

Daily Groundwater Sampling Record

Sheet 1 of 1

BAE SYSTEMS

Site:	Bishopton Burning Grounds	Date:	21/07/08	Weather:	Dry clear
Proj. No.:	B0014/0Fw	Name(s):	SOB		

Borehole		BGAWS06	BGAWS02	BGAWS01	BGAWS04	BGAWS03	BGAWS05		
Pre-purge	GW level (m.bgl)	1.10	2.70	1.52	0.80	1.07	0.76		
	BH Base (m.bgl)	4.97	4.72	3.97	4.96	4.93	4.98		
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover		
	Water column (m)	3.9	2.0	2.5	4.2	3.9	4.8		
	1 well vol. (l)	7.7	4.0	4.9	8.3	7.7	9.6		
	3 well vols. (l)	23.2	12.1	14.7	25.0	23.2	29.0		
Purge	Method	Hand	Hand	Hand	Hand	Hand	Hand		
	Vol. Removed (l)	10	8	10	15	9	30		
Sample	Method	Waterra	Waterra	Waterra	Waterra	Waterra	Waterra		
	Temp (°C)	12.2	12.1	11.4	12.7	11.3	10.5		
	pH	7.1	7.5	7.2	7.0	6.8	6.8		
	Eh (mV)	-111	34	-25	-31	-52	3		
	EC (µS/cm)	1231	474	715	848	975	366		
	DO ₂ (mg/l)	Too silty	Too silty	Too silty	Too silty	Too silty	4.47		
	Colour	Brown	Light Brown	Light Brown	Light Brown	Grey / brown	Grey		
	Turbidity	High	High	High	High	High	Medium		
	Odour	Peaty odour	-	Peaty odour	Peaty odour	Peaty odour	Peaty odour		
	Other	-	-	-	-	-	-		
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	
						pH	4.01 / 7.01	yes	
						DO ₂	100%	yes	

Daily Gas Monitoring Record

Sheet 1 of 1



Site:	Bishopton	Date:	02/12/08	Weather:	Clear, cold
Proj. No.:	B0060/00	Name(s):	KI, JP	Equipment:	GA2000 (serial no.GA07888) GF60 (serial no.3316)

(Peak readings shown in brackets)

BH ref	CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	Ba. Pr. (mbar)	Rel. Pr. (mbar)	H ₂ S (ppm)	CO (ppm)	Flow (l/hr)	GW level (m)	BH Base (m)	Datum	Comments
BH1455	0.3 (0.4)	4.8	14.3	993	3.12	ND	ND	ND	1.39	4.86	Top of cover	
BH1621S	ND	0.8	19.4	992	1.56	2	5	ND	1.35	5.68	Top of cover	
BH1621D	ND	0.5 (0.7)	19.6	992	1.56	1	8	0.1	1.47	11.77	Top of cover	
BH1231	ND	0.4	19.4	992	1.77	ND	ND	ND	1.73	10.41	Top of cover	
BH1089	ND	4.2 (4.5)	15.6	991	1.70	ND	ND	0.1	2.89	6	Top of cover	
BH1074S	ND	4.8	16.7	992	-0.68	1	ND	2.8	1.11	4.28	Top of cover	
BH1074D	ND	ND	19.4	992	-0.68	2	8	ND	1.03	12.00	Top of cover	
BH1108	ND	3.7	16.7	992	6.54	2	7	1.4 (15)	0.94	3.59	Top of cover	
BH1445	ND	0.4	21.0	991	1.75	ND	ND	ND	2.01	4.43	Top of cover	
Calibration						Comments: Calibration checks within tolerance limits						
Standard gas	5%	5%	6%	see sheet no.:								
Pre-cal	5.1	4.8	5.7									
Calibrated?	Y	Y	Y									

Daily Groundwater Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	02/12/08	Weather:	Clear, cold
Proj. No.:	B0006/00	Name(s):	KI & JP		

Borehole		BH1455	BH1621D	BH1621S	BH1231	BH1089	BH1074D	BH1074S	BH1108
Pre-purge	GW level (m.bgl)	1.39	1.47	1.35	1.73	2.89	1.03	1.11	0.94
	BH Base (m.bgl)	4.86	11.77	5.68	10.41	6.00	12.00	4.28	3.59
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	3.5	10.3	4.3	8.7	3.1	11.0	3.2	2.7
	1 well vol. (l)	6.9	20.6	8.7	17.4	6.2	21.9	6.3	5.3
	3 well vols. (l)	20.8	61.8	26.0	52.1	18.7	65.8	19.0	15.9
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	PP1	PP1
	Vol. Removed (l)	20	45	26	22	20	66	10	15
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	11.7	10.1	10.5	10.4	9.4	9.7	8.6	7.8
	pH	7.60	8.37	7.89	8.08	7.40	8.16	8.04	7.48
	Eh (mV)	113	-26	47	-4	65	-66	6	-1
	EC (µS/cm)	1174	1413	660	276	375	442	360	600
	DO ₂ (mg/l)	0.22	5.31	5.46	0.66	4.35	2.81	7.49	3.25
	Colour	Brown	Brown	Brown	Brown	Brown	Clear	Brown	Brown
	Turbidity	High	High	High	High	High	Low	Medium	Medium
	Odour	-	-	-	-	-	-	-	-
	Other	-	Pumped Dry	-	Pumped Dry	-	-	Pumped Dry	Audible recharge
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 2 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	02/12/08	Weather:	Clear, cold
Proj. No.:	B0060/00	Name(s):	KI & JP		

Borehole		BH1445							
Pre-purge	GW level (m.bgl)	2.01							
	BH Base (m.bgl)	4.43							
	Datum	Top of cover							
	Water column (m)	2.4							
	1 well vol. (l)	4.8							
	3 well vols. (l)	14.5							
Purge	Method	PP1							
	Vol. Removed (l)	6							
Sample	Method	Bailer							
	Temp (°C)	7.7							
	pH	8.50							
	Eh (mV)	-19							
	EC (µS/cm)	377							
	DO ₂ (mg/l)	6.09							
	Colour	Brown							
	Turbidity	Medium							
	Odour	-							
	Other	Pumped Dry							
Comments:					Calibration	Standard	Equipment calibrated to standard		
					EC	1413 µS/cm	yes	∅	
					pH	4.01 / 7.01	yes	∅	
					DO ₂	100%	yes	∅	

Daily Gas Monitoring Record

Sheet 1 of 1



Site:	Bishopton	Date:	03/12/08	Weather:	Clear, cold
Proj. No.:	B0060/00	Name(s):	KI & JP	Equipment:	GA2000 (serial no.GA07888) GF60 (serial no.3316)

(Peak readings shown in brackets)

