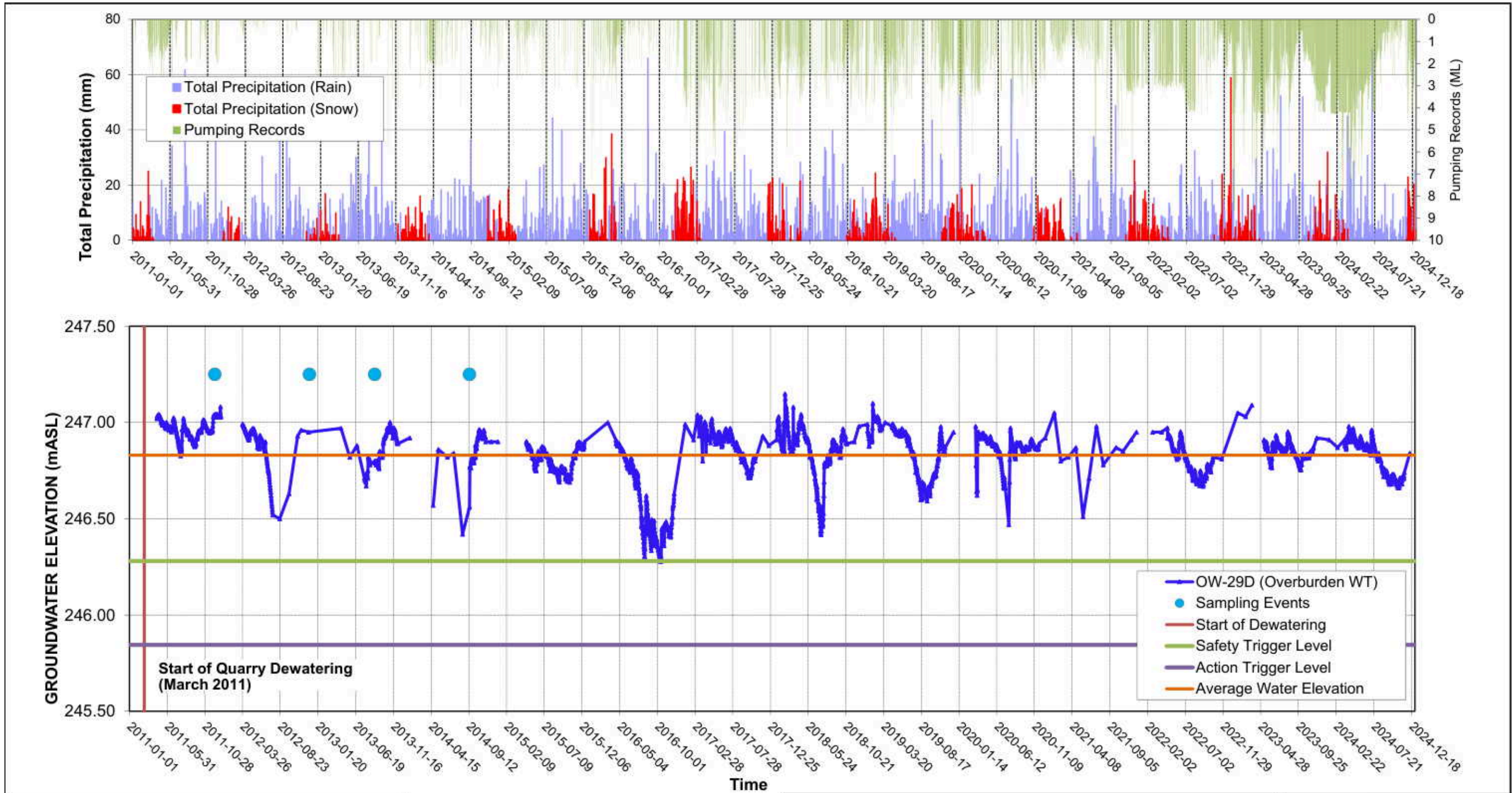
Drawn: JPAO

Project: CA0024555

Chkd: KAM

GROUNDWATER TRIGGER LEVELS OW-29C

FIGURE G6



Date: April 2025

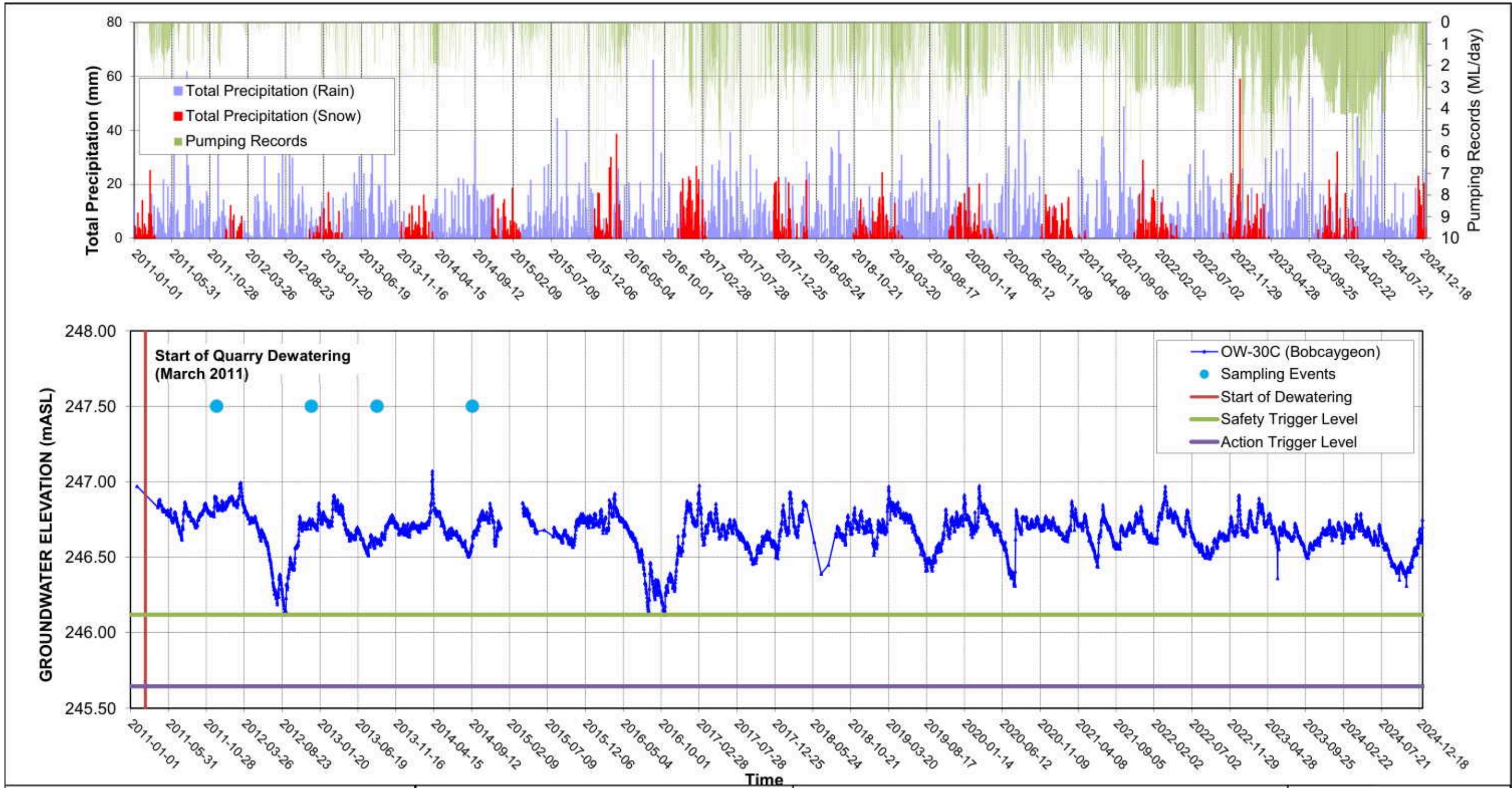
Drawn: JPAO

Project: CA0024555

Chkd: KAM

GROUNDWATER TRIGGER LEVELS OW-29D

FIGURE G7

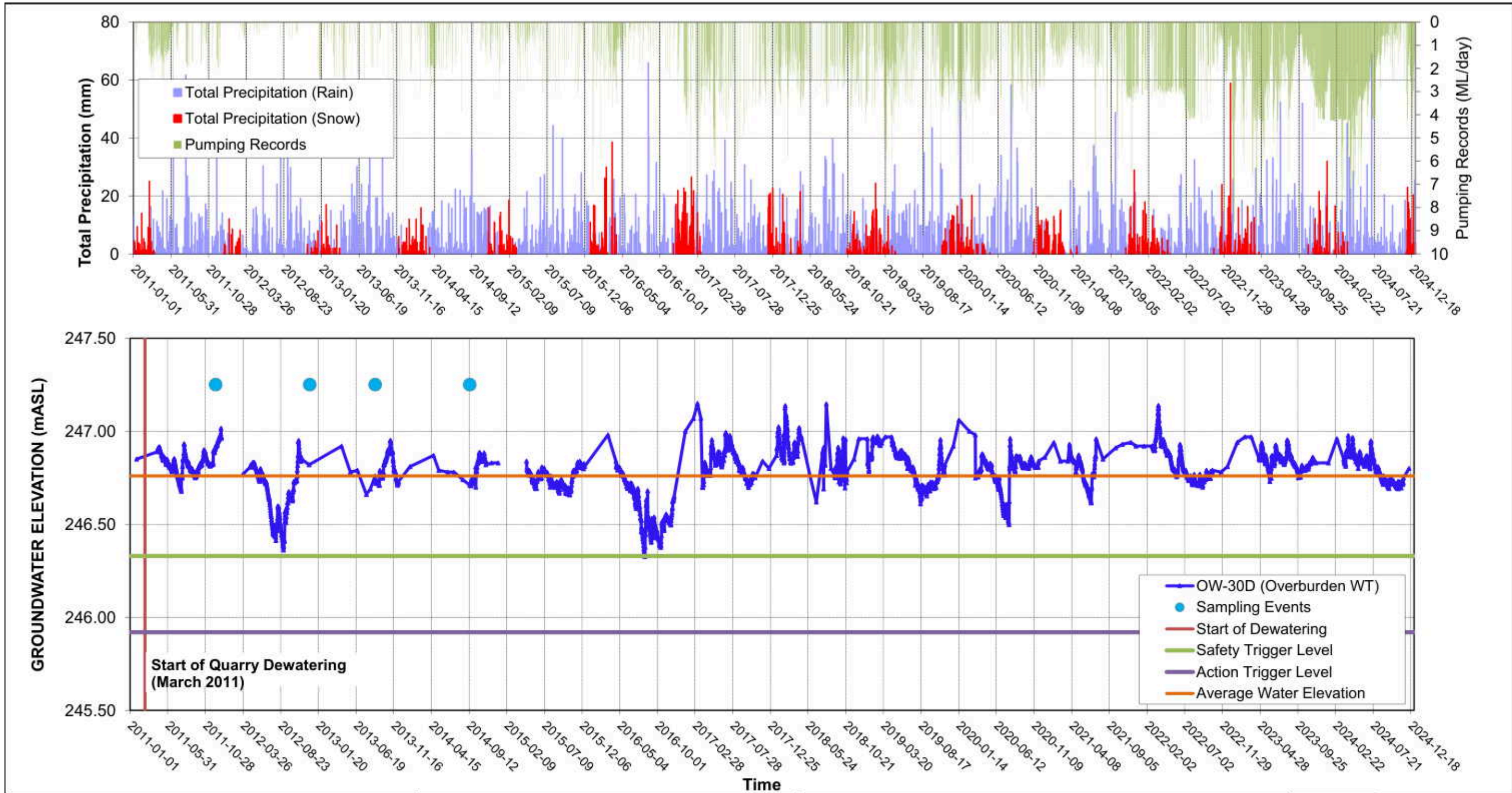


Date: April 2025  
Project: CA002455