BH ref	CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	Ba. Pr. (mbar)	Rel. Pr. (mbar)	H ₂ S (ppm)	CO (ppm)	Flow (l/hr)	GW level (m)	BH Base (m)	Datum	Comments
BH1306	ND	0.2	20.8	1001	1.70	ND	ND	ND	1.43	4.96	top of cover	
BH1532	0.1	3.0	20.0	1000	1.70	1	5	ND	0.80	5.11	top of cover	
BH1219	ND	0.8	20.8	999	1.64	ND	6	ND	0.98	4.57	top of cover	
BH1622	0.1	1.0	21.2	998	1.11	1	5	ND	1.10	9.51	top of cover	
BH1046	ND	ND	21.5	998	1.25	1	3	ND	1.10	7.41	top of cover	
PER22	0.1	ND	21.5	998	1.24	1	4	ND	1.08	5.03	top of cover	
BH1167	ND	ND	21.4	997	1.25	ND	ND	ND	1.23	4.82	top of cover	
BH1366	ND	0.0 (0.1)	21.4	997	1.15	ND	5	ND	1.46	4.58	top of cover	
BH1375	0.4	0.1	21.1	996	1.33	ND	2	ND	0.42	7.42	top of cover	
Calibration						Comments: Calibration checks within tolerance limits						
Standard gas	5%	5%	6%	see sheet no.:								
Pre-cal	5.1	4.8	5.7									
Calibrated?	Y	Y	Y									

Daily Groundwater Sampling Record

Sheet 1 of 1

BAE SYSTEMS

Site:	Bishopton	Date:	03/12/08	Weather:	Clear, cold
Proj. No.:	B0060/00	Name(s):	KI & JP		

Borehole		BH1306	BH1532	BH1219	BH1622	BH1046	BH1167	BH1366	BH1375
Pre-purge	GW level (m.bgl)	1.43	0.80	0.98	1.10	1.10	1.23	1.46	0.42
	BH Base (m.bgl)	4.96	5.11	4.57	9.51	7.41	4.82	4.58	7.42
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	3.5	4.3	3.6	8.4	6.3	3.6	3.1	7.0
	1 well vol. (l)	7.1	8.6	7.2	16.8	12.6	7.2	6.2	14.0
	3 well vols. (l)	21.2	25.9	21.5	50.5	37.9	21.5	18.7	42.0
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	PP1	PP1
	Vol. Removed (l)	20	20	16	50	32	8	15	42
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	9.2	6.4	8.1	8.3	8.4	7.2	8.6	8.7
	pH	7.64	8.08	7.82	8.43	8.84	9.82	7.73	8.40
	Eh (mV)	-104	23	-63	153	-56	-44	35	171
	EC (µS/cm)	1512	1540	485	482	38	802	447	796
	DO ₂ (mg/l)	1.97	5.58	7.59	3.62	4.25	4.65	4.77	2.51
	Colour	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
	Turbidity	Low	Low	Medium	V. Low	V. Low	High	Low	High
	Odour	Sulphurous	-	Sulphurous	-	-	-	-	Slightly sulphurous
	Other	-	-	Pumped Dry	-	Pumped Dry	Pumped Dry	Pumped Dry	-
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	04/12/08	Weather:	Overcast, cold, occasional showers
Proj. No.:	B0060/00	Name(s):	KI & JP		

Borehole		PER22	BH1412	BH1430	PER06	PER05	PER04	BH1429	BH1623
Pre-purge	GW level (m.bgl)	1.08	1.81	0.81	1.64	0.78	1.14	0.20	0.78
	BH Base (m.bgl)	5.00	4.50	4.03	6.71	9.02	6.79	4.74	4.81
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	3.9	2.7	3.2	5.1	8.2	5.7	4.5	4.0
	1 well vol. (l)	7.8	5.4	6.4	10.1	16.5	11.3	9.1	8.1
	3 well vols. (l)	23.5	16.1	19.3	30.4	49.4	33.9	27.2	24.2
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	PP1	PP1
	Vol. Removed (l)	11	16	7	30	32	16	16	16
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	9.0	8.8	7.4	9.1	8.1	8.4	7.6	7.2
	pH	7.87	7.26	7.58	7.39	7.26	7.27	7.23	7.08
	Eh (mV)	-246	36	-44	-49	-70	-119	-34	12
	EC (µS/cm)	1655	317	422	376	430	1387	316	342
	DO ₂ (mg/l)	0	4.45	5.38	3.51	3.28	0.71	2.87	5.92
	Colour	Dark grey brown	Brown	Brown	Brown	Brown	Grey-brown	Grey-Brown	Dark Brown
	Turbidity	V.High	Medium	Low	High	High	V. High	High	High
	Odour	-	-	-	Slightly sulphurous	Sulphurous	Slightly sulphurous	-	-
	Other	Pumped Dry	-	Pumped Dry	-	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 2 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	04/12/08	Weather:	Overcast, cold, occasional showers
Proj. No.:	B0060/00	Name(s):	KI & JP		

Borehole		PER02	PER01						
Pre-purge	GW level (m.bgl)	1.65	1.54						
	BH Base (m.bgl)	8.77	6.18						
	Datum	Top of cover	Top of cover						
	Water column (m)	7.1	4.6						
	1 well vol. (l)	14.2	9.3						
	3 well vols. (l)	42.7	27.8						
Purge	Method	PP1	PP1						
	Vol. Removed (l)	24	28						
Sample	Method	Bailer	Bailer						
	Temp (°C)	8.2	8.4						
	pH	6.43	6.41						
	Eh (mV)	-61	-59						
	EC (µS/cm)	6.52 ms	776						
	DO ₂ (mg/l)	3.59	0.42						
	Colour	Dark Brown	Dark Brown						
	Turbidity	Medium	High						
	Odour	-	-						
	Other	Pumped Dry	-						
Comments:					Calibration	Standard	Equipment calibrated to standard		
					EC	1413 µS/cm	yes	∅	
					pH	4.01 / 7.01	yes	∅	
					DO ₂	100%	yes	∅	

Daily Gas Monitoring Record

Sheet 1 of 1



Site:	Bishopton	Date:	08/12/08	Weather:	Clear, cold
Proj. No.:	B0060/00	Name(s):	KI & NA	Equipment:	GA2000 (serial no.GA07888) GF60 (serial no.3316)

(Peak readings shown in brackets)

BH ref	CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	Ba. Pr. (mbar)	Rel. Pr. (mbar)	H ₂ S (ppm)	CO (ppm)	Flow (l/hr)	GW level (m)	BH Base (m)	Datum	Comments
BH1134	-	-	-	-	-	-	-	-	-	-	top of cover	Destroyed
BH1349	ND	2.3 (2.7)	21.5	1019	-0.85	ND	ND	0.1	0.88	4.47	top of cover	
ESGF	ND	0.0 (0.1)	22.1	1017	-0.35	ND	1	ND	1.16	9.88	top of cover	
ESGD	5.6 (5.7)	3.6	13.5	1016	0.36	ND	ND	0.3	0.97	4.22	top of cover	
ESGA	6.5 (6.7)	4.7	1.0 (0.7)	1016	0.42	ND	ND	0.2	1.96	6.93	top of cover	
GT13	45.2 (49.2)	4.1	5.4	1016	0.57	ND	ND	0.2	1.26	6.58	top of cover	
BH1505	ND	0.4 (0.9)	21.5	1016	0.66	ND	ND	ND	0.74	3.78	top of cover	
BH1624	ND	2.0 (2.2)	20.4	1016	2.73	ND	ND	0.2	1.74	4.46	top of cover	
GT10	ND	ND	21.7	1015	0.93	ND	ND	ND	1.74	7.40	top of cover	
ESGJ	1.5	5.1	18.2	1015	-0.79	ND	ND	1.8	1.74	7.40	top of cover	
Calibration						Comments: Calibration checks within tolerance limits						
Standard gas	5%	5%	6%	see sheet no.:								
Pre-cal	5.2	5.1	5.2									
Calibrated?	Y	Y	Y									

Daily Groundwater Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	08/12/08	Weather:	Clear, cold
Proj. No.:	B0060/00	Name(s):	KI & NA		

Borehole		BH1349	ESGF	ESGD	ESGA	GT13	BH1505	BH1624	ASPA	
Pre-purge	GW level (m.bgl)	0.88	1.16	0.97	1.96	1.26	0.74	1.74	3.43	
	BH Base (m.bgl)	4.68	9.88	4.22	6.93	6.58	3.78	4.46	10.33	
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	
	Water column (m)	3.8	8.7	3.3	5.0	5.3	3.0	2.7	6.9	
	1 well vol. (l)	7.6	17.4	6.5	9.9	10.6	6.1	5.4	13.8	
	3 well vols. (l)	22.8	52.3	19.5	29.8	31.9	18.2	16.3	41.4	
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	PP1	PP1	
	Vol. Removed (l)	23	55	20	30	30	4	17	42	
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	
	Temp (°C)	8.1	8.8	7.9	8.8	9.1	7.2	9.0	9.8	
	pH	6.65	7.14	6.22	5.68	6.96	6.79	6.75	6.69	
	Eh (mV)	16	67	20	36	-91	-1	26	-86	
	EC (µS/cm)	100	504	1240	782	1876	886	536	1987	
	DO ₂ (mg/l)	5.25	4.57	7.13	3.92	0.54	6.76	4.41	3.88	
	Colour	Brown	Brown	Dark Brown	Dark Grey	Grey/Brown	Grey	Light grey/brown	Brown	
	Turbidity	Medium	Low	Medium	High	High	Medium	Medium	Medium	
	Odour	Slightly sulphurous	-	Sulphurous	Sulphurous	Sulphurous	-	-	-	
	Other	-	-	-	-	-	-	-	-	
Comments:						Calibration	Standard	Equipment calibrated to standard		
						EC	1413 µS/cm	yes	∅	
						pH	4.01 / 7.01	yes	∅	
						DO ₂	100%	yes	∅	

Daily Groundwater Sampling Record

Sheet 2 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	08/12/08	Weather:	Clear, cold
Proj. No.:	B0060/00	Name(s):	KI & NA		

Borehole		ASPC	GT10	ESGJ				
Pre-purge	GW level (m.bgl)	0.76	0.92	1.74				
	BH Base (m.bgl)	5.22	8.82	7.40				
	Datum	Top of cover	Top of cover	Top of cover				
	Water column (m)	4.5	7.9	5.7				
	1 well vol. (l)	8.9	15.8	11.3				
	3 well vols. (l)	26.8	47.4	34.0				
Purge	Method	PP1	PP1	PP1				
	Vol. Removed (l)	27	48	34				
Sample	Method	Bailer	Bailer	Bailer				
	Temp (°C)	8.1	8.4	7.9				
	pH	7.07	7.08	7.23				
	Eh (mV)	-70	52	20				
	EC (µS/cm)	2302	315	2197				
	DO ₂ (mg/l)	3.89	5.76	3.16				
	Colour	Clear	Grey	Grey/Black				
	Turbidity	-	Medium	Very High				
	Odour	-	-	-				
	Other	-	-	-				
Comments:					Calibration	Standard	Equipment calibrated to standard	
					EC	1413 µS/cm	yes	∅
					pH	4.01 / 7.01	yes	∅
					DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 1 of 1

BAE SYSTEMS

Site:	Bishopton	Date:	09/12/08	Weather:	Clear, cold, still
Proj. No.:	B0060/00	Name(s):	KI & NA		

Borehole		ESGC	ASPD	GT06	ESGH	BH1504	BH1027	BH1531	
Pre-purge	GW level (m.bgl)	0.80	1.80	1.60	1.09	1.00	1.52	0.65	
	BH Base (m.bgl)	4.50	9.51	9.96	6.71	3.93	9.16	14.46	
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	
	Water column (m)	3.7	7.7	8.4	5.6	2.9	7.6	13.8	
	1 well vol. (l)	7.4	15.4	16.7	11.2	5.9	15.3	27.6	
	3 well vols. (l)	22.2	46.3	50.2	33.7	17.6	45.8	82.9	
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	PP1	
	Vol. Removed (l)	23	47	26	33	18	46	86	
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	
	Temp (°C)	7.8	8.1	9.4	9.1	8.6	8.9	9.2	
	pH	6.47	7.40	8.40	10.56	7.64	9.11	8.52	
	Eh (mV)	-9	-91	-125	110	84	-93	127	
	EC (µS/cm)	646	859	937	211	783	435	560	
	DO ₂ (mg/l)	3.82	2.61	2.49	2.73	4.53	1.33	1.44	
	Colour	Brown	Grey/Brown	Dark Brown	Dark Brown	Brown	Clear	Brown	
	Turbidity	Low	Medium	High	High	High	Low	Medium	
	Odour	Sulphurous	Sulphurous	-	-	-	-	-	
	Other	-	LNAPL Sheen	-	Pumped Dry	-	-	-	
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 1 of 1

BAE SYSTEMS

Site:	Bishopton	Date:	10/12/08	Weather:	Clear, cold
Proj. No.:	B0060/00	Name(s):	KI & NA		

Borehole		BH1194S	BH1134						
Pre-purge	GW level (m.bgl)	0.83	0.80						
	BH Base (m.bgl)	8.34	4.70						
	Datum	Top of cover	Ground Level						
	Water column (m)	7.5	3.9						
	1 well vol. (l)	15.0	7.8						
	3 well vols. (l)	45.1	23.4						
Purge	Method	PP1	PP1						
	Vol. Removed (l)	45	12						
Sample	Method	Bailer	Bailer						
	Temp (°C)	9.3	9.2						
	pH	8.65	8.02						
	Eh (mV)	-122	-89						
	EC (µS/cm)	508	829						
	DO ₂ (mg/l)	2.31	2.26						
	Colour	Brown	Brown/Grey						
	Turbidity	High	High						
	Odour	-	-						
	Other	-	-						
Comments:					Calibration	Standard	Equipment calibrated to standard		
					EC	1413 µS/cm	yes	∅	
					pH	4.01 / 7.01	yes	∅	
					DO ₂	100%	yes	∅	