Drawn: JPAO  
Chkd: KAM

GROUNDWATER TRIGGER LEVELS OW-30C

FIGURE G8



Date: April 2025

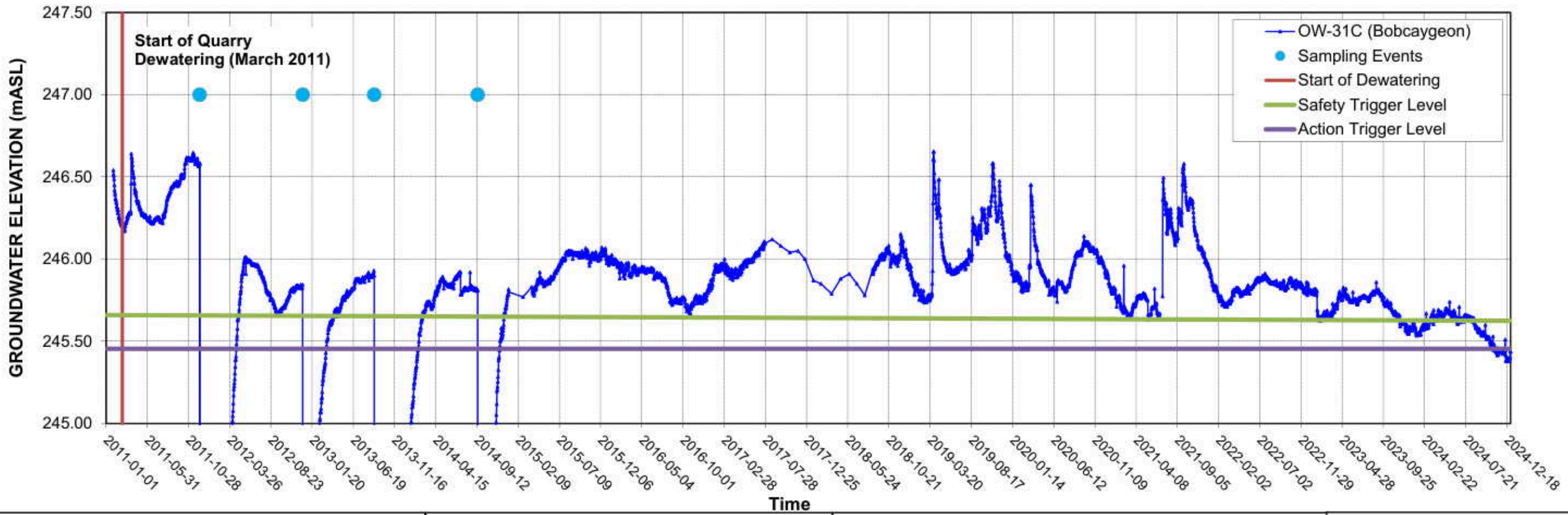
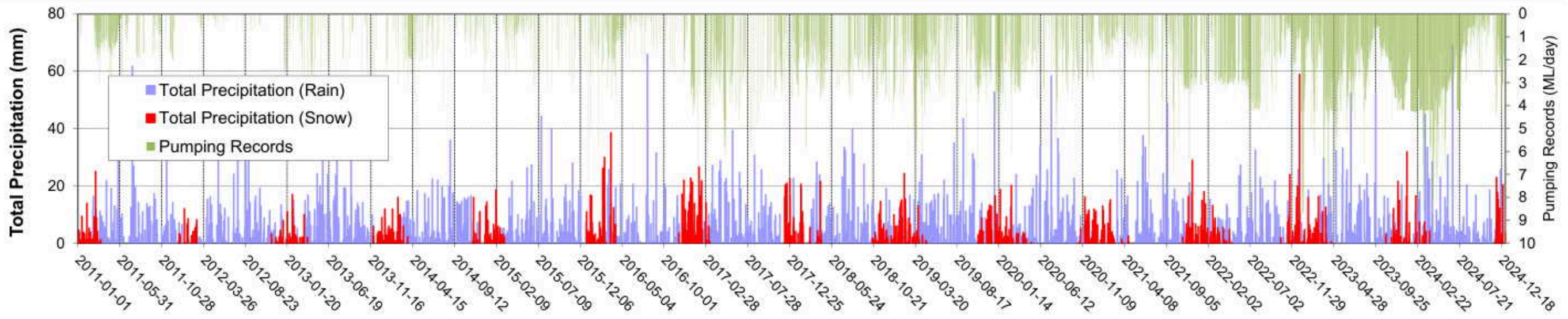
Drawn: JPAO

Project: CA0024555

Chkd: KAM

GROUNDWATER TRIGGER LEVELS OW-30D

FIGURE G9

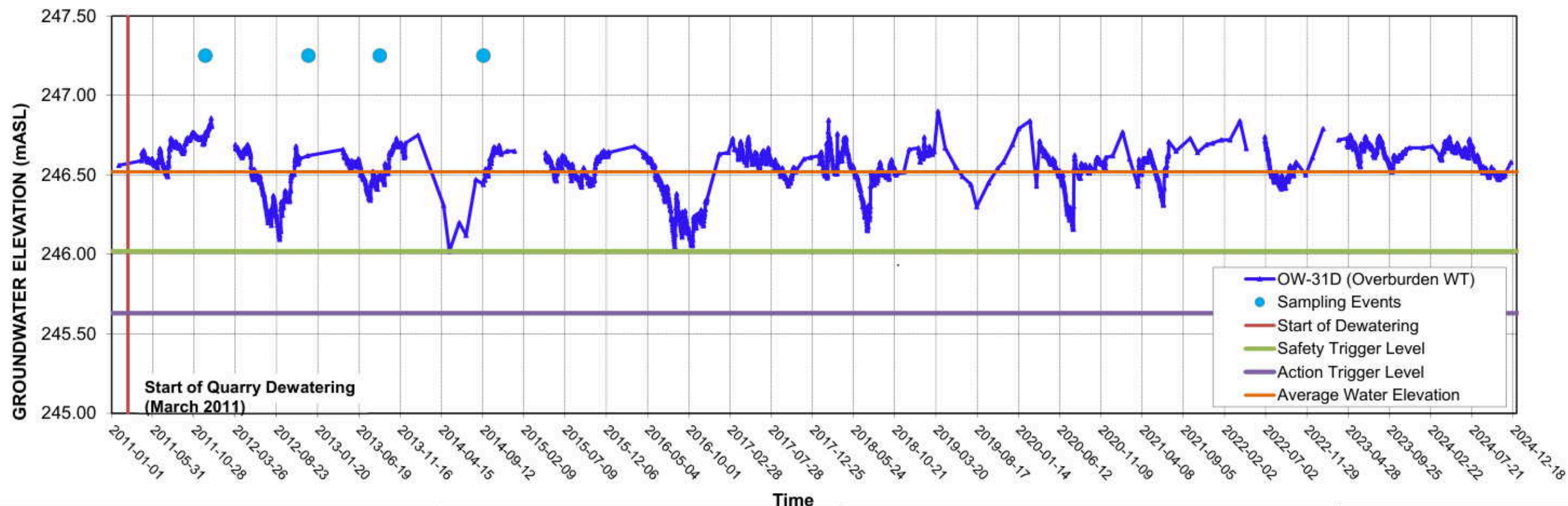
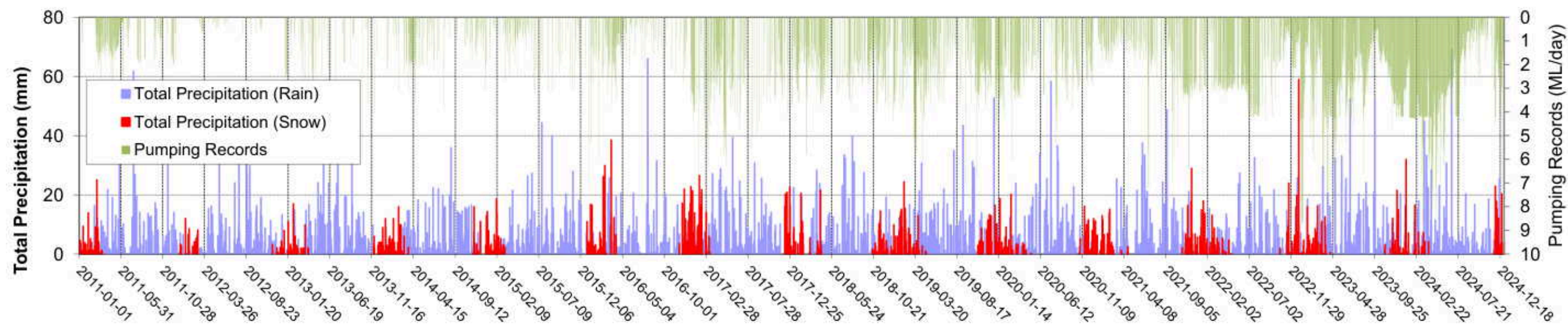