Daily Gas Monitoring Record

Sheet 1 of 1



Site:	Bishopton	Date:	15/12/08	Weather:	Overcast, cold
Proj. No.:	B0060/00	Name(s):	KI & JP	Equipment:	GA2000 (serial no.GA07888) GF60 (serial no.3316)

(Peak readings shown in brackets)

BH ref	CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	Ba. Pr. (mbar)	Rel. Pr. (mbar)	H ₂ S (ppm)	CO (ppm)	Flow (l/hr)	GW level (m)	BH Base (m)	Datum	Comments
BH2093	ND	2.1	19.3	1016	-0.25	ND	4	ND	1.18	5.48	top of cover	
BH2092	ND	3.6	13.1	1027	-0.49	14	ND	0.2	2.36	3.42	top of cover	
BH2091	ND	ND	22.1	1016	-0.07	ND	ND	ND	0.67	6.32	top of cover	
BH2259	ND	0.8	22.0	1016	0.28	ND	8	ND	1.83	5.11	top of cover	
BH2260	0.1 (0.2)	4.4	20.6	1015	0.66	ND	5	ND	0.76	7.02	top of cover	
BH2725	ND	0.6 (0.7)	18.7	1010	1.27	ND	ND	0.4	2.09	6.67	top of cover	
BH2663	ND	1.7 (1.8)	19.5	1011	0.69	ND	8	ND	0.99	7.14	top of cover	
BH2662	ND	2.8 (3.2)	20.4	1011	0.98	ND	ND	ND	1.62	7.07	top of cover	
BH2261	-	-	-	-	-	-	-	-	0.00	7.05	top of pipe	Artesian
Calibration							Comments: Calibration checks within tolerance limits					
Standard gas	5%	5%	6%	see sheet no.:								
Pre-cal	5.1	4.9	5.3									
Calibrated?	Y	Y	Y									

Daily Groundwater Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	15/12/08	Weather:	Overcast, cold
Proj. No.:	B0060/00	Name(s):	KI & JP		

Borehole		BH2093	BH2092	BH2091	BH2259	BH2260	BH2725	BH2663	BH2662
Pre-purge	GW level (m.bgl)	1.18	2.36	0.67	1.83	0.76	2.09	0.99	1.62
	BH Base (m.bgl)	5.48	3.42	6.32	5.11	2.09	6.67	7.14	7.07
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	4.3	1.1	5.7	3.3	1.3	4.6	6.2	5.5
	1 well vol. (l)	8.6	2.1	11.3	6.6	2.7	9.2	12.3	10.9
	3 well vols. (l)	25.8	6.4	33.9	19.7	8.0	27.5	36.9	32.7
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	PP1	PP1
	Vol. Removed (l)	16	2	35	19	38	24	30	16
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	6.7	8.0	9.3	7.8	8.6	9.7	9.5	8.4
	pH	7.77	7.84	7.26	8.11	7.82	8.02	7.63	7.56
	Eh (mV)	2	13	-52	-14	-94	-30	-65	-27
	EC (µS/cm)	502	624	414	584	653	526	415	397
	DO ₂ (mg/l)	5.06	5.37	1.73	4.68	1.37	2.63	2.89	2.96
	Colour	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Brown
	Turbidity	High	High	Low-Med	High	High	Medium	High	High
	Odour	-	-	-	-	Sulphurous	-	Slightly sulphurous	-
	Other	Pumped Dry	Pumped Dry	-	Pumped Dry	-	Pumped Dry	Pumped Dry	Pumped Dry
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 2 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	15/12/08	Weather:	Overcast, cold
Proj. No.:	B0060/00	Name(s):	KI & JP		

Borehole		BH2261							
Pre-purge	GW level (m.bgl)	0.00							
	BH Base (m.bgl)	7.05							
	Datum	Pipe							
	Water column (m)	7.1							
	1 well vol. (l)	14.1							
	3 well vols. (l)	42.3							
Purge	Method	Waterra							
	Vol. Removed (l)	42							
Sample	Method	Bailer							
	Temp (°C)	8.4							
	pH	7.95							
	Eh (mV)	-88							
	EC (µS/cm)	963							
	DO ₂ (mg/l)	5.00							
	Colour	Brown							
	Turbidity	High							
	Odour	-							
	Other	Pumped Dry							
Comments:					Calibration	Standard	Equipment calibrated to standard		
					EC	1413 µS/cm	yes	∅	
					pH	4.01 / 7.01	yes	∅	
					DO ₂	100%	yes	∅	

Daily Groundwater Sampling Record

Sheet 1 of 1

BAE SYSTEMS

Site:	Bishopton	Date:	16/12/08	Weather:	Cold, rain
Proj. No.:	B0060/00	Name(s):	KI & JP		

Borehole		BH2585	BH2268	BH2267	BH2002	BH2001			
Pre-purge	GW level (m.bgl)	0.00	1.76	1.02	0.00	0.76			
	BH Base (m.bgl)	6.84	6.86	7.32	6.00	7.09			
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover			
	Water column (m)	6.8	5.1	6.3	6.0	6.3			
	1 well vol. (l)	13.7	10.2	12.6	12.0	12.7			
	3 well vols. (l)	41.0	30.6	37.8	36.0	38.0			
Purge	Method	PP1	PP1	PP1	PP1	PP1			
	Vol. Removed (l)	42	31	38	30	38			
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer			
	Temp (°C)	10.8	9.4	9.7	7.8	9.4			
	pH	7.08	5.58	5.33	6.31	5.20			
	Eh (mV)	-97	27	26	-22	-37			
	EC (µS/cm)	377	529	420	301	666			
	DO ₂ (mg/l)	7.15	6.48	8.16	9.09	19.32			
	Colour	Brown	Dark Grey	Dark Grey	Dark Grey	Dark Grey			
	Turbidity	High	High	High	V. High	High			
	Odour	-	Sulphurous	Sulphurous	Slight Sulphurous	Sulphurous			
	Other	-	-	-	Pumped Dry	-			
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 1 of 1

BAE SYSTEMS

Site:	Bishopton	Date:	17/12/08	Weather:	Cold, wind, rain
Proj. No.:	B0060/00	Name(s):	KI & JP		

Borehole		BH2588							
Pre-purge	GW level (m.bgl)	0.96							
	BH Base (m.bgl)	7.14							
	Datum	Top of cover							
	Water column (m)	6.2							
	1 well vol. (l)	12.4							
	3 well vols. (l)	37.1							
Purge	Method	PP1							
	Vol. Removed (l)	28							
Sample	Method	Bailer							
	Temp (°C)	9.7							
	pH	5.95							
	Eh (mV)	11							
	EC (µS/cm)	805							
	DO ₂ (mg/l)	Malfunction							
	Colour	Brown							
	Turbidity	High							
	Odour	Sulphurous							
	Other	Pumped Dry							
Comments:					Calibration	Standard	Equipment calibrated to standard		
					EC	1413 µS/cm	yes	∅	
					pH	4.01 / 7.01	yes	∅	
					DO ₂	100%	yes	∅	