Date: April 2025  
Project: CA0024555

Drawn: JPAO  
Chkd: KAM

GROUNDWATER TRIGGER LEVELS OW-31C

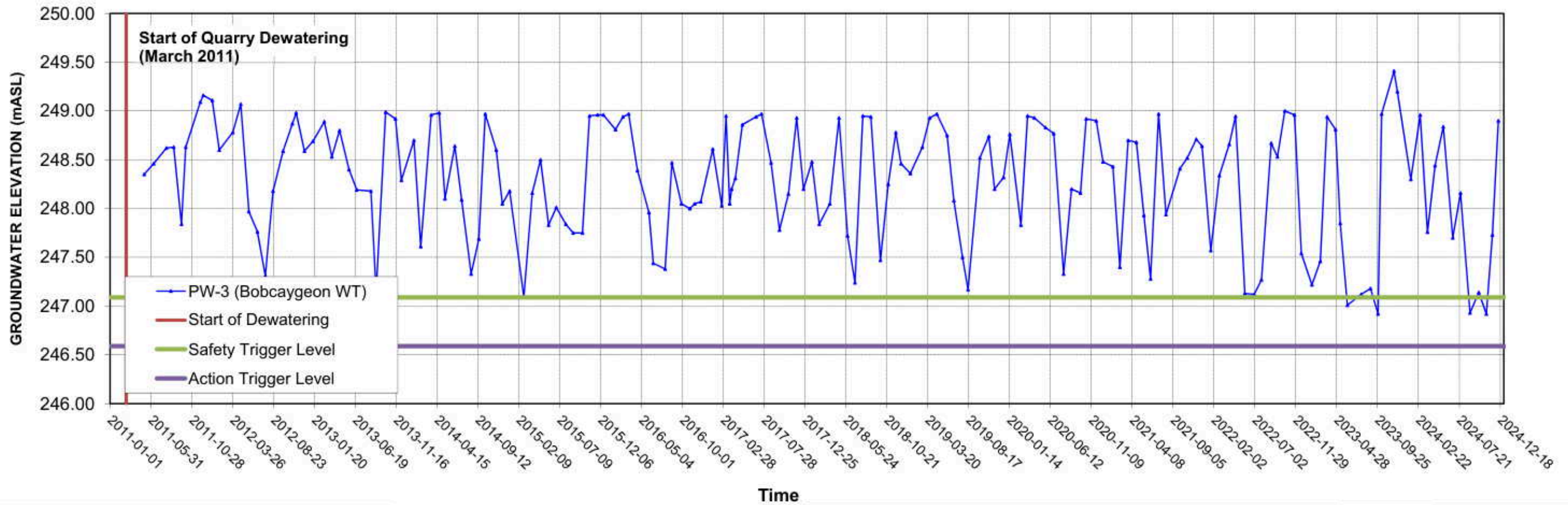
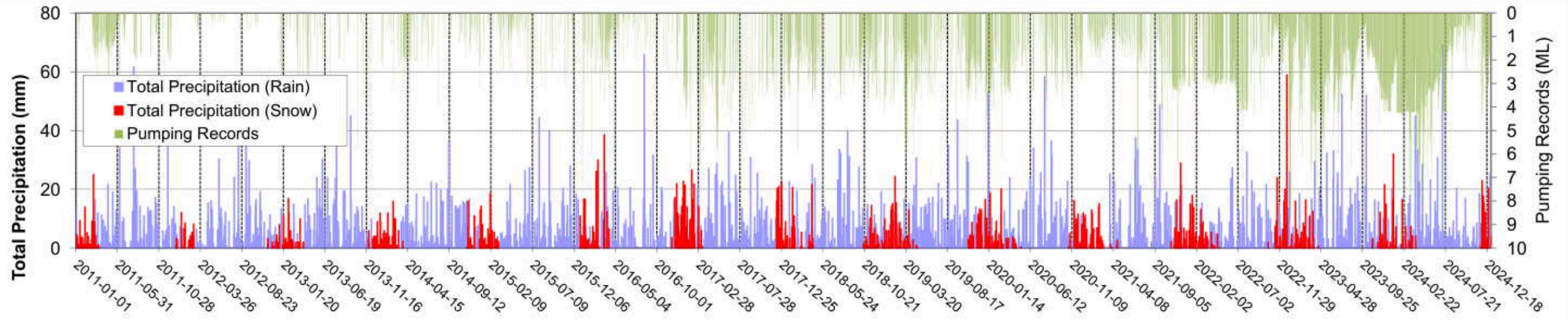
FIGURE G10



Date: April 2025  
 Drawn: JPAO  
 Project: CA0024555  
 Chkd: KAM

GROUNDWATER TRIGGER LEVELS OW-31D

FIGURE G11

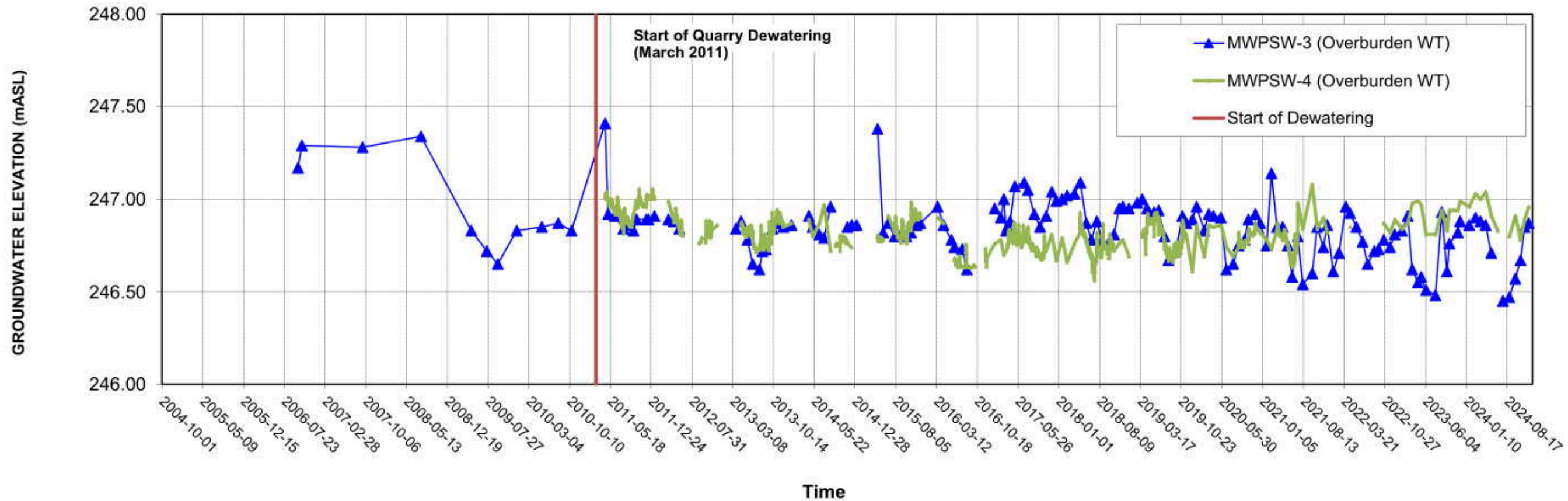
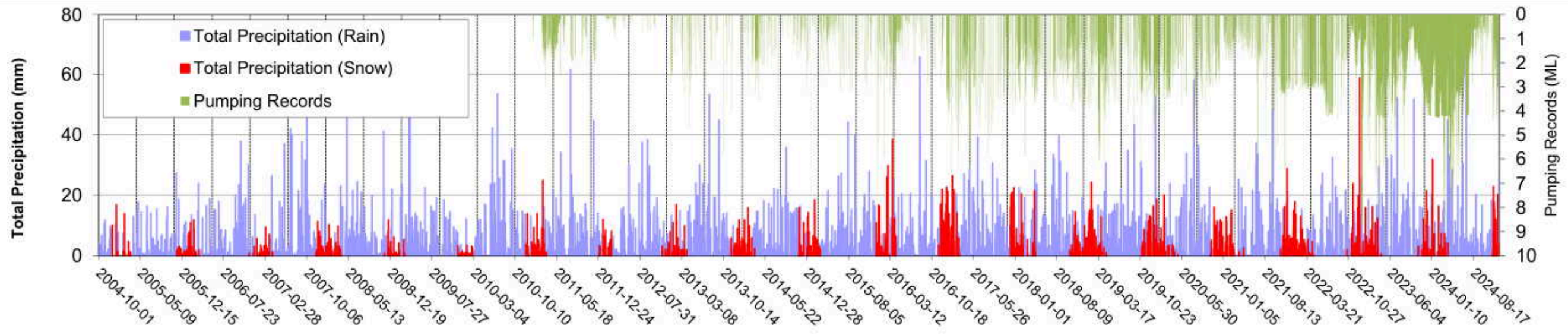


Date: April 2025  
Project: CA0024555

Drawn: JPAO  
Chkd: KAM

GROUNDWATER TRIGGER LEVELS PW-3

FIGURE G12



Date: April 2025  
Project: CA0024555

Drawn: JPAO  
Chkd: KAM

GROUNDWATER ELEVATIONS MWPSW-3 AND MWPSW-4

FIGURE G13

**APPENDIX H**

**Additional Trigger Assessment  
Documentation (Golder, 2019a)**

Action Trigger levels cannot be assigned at locations MWPSW-3, MWPSW-4, SG06-1, SG06-2, SG09-3 and SG09-4 because these locations have historically gone dry. As a result, the safety trigger is at the dry level, and the development of a lower trigger level is not feasible; however, an action trigger period can be developed (as discussed in Section 4.2).