Daily Groundwater Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	18/12/08	Weather:	Cold, rain
Proj. No.:	B0060/00	Name(s):	KI & JP		

Borehole		BH2668	BH2669	BH2671	BH2670	BH2672	BH2674	BH2677	BH2679
Pre-purge	GW level (m.bgl)	0.77	0.55	1.16	1.68	2.13	1.21	0.85	2.77
	BH Base (m.bgl)	7.02	7.15	6.72	7.16	6.55	7.15	7.54	9.03
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	6.3	6.6	5.6	5.5	4.4	5.9	6.7	6.3
	1 well vol. (l)	12.5	13.2	11.1	11.0	8.8	11.9	13.4	12.5
	3 well vols. (l)	37.5	39.6	33.4	32.9	26.5	35.6	40.1	37.6
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	PP1	PP1
	Vol. Removed (l)	33	27	35	29	9	36	24	14
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	9.7	8.8	8.8	9.9	9.5	11.6	10.7	11.9
	pH	6.33	6.52	7.48	6.71	6.95	4.23	6.21	6.18
	Eh (mV)	-119	-55	10	15	-28	73	-14	31
	EC (µS/cm)	1756	2409	451	1082	292	1614	415	2092
	DO ₂ (mg/l)	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction
	Colour	Brown	Brown	Dark Grey	Dark Grey	Dark Grey	Brown	Dark Grey	Brown-Grey
	Turbidity	High	High	High	High	V.High	Med-Low	High	Med-Low
	Odour	-	-	-	-	-	Slightly sulphurous	-	-
	Other	Pumped Dry	Pumped Dry	-	Pumped Dry	Pumped Dry	-	Pumped Dry	Pumped Dry
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 2 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	18/12/08	Weather:	Cold, rain
Proj. No.:	B0060/00	Name(s):	KI & JP		

Borehole		BH2676	BH2675						
Pre-purge	GW level (m.bgl)	1.77	1.46						
	BH Base (m.bgl)	7.22	7.00						
	Datum	Top of cover	Top of cover						
	Water column (m)	5.5	5.5						
	1 well vol. (l)	10.9	11.1						
	3 well vols. (l)	32.7	33.2						
Purge	Method	PP1	PP1						
	Vol. Removed (l)	21	23						
Sample	Method	Bailer	Bailer						
	Temp (°C)	11.2	11.2						
	pH	5.42	4.89						
	Eh (mV)	48	76						
	EC (µS/cm)	1216	994						
	DO ₂ (mg/l)	Malfunction	Malfunction						
	Colour	Dark Grey	Dark Brown						
	Turbidity	High	High						
	Odour	-	-						
	Other	Pumped Dry	Pumped Dry						
Comments:					Calibration	Standard	Equipment calibrated to standard		
					EC	1413 µS/cm	yes	∅	
					pH	4.01 / 7.01	yes	∅	
					DO ₂	100%	yes	∅	

Daily Gas Monitoring Record

Sheet 1 of 1



Site:	Bishopton	Date:	05/01/09	Weather:	Clear, cold
Proj. No.:	B0060/00	Name(s):	KI & CON	Equipment:	GA2000 (serial no.GA07888) GF60 (serial no.3316)

(Peak readings shown in brackets)

BH ref	CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	Ba. Pr. (mbar)	Rel. Pr. (mbar)	H ₂ S (ppm)	CO (ppm)	Flow (l/hr)	GW level (m)	BH Base (m)	Datum	Comments
BH2198	0.0 (0.1)	3.8 (4.1)	20.3	1026	1.02	ND	ND	ND	1.75	6.20	top of cover	
BH2636	-	-	-	-	-	-	-	-	0.87	6.49	top of cover	Gas Tap Broken
BH2635	2.0	4.1	18.6	1026	1.17	ND	ND	ND	1.40	6.86	top of cover	
BH2534	0.0 (0.1)	0.4 (0.5)	21.4	1027	1.21	ND	ND	ND	0.71	6.43	top of cover	
BH2535	1.5	3.8	19.4	1026	1.37	ND	ND	ND	2.02	6.76	top of cover	
BH2530	0.1	2.3 (2.5)	20.4	1027	1.36	ND	ND	0.2	0.80	6.67	top of cover	
BH2529	0.1	2.5 (3.2)	20.4	1026	1.23	ND	ND	ND	1.95	7.11	top of cover	
BH2477	0.0 (0.1)	0.4	21.0	1026	1.23	ND	ND	ND	1.32	5.39	top of cover	
BH2226	-	-	-	-	-	-	-	-	1.58	6.83	top of cover	Gas Tap Clogged
BH2587	ND	2.6	20.7	1027	1.27	ND	ND	0.1	1.62	6.44	top of cover	
BH2225	0.1	3.5	19.3	1027	1.25	ND	ND	-6 to 3.7	1.09	14.69	top of cover	
BH2221	-	-	-	-	-	-	-	-	0.05	18.78	top of cover	Artesian
BH2224	0.1	0.1	20.9	1027	1.28	ND	ND	ND	1.25	1.38	top of cover	
BH2222	ND	1.8 (2.1)	19.8	1027	1.20	ND	ND	ND	1.17	1.58	top of cover	
BH2063	0.1	0.9	20.1	1026	1.36	ND	ND	ND	1.73	2.30	top of cover	
BH2061	0.1	ND	20.4	1024	1.41	ND	ND	ND	DRY	2.12	top of cover	

Calibration						Comments: Calibration checks within tolerance limits					
Standard gas	5%	5%	6%	see sheet no.:							
Pre-cal	5.3	4.7	5.1								
Calibrated?	Y	Y	Y								

Daily Groundwater Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	05/01/09	Weather:	Clear, cold
Proj. No.:	B0060/00	Name(s):	KI & CON		

Borehole		BH2198	BH2636	BH2635	BH2534	BH2535	BH2530	BH2529	BH2063
Pre-purge	GW level (m.bgl)	1.75	0.87	1.40	0.71	2.02	0.80	1.95	1.73
	BH Base (m.bgl)	6.20	6.49	6.86	6.43	6.76	6.67	7.11	2.30
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	4.5	5.6	5.5	5.7	4.7	5.9	5.2	0.6
	1 well vol. (l)	8.9	11.2	10.9	11.4	9.5	11.7	10.3	1.1
	3 well vols. (l)	26.7	33.7	32.8	34.3	28.4	35.2	31.0	3.4
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	PP1	PP1
	Vol. Removed (l)	27	18	14	13	29	24	11	4
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	9.0	7.5	7.5	6.5	7.7	7.8	7.8	5.7
	pH	5.2	7.74	6.89	7.11	5.88	6.75	6.48	7.52
	Eh (mV)	44	-168	-80	-83	-71	-91	-55	9
	EC (µS/cm)	813	626	840	786	643	713	426	293.7
	DO ₂ (mg/l)	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction
	Colour	Brown	Grey-Brown	Grey-Brown	Grey-Brown	Grey-Brown	Dark Brown	Dark Brown	Brown
	Turbidity	High	V.High	V.High	V.High	V.High	High	High	High
	Odour	Slightly sulphurous	Slightly sulphurous	Sulphurous	-	Slightly sulphurous	-	-	-
	Other	-	Pumped Dry	Pumped Dry	Pumped Dry	-	Pumped Dry	Pumped Dry	-
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 2 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	05/01/09	Weather:	Clear, cold
Proj. No.:	B0060/00	Name(s):	KI & CON		

Borehole		BH2477	BH2226	BH2587	BH2225	BH2221	BH2224	BH2222	BH2061
Pre-purge	GW level (m.bgl)	1.32	1.58	1.62	1.09	0.05	1.25	1.17	DRY
	BH Base (m.bgl)	5.39	6.83	6.44	14.69	18.78	1.38	1.58	2.12
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	4.1	5.3	4.8	13.6	18.7	0.1	0.4	-
	1 well vol. (l)	8.1	10.5	9.6	27.2	37.5	0.3	0.8	-
	3 well vols. (l)	24.4	31.5	28.9	81.6	112.4	0.8	2.5	-
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	PP1	-
	Vol. Removed (l)	15	32	29	82	112	0.25	0.5	-
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	-	-	-
	Temp (°C)	7.3	8.0	8.1	7.7	8.6	-	-	-
	pH	6.67	6.90	6.79	6.21	7.50	-	-	-
	Eh (mV)	-57	-75	5	-52	-101	-	-	-
	EC (µS/cm)	577	498	353	527	301	-	-	-
	DO ₂ (mg/l)	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	-	-	-
	Colour	Brown	Grey-Brown	Brown	Dark Brown	Brown	-	-	-
	Turbidity	V. High	High	High	High	High	-	-	-
	Odour	-	Slightly sulphurous	Sulphurous	Sulphurous	Slightly sulphurous	-	-	-
	Other	Pumped Dry	-	-	-	-	-	-	-
Comments:	BH2224 & BH2222 - Insufficient water to sample.					Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Gas Monitoring Record

Sheet 1 of 1



Site:	Bishopton	Date:	07/01/09	Weather:	Fine rain, mild
Proj. No.:	B0060/00	Name(s):	KI & CON	Equipment:	GA2000 (serial no.GA07888) GF60 (serial no.3316)

(Peak readings shown in brackets)

BH ref	CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	Ba. Pr. (mbar)	Rel. Pr. (mbar)	H ₂ S (ppm)	CO (ppm)	Flow (l/hr)	GW level (m)	BH Base (m)	Datum	Comments
BH2003	0.1	4.2	18.7	1020	-0.19	ND	ND	2.4	0.94	3.85	top of cover	
BH2266	0.4	2.9 (3.0)	19.2	1021	1.91	ND	ND	ND	1.40	6.90	top of cover	
BH2379	5.7	3.1	15.4	1021	6.25	ND	ND	0.1 (13)	0.38	14.74	top of cover	
BH2041	ND	2.1	20.6	1022	1.26	ND	ND	ND	0.81	7.02	top of cover	
BH2349	0.0 (0.1)	0.8 (1.0)	20.6	1022	1.23	ND	ND	ND	1.57	6.66	top of cover	
BH2351	ND	2.1 (2.2)	19.1	1021	1.40	ND	ND	ND	0.70	6.52	top of cover	
BH2416	0 (0.1)	0 (0.1)	15.6	1021	1.39	ND	10	ND	1.74	23.34	top of cover	
BH2412	-	-	-	-	-	-	-	ND	0.32	7.35	top of cover	Water entered pipe of GA2000
BH2199	ND	0.8	20.6	1022	1.15	ND	4	ND	2.03	7.19	top of cover	
BH2415	ND	3 (3.1)	19.2	1021	0.95	ND	4	ND	1.30	7.15	top of cover	
BH2414	ND	0.0	21.2	1021	0.86	ND	3	ND	0.70	7.32	top of cover	
BH2644	1.5	5.0	17.2	1022	2.26	ND	4	ND	1.62	7.04	top of cover	
WS3039	ND	0.3	20.9	1021	0.78	ND	ND	ND	2.80	5.43	top of cover	
WS3088	10.8 (11.5)	6.9 (7)	16.0	1021	0.92	ND	12	0.5	0.81	6.12	top of cover	

Calibration						Comments: Calibration checks within tolerance limits BH2379 : Water entered pipe of monitor before gas readings stabilised.						
Standard gas	5%	5%	6%	see sheet no.:								
Pre-cal	5.3	4.7	5.1									
Calibrated?	Y	Y	Y									

Daily Groundwater Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	07/01/09	Weather:	Fine rain, mild
Proj. No.:	B0060/00	Name(s):	KI & CON		

Borehole		BH2003	BH2266	BH2379	BH2041	BH2349	BH2351	BH2416	BH2412
Pre-purge	GW level (m.bgl)	0.94	1.40	0.38	0.81	1.57	0.70	1.74	0.32
	BH Base (m.bgl)	3.85	6.90	14.74	7.02	6.66	6.52	23.34	7.35
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	2.9	5.5	14.4	6.2	5.1	5.8	21.6	7.0
	1 well vol. (l)	5.8	11.0	28.7	12.4	10.2	11.6	43.2	14.1
	3 well vols. (l)	17.5	33.0	86.2	37.3	30.5	34.9	129.6	42.2
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	PP1	PP1
	Vol. Removed (l)	18	35	87	38	12	35	130	37
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	7.1	9.4	9.1	9.6	8.4	8.2	9.4	9.3
	pH	7.02	6.65	7.51	7.15	6.52	6.25	6.77	7.38
	Eh (mV)	52	12	-118	-79	7	-35	-46	-38
	EC (µS/cm)	270.2	706	3450	592	430	475	857	1199
	DO ₂ (mg/l)	10.21	7.65	9.51	7.79	8.48	15.41	7.29	4.05
	Colour	Brown	Dark Brown	Grey Brown	Dark Brown	Grey Brown	Dark grey-brown	Light grey	Brown
	Turbidity	Low	High	Low	Medium	High	High	V. Low/Clear	High
	Odour	-	Slightly Sulphurous	Sulphurous	-	-	Sulphurous	-	-
	Other	-	Audible recharge	-	-	Pumped Dry	Audible recharge	-	-
Comments:	BH2412 - Water above ground level.					Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 2 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	07/01/09	Weather:	Fine rain, mild
Proj. No.:	B0060/00	Name(s):	KI & CON		