It should be noted that if the review of available on-site water level data indicates that the drawdown cone associated with the on-site quarry has not reached the trigger location that is below the action trigger level, no further action is required, and the action trigger levels would be adjusted accordingly to reflect the additional baseline groundwater level data. If it is determined that the decrease in water level to below the action trigger level is due to on-site quarry operations, the actions described in the table below will be initiated.

**Table 4: Action Trigger Level: Required Actions**

Locations	Required Actions
PW-3	Because PW-3 is over 150 metres from the edge of the wetland, if the water level at this location falls below the action trigger level, the required action would involve the installation of a new shallow groundwater monitoring between PW-3 and the wetland boundary (close to the wetland boundary). This additional monitoring well would become the new trigger location for this portion of the wetland.
OW-4C, OW-10C, OW-15C, OW-19C, OW-28, OW-29D, OW-30D and OW-31D	<p>Initiate monitoring along a vegetation assessment transect within the wetland in the vicinity of the trigger location that has fallen below the action trigger level. The minimum length of an assessment transect would be 150 metres. Depending on the length of the assessment transect, one or more community plot assessment area(s) would be included as part of the vegetation monitoring (approximately one community plot for every 150 metres of vegetation assessment transect). The vegetation monitoring would occur in the summer during the peak vegetation season.</p> <p>Because the response of the vegetation to environmental change (i.e., lowering of water levels) will not be immediate or dramatic, the first year of data collected at the vegetation transect would be considered baseline data. Subsequent years of vegetation data would be compared to the baseline data in an attempt to identify a significant change in the vegetation community. The following sampling frequency is proposed while the water level remains below the action trigger level (one sampling event in each specified year): year zero (baseline); year one; year two; year four; year six; and, year ten. After year ten, the frequency of monitoring events would remain at every four years. If a significant change is observed between sampling events, the vegetation sampling would return to an annual frequency. This proposed vegetation monitoring program is consistent with the current monitoring program included on the PTTW for the Brechin Quarry.</p> <p>If the groundwater level at a trigger location that has previously dropped below the action trigger level rises above the action trigger level, the above described vegetation monitoring would be discontinued until a new action trigger event occurs.</p>
OW-29C, OW-30C, OW-31C	Monitoring well locations OW-29C, OW-30C or OW-31C are in the shallow bedrock underlying the overburden beneath the wetland. If the groundwater level at OW-29C, OW-30C or OW-31C falls below the action trigger level, the frequency of the data logger download at the corresponding overlying overburden monitoring interval would be increased from quarterly to monthly (i.e., if the groundwater level in OW-29C falls below the action trigger level, then monthly downloading of the data logger in OW-29D would be required). This would allow for more frequent review of the detailed groundwater data from the overburden monitor in the vicinity of the trigger occurrence. Provided the water level at the associated overburden monitoring well remains above its' action trigger level, no additional actions are required. If the associated overburden monitoring location falls below the action trigger level, the wetland vegetation monitoring described above would be initiated.

As discussed during the May 30, 2019 conference call between MNRF, MECP, Tomlinson and Golder, the results of the baseline wetland monitoring completed in response to an action trigger at OW-4C, OW-10C, OW-15C, OW-19C, OW-28, OW-29D, OW-30D or OW-31D (described in the above table) will be submitted to the MNRF for review. Following review by the MNRF, further discussions will be initiated between Golder and the MNRF to develop triggers related to wetland function (where possible).

## 4.0 TRIGGER PERIODS

The safety trigger periods and action trigger periods defined below have specific activities that are required when the water level at the trigger location has been below 'normal' for a prolonged period of time, or for trigger locations that have gone dry in the past, the dry period extends longer than previously observed. The trigger periods are proposed in response to the MNRF recommendation received on May 28, 2019.

The trigger periods are defined for a subset of trigger locations (trigger period locations) that are in direct contact with the wetland (i.e., shallow overburden monitoring wells within the wetland and staff gauge locations) where the potential exists for impacts to the wetland if the water levels are depressed below 'normal' for a prolonged period (i.e., significantly beyond what has been observed in the historical water level record). The locations where the safety and action trigger periods will be assigned are OW-29D, OW-30D, OW-31D, MWPSW-3, MWPSW-4, SG06-1, SG06-2, SG09-3 and SG09-4. Trigger locations found outside the wetland, or at depth in the wetland (i.e., bedrock monitoring intervals in the wetland), will not have assigned trigger periods.

### 4.1 Safety Trigger Period

#### 4.1.1 OW-29D, OW-30D and OW-31D

For the trigger period locations that have not historically gone dry (OW-29D, OW-30D and OW-31D), the 'normal' water level is defined as the average water level measured at each trigger location. At this time, the drawdown cone associated with the dewatering of the existing quarry has not reached any of the trigger locations, and all the available water level data for the trigger locations are considered to be representative of natural variations. For OW-29D, OW-30D and OW-31D, the full historical water level data set up to the end of 2018 is used to define the average water level ('normal' water level).

The average water elevation for OW-29D, OW-30D and OW-31D was added to the detailed water level plots in Appendix B. The available water level data was then reviewed to identify the longest period when the water level was below the average water elevation for each location. For each location, the safety trigger period is set equal to the longest period below the average water elevation. The results are summarized in the table below.

**Table 5: Safety Trigger Period – OW-29D, OW-30D and OW-31D**

Location	Average Water Elevation (mASL)	Longest Period Below Average Water Elevation	Safety Trigger Period (Maximum Number of Days Below Average Water Elevation)
OW-29D	246.83	May 27, 2016 to January 20, 2017	238
OW-30D	246.76	May 22, 2016 to January 20, 2017	243
OW-31D	246.52	June 1, 2016 to January 20, 2017	234

The purpose of the safety trigger period is to act as an early alert trigger. If the water level at OW-29D, OW-30D or OW-31D remains below the average water elevation for a period equal to the above noted safety trigger periods, it would trigger the review of the available water level data and local precipitation data to confirm if the prolonged low water level is the result of site operations, or a wide-spread low-water condition unrelated to site operations. In addition, to assist in assessing the cause of the observed lower water level at the trigger

location(s), a groundwater level review of the data for all monitoring wells included in the PTTW monitoring program would be used to interpret the current extent of the groundwater level drawdown cone associated with the dewatering of the existing on-site quarry.

If the results of the water level assessment indicate that the prolonged drop-in water level at the trigger location is the result of a wide-spread seasonal low-water condition, and a review of the on-site groundwater data confirms the drawdown cone has not reached the triggering location(s), no immediate action is required, and ongoing monitoring would continue to follow the program specified in the PTTW. In this situation, the groundwater level data would be considered baseline conditions, and the associated safety trigger period would be adjusted accordingly.

If the results of the groundwater/surface water level assessment and precipitation review indicate that the prolonged decline in the water level at the trigger location(s) is a result of site operations, this would be communicated to the MECP and the MNRF. As discussed in Section 4.2, if the water elevation remains below the average elevation for the duration assigned for the action trigger period, then additional action(s) will be required.

#### 4.1.2 MWPSW3, MWPSW4, SG06-1, SG06-1, SG09-3 and SG09-4

For locations MWPSW3, MWPSW4, SG06-1, SG06-1, SG09-3 and SG09-4, which have historically gone dry, the available water level data was reviewed to identify the longest continuous dry period for each location. The results are summarized in the table below.

**Table 6: Longest Dry Period – MWPSW3, MWPSW4, SG06-1, SG06-1, SG09-3 and SG09-4**

Location	Longest Dry Period	Safety Trigger Period (Number of Days During Longest Dry Period)
MWPSW3	June 25, 2012 to February 25, 2013	275
MWPSW4	May 31, 2016 to December 7, 2016	190
SG06-1	September 27, 2016 to December 7, 2016	71
SG06-2	June 25, 2012 to December 14, 2012	172
SG09-3	June 17, 2016 to December 17, 2016	173
SG09-4	June 29, 2016 to December 6, 2016	160

The dry periods listed in Table 6 could be used to establish a safety trigger period for each location; however, a safety trigger level already exists for these locations (see Section 3.1) that is more conservative and requires a review of local water levels and precipitation when these locations first go dry. As such, no safety trigger period is defined for MWPSW3, MWPSW4, SG06-1, SG06-1, SG09-3 and SG09-4; however, the longest dry periods present in Table 6 are used to develop the action trigger periods for these locations presented in Section 4.2.

## 4.2 Action Trigger Period

An action trigger period has been assigned for all trigger locations in direct contact with the wetland (OW-29D, OW-30D, OW-31D, MWPSW-3, MWPSW-4, SG06-1, SG06-2, SG09-3 and SG09-4). The action trigger period is set equal to a 50 percent increase in the duration of the safety trigger period (OW-29D, OW-30D, OW-31D) or the longest dry period (MWPSW-3, MWPSW-4, SG06-1, SG06-2, SG09-3 and SG09-4) up to a maximum of 365 days. For example, the safety trigger period for OW-29D is 238 days, and the action trigger period is 357 days (i.e., 238 days x 1.5). The table below summarizes the action trigger period for each trigger location.

**Table 7: Action Trigger Period**

Location	Safety Trigger Period or Longest Dry Period (days)	Action Trigger Period (days)
OW-29D	238	357
OW-30D	243	364
OW-31D	234	351
MWPSW3	275	365
MWPSW4	190	285
SG06-1	71	106
SG06-2	172	258
SG09-3	173	260
SG09-4	160	240

The use of trigger periods permits the assignment of trigger actions to locations that have previously gone dry, which was not possible based solely on the trigger levels defined in Section 3.0 (i.e., the safety trigger was defined as dry, so no lower action trigger level could be defined).

It should be noted that if the review of available on-site water level data indicates that the groundwater level drawdown cone associated with the on-site quarry has not reached the triggering location(s), no further action is required, and the action trigger period would be adjusted accordingly to reflect the additional baseline water level data. If it is determined that the prolonged decrease in water level (OW-29D, OW-30D and OW-31D), or extended dry period (MWPSW3, MWPSW4, SG06-1, SG06-2, SG09-3 and SG09-4) to beyond the duration of the action trigger period is due to on-site quarry operations, the actions described in the table below will be initiated.

**Table 8: Action Trigger Period: Required Actions**

Locations	Required Actions
OW-29D, OW-30D, OW-31D, MWPSW3, MWPSW4, SG06-1, SG06-2, SG09-3 and SG09-4	<p>Initiate monitoring along a vegetation assessment transect within the wetland in the vicinity of the trigger location that has had prolonged decrease in water level (OW-29D, OW-30D and OW-31D), or extended dry period (MWPSW3, MWPSW4, SG06-1, SG06-2, SG09-3 and SG09-4) to beyond the duration of the action trigger period. The minimum length of an assessment transect would be 150 metres. Depending on the length of the assessment transect, one or more community plot assessment area(s) would be included as part of the vegetation monitoring (approximately one community plot for every 150 metres of vegetation assessment transect). The vegetation monitoring would occur in the summer during the peak vegetation season.</p> <p>Because the response of the vegetation to environmental change (i.e., lowering of water levels) will not be immediate or dramatic, the first year of data collected at the vegetation transect would be considered baseline data. Subsequent years of vegetation data would be compared to the baseline data in an attempt to identify a significant change in the vegetation community. The following sampling frequency is proposed while the prolonged decrease in water level (OW-29D, OW-30D and OW-31D), or extended dry period (MWPSW3, MWPSW4, SG06-1, SG06-2, SG09-3 and SG09-4) beyond the duration of the action trigger period is occurring (one sampling event in each specified year): year zero (baseline); year one; year two; year four; year six; and, year ten. After year ten, the frequency of monitoring events would remain at every four years. If a significant change is observed between sampling events, the vegetation sampling would return to an annual frequency. This proposed vegetation monitoring program is consistent with the current monitoring program included on the PTTW for the Brechin Quarry.</p> <p>If the water level at a trigger locations OW-29D, OW-30D, OW-31D returns to above the defined 'normal' water level, or water returns to the dry location (i.e., MWPSW3, MWPSW4, SG06-1, SG06-2, SG09-3 and SG09-4), the above described vegetation monitoring would be discontinued until the action trigger period is exceeded again.</p>

**APPENDIX I**

**Geophysical Logs (OW-38 through  
OW-41)**

PROJECT: Tomlinson Brechin Boreholes

# GEOPHYSICAL LOG OF: OW-38

SHEET 1 OF 2

LOCATION: N 4938725.2 ,E 651206.5

DRILLING DATE: 2021

DATUM: Geodetic

INCLINATION: -90° AZIMUTH: —

DRILL RIG: Unknown

DRILLING CONTRACTOR: Marathon Underground

DEPTH SCALE METRES	DRILLING RECORD	SYMBOLIC LOG	ELEV. DEPTH (m)	GEOPHYSICAL RECORD				PIEZOMETER OR STANDPIPE INSTALLATION										
				GAMMA (cps)		CONDUCTIVITY (mS/m)												
				20	40	60	80		5	10	15	20						
0			254.43															
			0.00															
			0.50															
			248.63															
			5.00															
			244.03															
			10.40															
			232.63															
			21.00															
			227.93															
			26.60															
			221.73															
			32.70															
			33.40															
			216.43															
			38.00															

OTTAWA-GEO. TOMLINSON BRECHIN BOREHOLES.GPJ GAL-GTA.GDT 19/23 JM

DEPTH SCALE

1 : 200



LOGGED: RDB

CHECKED: KAM

CONTINUED NEXT PAGE

PROJECT: Tomlinson Brechin Boreholes

# GEOPHYSICAL LOG OF: OW-38

SHEET 2 OF 2

LOCATION: N 4938725.2 ,E 651206.5

DRILLING DATE: 2021

DATUM: Geodetic

INCLINATION: -90° AZIMUTH: —

DRILL RIG: Unknown

DRILLING CONTRACTOR: Marathon Underground

DEPTH SCALE METRES	DRILLING RECORD	DESCRIPTION	SYMBOLIC LOG	ELEV. DEPTH (m)	GAMMA (cps)				CONDUCTIVITY (mS/m)				PIEZOMETER OR STANDPIPE INSTALLATION
					20	40	60	80	5	10	15	20	
40		— CONTINUED FROM PREVIOUS PAGE — medium grained crystalline, faintly to moderately porous, saccharoidal textured, stylonitic, medium to thickly bedded <b>DOLOSTONE</b> with shaley cap, <b>The Green Beds</b> .		212.53 41.00									  Clear Stone
45		<b>UNIT 2, 41.9 m to 46.0 m</b> Fresh, creamy light to medium brown, very fine grained, porcelainous, non-porous, stylonitic, medium to thickly bedded <b>LITHOGRAPHIC LIMESTONE</b> with interbeds of argillaceous nodular limestone and thin beds of mottled dolostone.		208.43 46.00									
46		<b>End of Borehole, 46.0 m</b>											