Borehole		BH2199	BH2415	BH2414	BH2644	WS3089	WS3088		
Pre-purge	GW level (m.bgl)	2.03	1.30	0.70	1.62	2.80	0.81		
	BH Base (m.bgl)	7.19	7.15	7.32	7.04	5.43	6.12		
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover		
	Water column (m)	5.2	5.9	6.6	5.4	2.6	5.3		
	1 well vol. (l)	10.3	11.7	13.2	10.8	5.3	10.6		
	3 well vols. (l)	31.0	35.1	39.7	32.5	15.8	31.9		
Purge	Method	PP1	PP1	PP1	PP1	HAND	HAND		
	Vol. Removed (l)	31	31	37	22	6	11		
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer		
	Temp (°C)	9.6	9.5	9.5	9.1	8.9	8.5		
	pH	7.12	5.12	6.60	6.71	5.71	5.83		
	Eh (mV)	31	42	14	-33	37	17		
	EC (µS/cm)	905	909	650	734	341	43		
	DO ₂ (mg/l)	0.61	9.92	7.97	4.75	4.72	5.19		
	Colour	Brown	grey/brown	Brown	Dark Grey	Grey Brown	Brown		
	Turbidity	Low-Medium	High	High	High	High	High		
	Odour	Slightly sulphurous	Sulphurous	-	Slightly sulphurous	-	-		
	Other	Turbidity increased after 10L	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry		
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Gas Monitoring Record

Sheet 1 of 1



Site:	Bishopton	Date:	12/01/09	Weather:	Breeze, broken cloud, cold
Proj. No.:	B0060/00	Name(s):	KI & CON	Equipment:	GA2000 (serial no.GA07888) GF60 (serial no.3316)

(Peak readings shown in brackets)

BH ref	CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	Ba. Pr. (mbar)	Rel. Pr. (mbar)	H ₂ S (ppm)	CO (ppm)	Flow (l/hr)	GW level (m)	BH Base (m)	Datum	Comments
BH2586	ND	ND	21.5	995	0.52	1	5	0.5	0.50	6.44	top of cover	
BH2269	1.6 (1.7)	2 (2.1)	20.0	996	0.45	ND	3	0.2	1.35	4.55	top of cover	
BH2584	ND	0.4	21.4	996	0.45	1	4	ND	1.05	6.88	top of cover	
BH2583	ND	ND	21.5	996	0.52	ND	5	ND	1.27	4.35	top of cover	
BH2265	ND	ND	21.4	997	0.63	1	3	ND	0.88	7.44	top of cover	
BH2264	ND	ND	21.4	997	0.50	ND	3	ND	0.73	10.90	top of cover	
BH2262	ND	3.6 (3.8)	17.9	997	0.55	1	3	0.1	1.11	7.11	top of cover	
BH2263	0.3 (0.4)	3.8 (4)	20.0	997	1.14	ND	7	0.4	0.50	7.38	top of cover	
BH2413	ND	0.5	21.3	997	1.63	ND	3	ND	0.59	7.30	top of cover	Gas tap was open
BH2643	ND	ND	21.4	997	0.36	ND	5	ND	0.5	7.29	top of cover	
WS3087	1.8 (2)	5.7 (6.4)	18.7	997	1.88	ND	11	0.2	1.50	6.10	top of cover	
BH2651	0.2 (0.3)	0.9 (1.4)	21.0	997	0.58	ND	5	ND	0.98	13.60	top of cover	
WS2650	ND	0.3 (0.7)	21.2	997	0.46	ND	5	ND	1.34	5.78	top of cover	
WS3090	0.6 (1.1)	3.2 (4.2)	18.4	997	9.03	ND	2	0.2	0.63	6.10	top of cover	
BH2350	ND	ND	21.5	997	0.53	1	4	0.7	1.02	6.72	top of cover	
BH2352	2.8	ND	20.7	998	0.30	1	5	0.9	0.66	7.09	top of cover	
WS3086	7.3	5.7	15.9	996	5.70	ND	3	ND	0.28	6.15	top of cover	
WS2645	ND	ND	21.3	996	2.67	1	4	ND	0.83	6.11	top of cover	
Calibration							Comments: Calibration checks within tolerance limits WS3086 : Water entered pipe before gas readings stabilised.					
Standard gas	5%	5%	6%	see sheet no.:								
Pre-cal	5.2	4.9	5.6									
Calibrated?	Y	Y	Y									

Daily Groundwater Sampling Record

Sheet 1 of 3

BAE SYSTEMS

Site:	Bishopton	Date:	12/01/09	Weather:	Broken cloud, cold
Proj. No.:	B0060/00	Name(s):	KI & CON		

Borehole		BH2586	BH2269	BH2584	BH2583	BH2265	BH2264	BH2262	BH2263	
Pre-purge	GW level (m.bgl)	0.50	1.35	1.05	1.27	0.88	0.73	1.11	0.50	
	BH Base (m.bgl)	6.44	4.55	6.88	4.35	7.44	10.90	7.11	7.38	
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	
	Water column (m)	5.9	3.2	5.8	3.1	6.6	10.2	6.0	6.9	
	1 well vol. (l)	11.9	6.4	11.7	6.2	13.1	20.3	12.0	13.8	
	3 well vols. (l)	35.6	19.2	35.0	18.5	39.4	61.0	36.0	41.3	
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	PP1	PP1	
	Vol. Removed (l)	36	20	28	20	40	61	16	42	
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	
	Temp (°C)	9.3	8.9	9.7	6.1	7.6	9.8	7.3	9.1	
	pH	5.25	5.26	5.86	4.41	9.45	7.82	7.02	4.91	
	Eh (mV)	-4	-41	-48	184	-22	-194	-34	57	
	EC (µS/cm)	800.0	616	553	284	1505	501	626	554.0	
	DO ₂ (mg/l)	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	
	Colour	Grey-Brown	Light Brown	Dark Grey-brown	Brown	Brown	Dark Brown	Grey-Brown	Brown	
	Turbidity	High	Medium	Medium-High	Low	Medium	High	High	High	
	Odour	Sulphurous	-	-	-	*	Sulphurous	-	Sulphurous	
	Other	-	-	Pumped Dry	-	-	-	Pumped Dry	-	
Comments:	BH2265 - Unidentifiable fishy/rubbery odour that quickly dispersed from the sample.	Calibration	Standard	Equipment calibrated to standard						
		EC	1413 µS/cm	yes	∅					
		pH	4.01 / 7.01	yes	∅					
		DO ₂	100%	yes	∅					

Daily Groundwater Sampling Record

Sheet 2 of 3

BAE SYSTEMS

Site:	Bishopton	Date:	12/01/09	Weather:	Broken cloud, cold
Proj. No.:	B0060/00	Name(s):	KI & CON		