OTTAWA-GEO TOMLINSON BRECHIN BOREHOLES.GPJ GAL-GTA.GDT 19/23 JM

DEPTH SCALE

1 : 200



LOGGED: RDB

CHECKED: KAM

PROJECT: Tomlinson Brechin Boreholes

# GEOPHYSICAL LOG OF: OW-39

SHEET 1 OF 1

LOCATION: N 4939517.3 ; E 650928.2

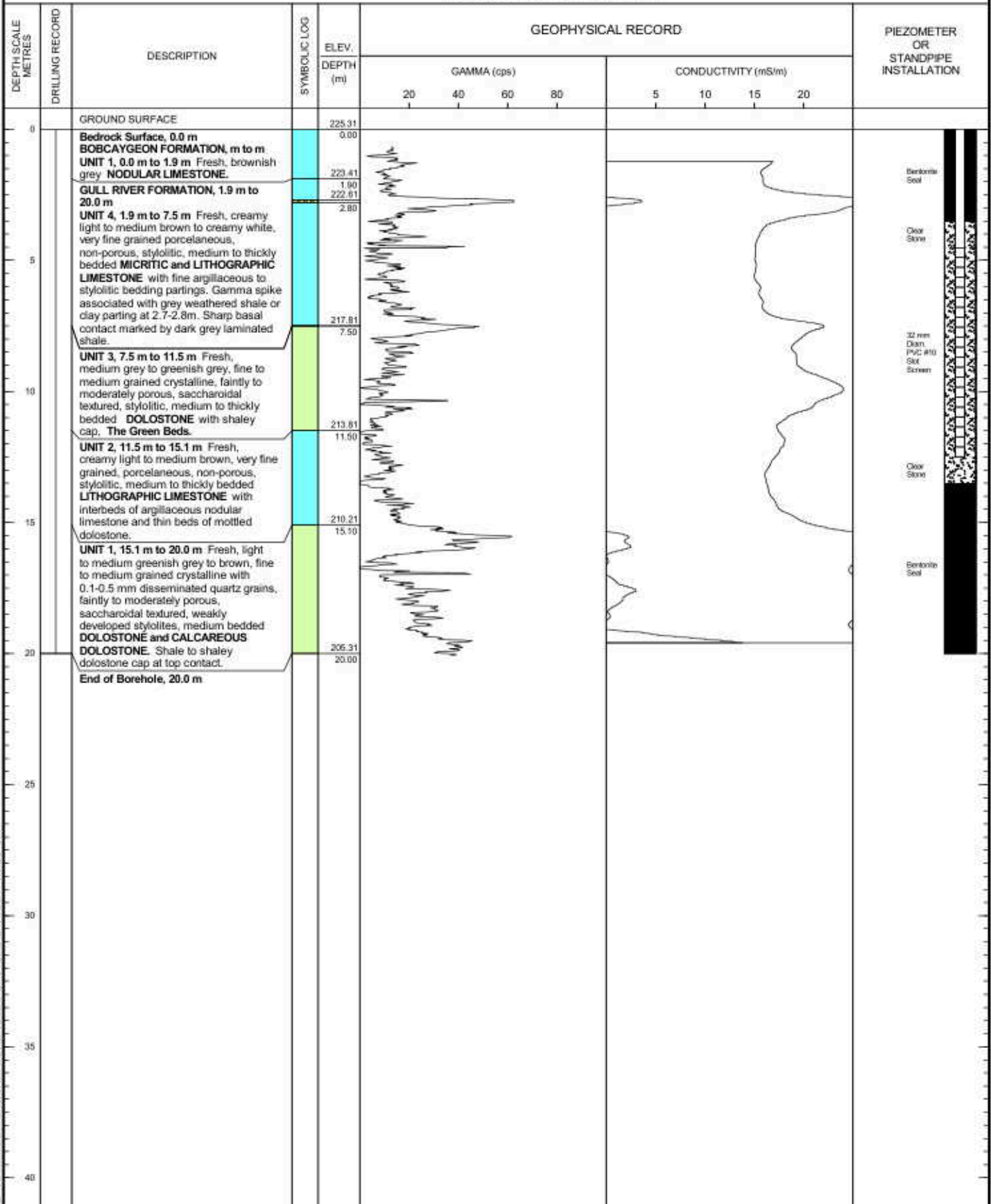
DRILLING DATE: 2021

DATUM: Geodetic

INCLINATION: -90° AZIMUTH: —

DRILL RIG: Air Track Drill

DRILLING CONTRACTOR: Brechin Quarry



OTTAWA-GEO. TOMLINSON BRECHIN BOREHOLES.GPJ GAL-GTA.GDT 19/23 JM

DEPTH SCALE

1 : 200



LOGGED: RDB

CHECKED: KAM

PROJECT: Tomlinson Brechin Boreholes

# GEOPHYSICAL LOG OF: OW-40

SHEET 1 OF 1

LOCATION: N 4939770.6 E 651599.8

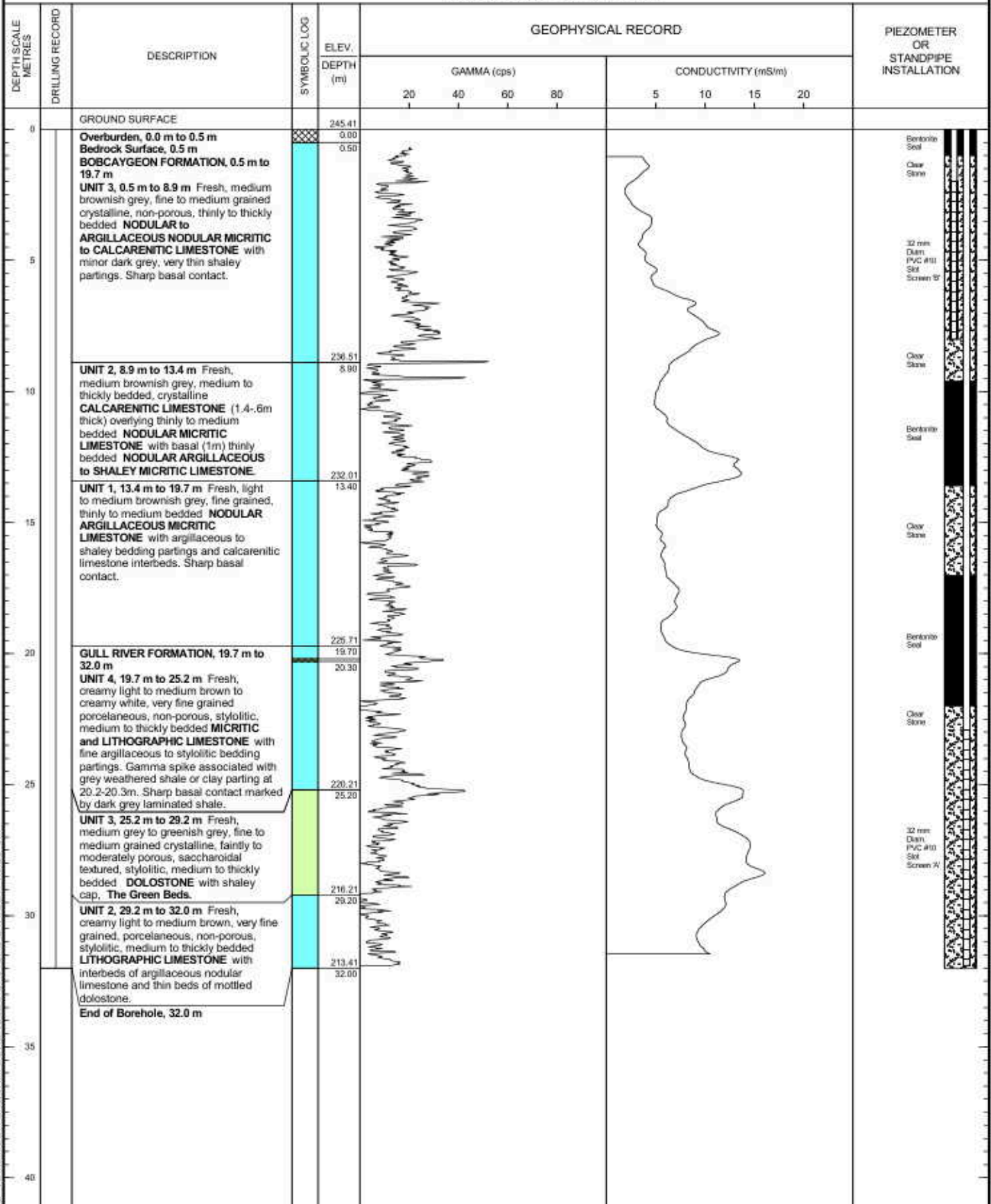
DRILLING DATE: 2021

DATUM: Geodetic

INCLINATION: -90° AZIMUTH: —

DRILL RIG: Air Track Drill

DRILLING CONTRACTOR: Brechin Quarry



OTTAWA-GEO TOMLINSON BRECHIN BOREHOLES.GPJ GAL-GTA.GDT 19/23 JM

DEPTH SCALE

1 : 200



LOGGED: RDB

CHECKED: KAM

PROJECT: Tomlinson Brechin Boreholes

# GEOPHYSICAL LOG OF: OW-41

SHEET 1 OF 1

LOCATION: N 4940222.3 E 651495.8

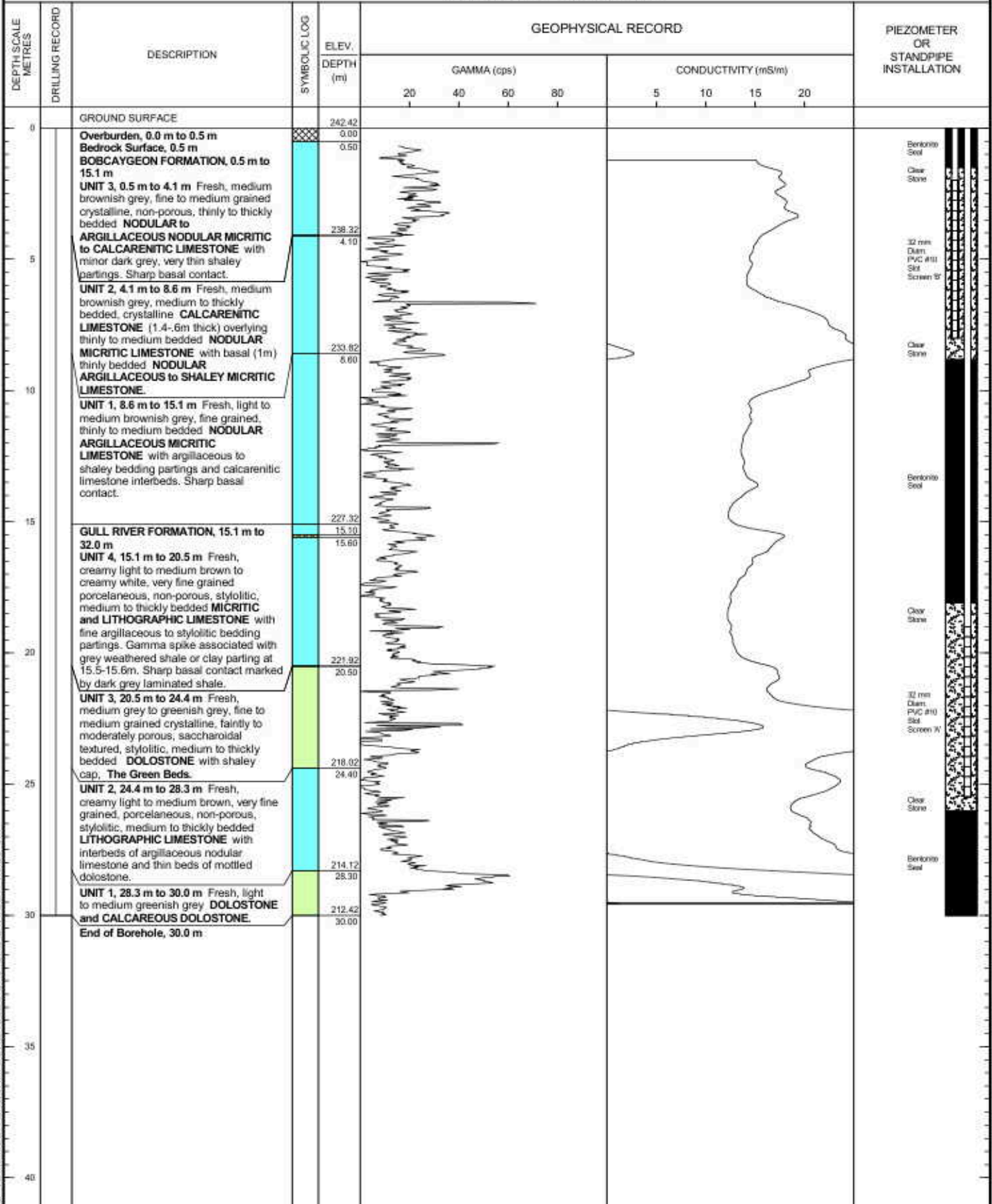
DRILLING DATE: 2021

DATUM: Geodetic

INCLINATION: -90° AZIMUTH: —

DRILL RIG: Air Track Drill

DRILLING CONTRACTOR: Brechin Quarry



OTTAWA-GEO. TOMLINSON BRECHIN BOREHOLES.GPJ GAL-GTA.GDT 1/9/23 JM

DEPTH SCALE

1 : 200



LOGGED: RDB

CHECKED: KAM

**APPENDIX J**

**Hydraulic Conductivity Testing  
Analysis (OW-38 through OW-41)**

**HVORSLEV SLUG TEST ANALYSIS  
RISING HEAD TEST OW-38A**

**INTERVAL (metres below ground surface)**

Top of Interval = 34.85  
Bottom of Interval = 44.00

$$K = \frac{r_c^2}{2L_e} \ln \left[ \frac{L_e}{2R_e} + \sqrt{1 + \left( \frac{L_e}{2R_e} \right)^2} \right] \left[ \frac{\ln \left( \frac{h_1}{h_2} \right)}{(t_2 - t_1)} \right] \quad \text{where K = (m/sec)}$$

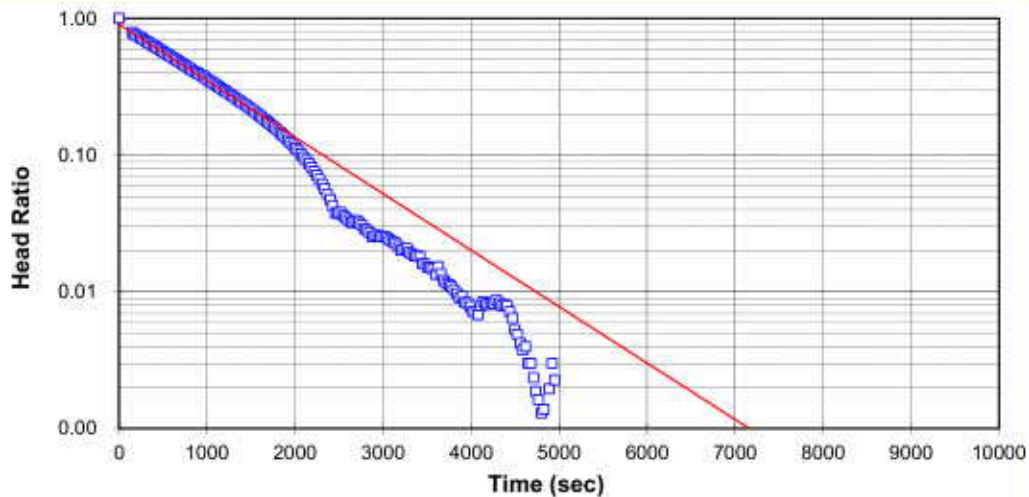
where:  $r_c$  = casing radius (metres)  
 $R_e$  = filter pack radius (metres)  
 $L_e$  = length of screened interval (metres)  
 $t$  = time (seconds)  
 $h_t$  = head at time  $t$  (metres)

**INPUT PARAMETERS**

$r_c$  = 1.6E-02  
 $R_e$  = 4.8E-02  
 $L_e$  = 9.2  
 $t_1$  = 150  
 $t_2$  = 1470  
 $h_1/h_0$  = 0.79  
 $h_2/h_0$  = 0.23

**RESULTS**

K= 7E-08 m/sec  
K= 7E-06 cm/sec



Project Name: Tomlinson Brechin Quarry Deepening  
Project No.: 21461105  
Test Date: 2022-09-27

Analysis By: SPS  
Checked By: JPAO  
Analysis Date: 2022-10-27

Golder Associates Ltd.

**BOUWER AND RICE SLUG TEST ANALYSIS  
RISING HEAD TEST OW-38B**

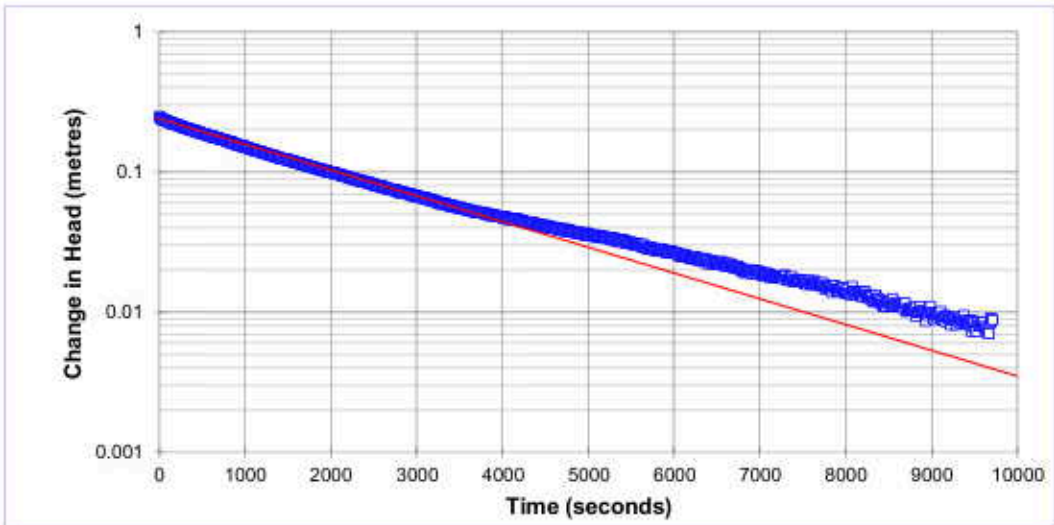
<b>INTERVAL (metres below ground surface)</b>	
<b>Top of Interval =</b>	<b>1.50</b>
<b>Bottom of Interval =</b>	<b>7.00</b>

$$K = \frac{r_c^2 \ln\left(\frac{R_e}{r_w}\right)}{2L_e} \frac{1}{t} \ln \frac{y_0}{y_t} \quad \text{where } K=\text{m/sec}$$

where:

- |   |   |
|---|---|
| $r_c$ = casing radius (metres);               | $r_w$ = radial distance to undisturbed aquifer (metres) |
| $R_e$ = effective radius (metres);            | $y_0$ = initial drawdown (metres)                       |
| $L_e$ = length of screened interval (metres); | $y_t$ = drawdown (metres) at time t (seconds)           |

INPUT PARAMETERS	RESULTS				
$r_c =$ 0.029	<table> <tr> <td><b>K=</b> 1E-07</td> <td><b>m/sec</b></td> </tr> <tr> <td><b>K=</b> 1E-05</td> <td><b>cm/sec</b></td> </tr> </table>	<b>K=</b> 1E-07	<b>m/sec</b>	<b>K=</b> 1E-05	<b>cm/sec</b>
<b>K=</b> 1E-07		<b>m/sec</b>			
<b>K=</b> 1E-05		<b>cm/sec</b>			
$r_w =$ 0.05					
$L_e =$ 4.86					
$\ln(R_e/r_w) =$ 3.46					
$y_0 =$ 0.24					
$y_t =$ 0.05					
$t =$ 3560					



Project Name: Tomlinson Brechin Quarry Deepening  
 Project No.: 21461105  
 Test Date: 28-Sep-22

Analysis By: SPS  
 Checked By: JPAO  
 Analysis Date: 27-Oct-22

**HVORSLEV SLUG TEST ANALYSIS  
RISING HEAD TEST OW-39**

**INTERVAL (metres below ground surface)**

Top of Interval = 4.90  
Bottom of Interval = 12.50

$$K = \frac{r_c^2}{2L_e} \ln \left[ \frac{L_e}{2R_e} + \sqrt{1 + \left( \frac{L_e}{2R_e} \right)^2} \right] \left[ \frac{\ln \left( \frac{h_1}{h_2} \right)}{(t_2 - t_1)} \right] \quad \text{where K = (m/sec)}$$

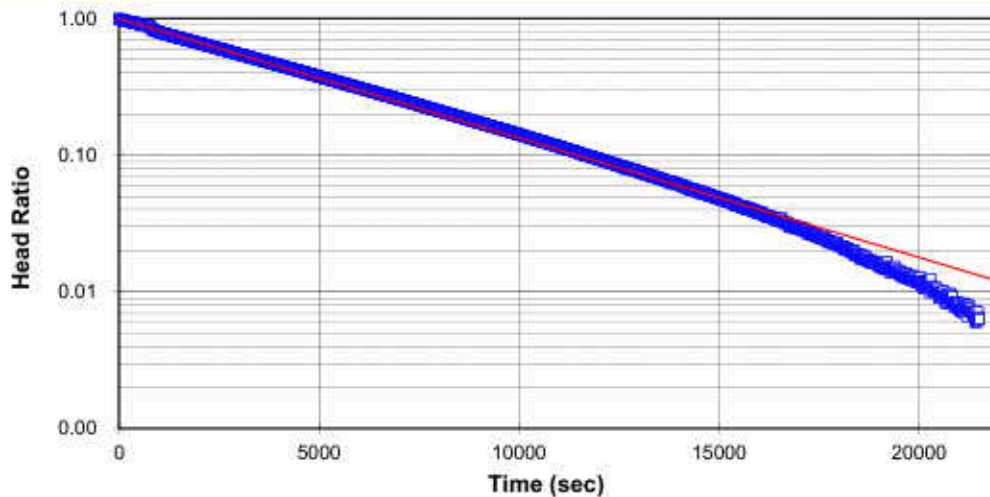
where:  $r_c$  = casing radius (metres)  
 $R_e$  = filter pack radius (metres)  
 $L_e$  = length of screened interval (metres)  
 $t$  = time (seconds)  
 $h_t$  = head at time  $t$  (metres)

**INPUT PARAMETERS**

$r_c$  = 1.6E-02  
 $R_e$  = 5.1E-02  
 $L_e$  = 7.6  
 $t_1$  = 0  
 $t_2$  = 15000  
 $h_1/h_0$  = 1.00  
 $h_2/h_0$  = 0.05

**RESULTS**

K= 2E-08 m/sec  
K= 2E-06 cm/sec



Project Name: Tomlinson Brechin Quarry Deepening  
Project No.: 21461105  
Test Date: 2022-09-27

Analysis By: SPS  
Checked By: JPAO  
Analysis Date: 2022-10-27

Golder Associates Ltd.



**BOUWER AND RICE SLUG TEST ANALYSIS  
FALLING HEAD TEST OW-40B**

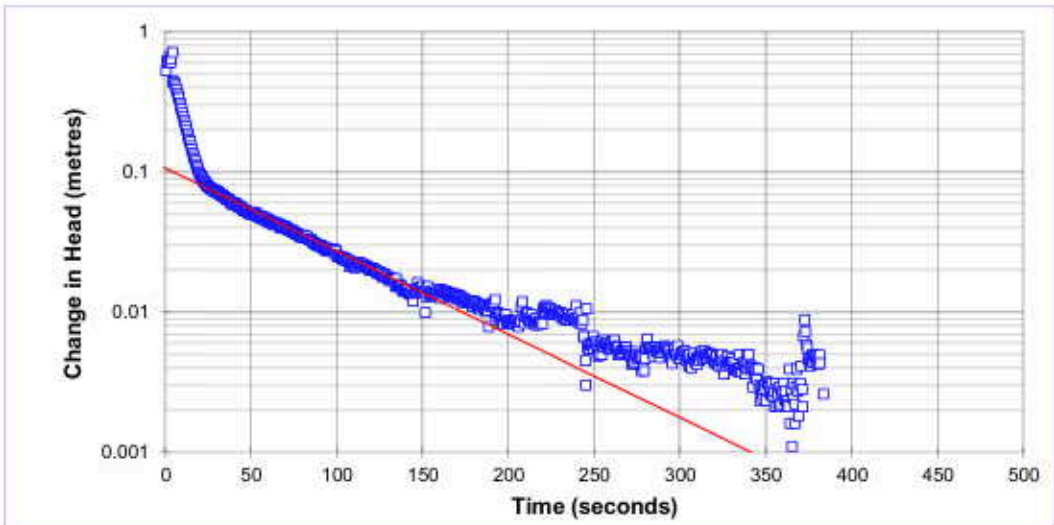
<b>INTERVAL (metres below ground surface)</b>	
Top of Interval =	1.90
Bottom of Interval =	8.00

$$K = \frac{r_c^2 \ln\left(\frac{R_e}{r_w}\right)}{2L_e} \frac{1}{t} \ln \frac{y_0}{y_t} \quad \text{where } K = \text{m/sec}$$

where:

- |   |   |
|---|---|
| $r_c$ = casing radius (metres);               | $r_w$ = radial distance to undisturbed aquifer (metres) |
| $R_e$ = effective radius (metres);            | $y_0$ = initial drawdown (metres)                       |
| $L_e$ = length of screened interval (metres); | $y_t$ = drawdown (metres) at time t (seconds)           |

INPUT PARAMETERS	RESULTS						
$r_c = 0.031$	<table border="1"> <tr> <td>K=</td> <td>4E-06</td> <td>m/sec</td> </tr> <tr> <td>K=</td> <td>4E-04</td> <td>cm/sec</td> </tr> </table>	K=	4E-06	m/sec	K=	4E-04	cm/sec
K=		4E-06	m/sec				
K=		4E-04	cm/sec				
$r_w = 0.05$							
$L_e = 6.10$							
$\ln(R_e/r_w) = 3.44$							
$y_0 = 0.07$							
$y_t = 0.01$							
$t = 132$							



Project Name: Tomlinson Brechin Quarry Deepening  
Project No.: 21461105  
Test Date: 27-Sep-22

Analysis By: SPS  
Checked By: JPAO  
Analysis Date: 27-Oct-22

**HVORSLEV SLUG TEST ANALYSIS  
RISING HEAD TEST OW-41A**

**INTERVAL (metres below ground surface)**

Top of Interval = 19.40  
Bottom of Interval = 25.50

$$K = \frac{r_c^2}{2L_e} \ln \left[ \frac{L_e}{2R_e} + \sqrt{1 + \left( \frac{L_e}{2R_e} \right)^2} \right] \left[ \frac{\ln \left( \frac{h_1}{h_2} \right)}{(t_2 - t_1)} \right] \quad \text{where K = (m/sec)}$$

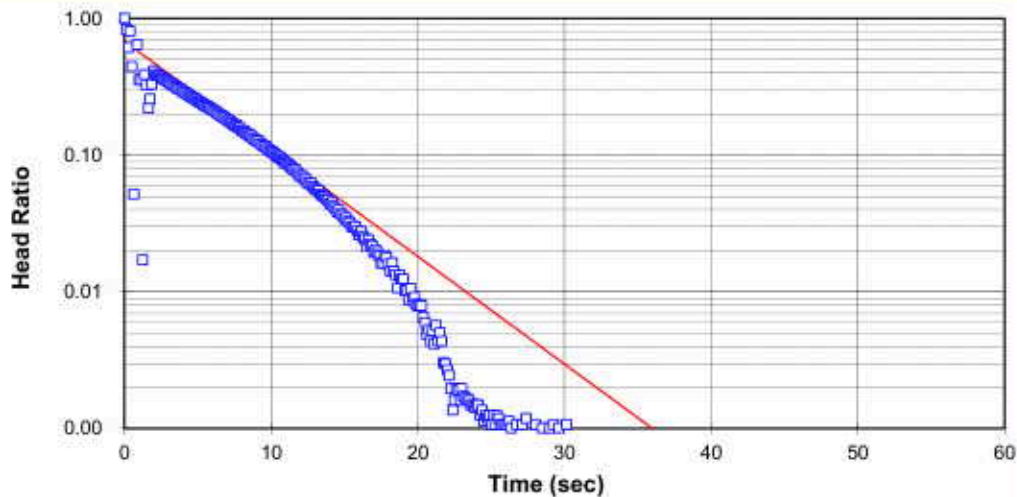
where:  $r_c$  = casing radius (metres)  
 $R_e$  = filter pack radius (metres)  
 $L_e$  = length of screened interval (metres)  
 $t$  = time (seconds)  
 $h_t$  = head at time  $t$  (metres)

**INPUT PARAMETERS**

$r_c$  = 1.6E-02  
 $R_e$  = 5.1E-02  
 $L_e$  = 6.1  
 $t_1$  = 0  
 $t_2$  = 36  
 $h_1/h_0$  = 0.68  
 $h_2/h_0$  = 0.00

**RESULTS**

K= 2E-05 m/sec  
K= 2E-03 cm/sec



Project Name: Tomlinson Brechin Quarry Deepening  
Project No.: 21461105  
Test Date: 2022-09-27

Analysis By: SPS  
Checked By: JPAO  
Analysis Date: 2022-10-27

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**HVORSLEV SLUG TEST ANALYSIS  
FALLING HEAD TEST OW-41B**

**INTERVAL (metres below ground surface)**

**Top of Interval = 1.90  
Bottom of Interval = 8.00**

$$K = \frac{r_c^2}{2L_e} \ln \left[ \frac{L_e}{2R_e} + \sqrt{1 + \left( \frac{L_e}{2R_e} \right)^2} \right] \left[ \frac{\ln \left( \frac{h_1}{h_2} \right)}{(t_2 - t_1)} \right] \quad \text{where } K = (\text{m/sec})$$

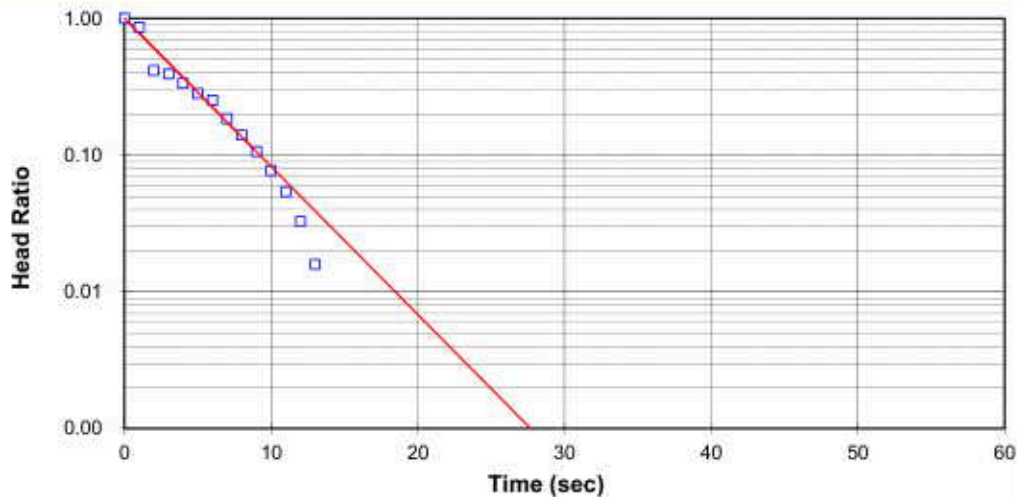
where:  $r_c$  = casing radius (metres)  
 $R_e$  = filter pack radius (metres)  
 $L_e$  = length of screened interval (metres)  
 $t$  = time (seconds)  
 $h_t$  = head at time  $t$  (metres)

**INPUT PARAMETERS**

$r_c = 1.6\text{E-}02$   
 $R_e = 5.1\text{E-}02$   
 $L_e = 6.1$   
 $t_1 = 0$   
 $t_2 = 9$   
 $h_1/h_0 = 1.00$   
 $h_2/h_0 = 0.11$

**RESULTS**

**K= 2E-05 m/sec**  
**K= 2E-03 cm/sec**



Project Name: **Tomlinson Brechin Quarry Deepening**  
 Project No.: **21461105**  
 Test Date: **2022-09-27**

Analysis By: **SPS**  
 Checked By: **JPAO**  
 Analysis Date: **2022-10-27**



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