Borehole		BH2413	BH2643	WS3087	BH2651	WS2650	WS3090	BH2350	BH2352
Pre-purge	GW level (m.bgl)	0.59	0.50	1.50	0.98	1.34	0.63	1.02	0.66
	BH Base (m.bgl)	7.30	7.29	6.10	13.60	5.78	6.10	6.72	7.09
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	6.7	6.8	4.6	12.6	4.4	5.5	5.7	6.4
	1 well vol. (l)	13.4	13.6	9.2	25.2	8.9	10.9	11.4	12.9
	3 well vols. (l)	40.3	40.7	27.6	75.7	26.6	32.8	34.2	38.6
Purge	Method	PP1	PP1	PP1	PP1	Hand	Hand	PP1	PP1
	Vol. Removed (l)	26	24	8	76	8	11	26	21
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	8.7	9.1	9.2	9.6	9.6	9.3	8.4	8.2
	pH	6.14	5.68	4.54	5.52	5.82	5.40	5.46	5.25
	Eh (mV)	-43	-30	40	-29	-55	220	52	-26
	EC (µS/cm)	767	500	1821	769	1271	1285	1091	1390.0
	DO ₂ (mg/l)	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction
	Colour	Grey-Brown	Dark Brown	Brown	Lgihht Brown	Dark Brown	Grey-Brown	Brown	Dark Grey
	Turbidity	High	Medium High	High	Medium High	High	High	High	High
	Odour	Sulphurous	-	-	Slightly sulphurous	-	-	Sulphurous	Slightly sulphurous
	Other	Pumped Dry	Pumped Dry	Pumped Dry	-	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 3 of 3

BAE SYSTEMS

Site:	Bishopton	Date:	12/01/09	Weather:	Broken cloud, cold
Proj. No.:	B0060/00	Name(s):	KI & CON		

Borehole		WS3086	WS2645						
Pre-purge	GW level (m.bgl)	0.28	0.83						
	BH Base (m.bgl)	6.15	6.11						
	Datum	Top of cover	Top of cover						
	Water column (m)	5.9	5.3						
	1 well vol. (l)	11.7	10.6						
	3 well vols. (l)	35.2	31.7						
Purge	Method	Hand	Hand						
	Vol. Removed (l)	12	30						
Sample	Method	Bailer	Bailer						
	Temp (°C)	8.5	8.6						
	pH	5.27	4.93						
	Eh (mV)	29	-9						
	EC (µS/cm)	1183	936						
	DO ₂ (mg/l)	Malfunction	Malfunction						
	Colour	Grey-Brown	Brown						
	Turbidity	High	V. High						
	Odour	-	-						
	Other	Pumped Dry	* See comments						
Comments:		* WS2645: Pumped dry - quick audible recharge, then slow recharge			Calibration	Standard	Equipment calibrated to standard		
					EC	1413 µS/cm	yes	∅	
					pH	4.01 / 7.01	yes	∅	
					DO ₂	100%	yes	∅	

Daily Groundwater Sampling Record

Sheet 1 of 1

BAE SYSTEMS

Site:	Bishopton	Date:	13/01/09	Weather:	Sunny with some showers
Proj. No.:	B0060/00	Name(s):	KI & CON		

Borehole		BH2355	BH3085	BH2680	BH2673				
Pre-purge	GW level (m.bgl)	0.47	0.85	2.00	0.75				
	BH Base (m.bgl)	7.20	7.05	7.00	7.20				
	Datum	Top of cover	Top of cover	Top of cover	Top of cover				
	Water column (m)	6.7	6.2	5.0	6.5				
	1 well vol. (l)	13.5	12.4	10.0	12.9				
	3 well vols. (l)	40.4	37.2	30.0	38.7				
Purge	Method	PP1	PP1	PP1	PP1				
	Vol. Removed (l)	18	12	26	13				
Sample	Method	Bailer	Bailer	Bailer	Bailer				
	Temp (°C)	8.2	8.6	9.3	6.8				
	pH	6.04	5.78	6.45	5.62				
	Eh (mV)	-15	-37	-110	190				
	EC (µS/cm)	948.0	1541	2062	1030				
	DO ₂ (mg/l)	Malfunction	Malfunction	Malfunction	Malfunction				
	Colour	Brown	Grey-Brown	Dark Grey	Grey-Brown				
	Turbidity	High	High	High	High				
	Odour	-	-	Slightly Sulphurous	-				
	Other	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry				
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Gas Monitoring Record

Sheet 1 of 1



Site:	Bishopton	Date:	19/01/09	Weather:	Overcast then bright, then snow, mild then cold
Proj. No.:	B0060/00	Name(s):	KI & CON	Equipment:	GA2000 (serial no.GA07888) GF60 (serial no.3316)

(Peak readings shown in brackets)

BH ref	CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	Ba. Pr. (mbar)	Rel. Pr. (mbar)	H ₂ S (ppm)	CO (ppm)	Flow (l/hr)	GW level (m)	BH Base (m)	Datum	Comments
WS3091	0.4	1.5	19.5	965	0.90	ND	ND	ND	0.40	4.81	top of cover	Water entered pipe
WS2646	2.9	2.3	19.6	964	0.00	ND	ND	ND	0.46	3.74	top of cover	Water entered pipe
WS3092	0.3	1	20.1	964	0.29	ND	ND	ND	0.54	3.62	top of cover	Water entered pipe
WS3093	0.7 (0.8)	2.3 (2.9)	19.3	964	0.57	ND	ND	ND	0.30	4.90	top of cover	
WS2649	2.8	6.6	18.2	963	5.39	ND	ND	ND	0.59	5.12	top of cover	
WS3094	ND	0.3 (0.4)	20.4	963	0.29	ND	ND	ND	0.56	4.96	top of cover	
BH2648	0.1	1.8	20.1	963	0.68	ND	ND	ND	0.90	15.30	top of cover	
BH2652	ND	0.2 (0.3)	20.4	963	0.23	ND	ND	ND	1.10	40.00	top of cover	
WS2647	ND	0.3	20.5	963	0.45	ND	ND	ND	0.49	5.02	top of cover	
WS3102	ND	0.3	20.3	964	2.83	ND	ND	ND	1.10	3.75	top of cover	
Calibration						Comments: Calibration checks within tolerance limits						
Standard gas	5%	5%	6%	see sheet no.:								
Pre-cal	5.1	4.9	5.8									
Calibrated?	Y	Y	Y									

Daily Groundwater Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	19/01/09	Weather:	Overcast, snow showers
Proj. No.:	B0060/00	Name(s):	KI & CON		

Borehole		WS3091	WS2646	WS3092	WS3093	WS2649	WS3094	BH2652	WS2647
Pre-purge	GW level (m.bgl)	0.40	0.46	0.54	0.30	0.59	0.56	1.10	0.49
	BH Base (m.bgl)	4.81	3.74	3.62	4.90	5.12	4.96	40.00	5.02
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	4.4	3.3	3.1	4.6	4.5	4.4	38.9	4.5
	1 well vol. (l)	2.2	1.6	1.5	2.3	2.3	2.2	77.8	2.3
	3 well vols. (l)	6.6	4.9	4.6	6.9	6.8	6.6	233.4	6.8
Purge	Method	Hand	Hand	Hand	Hand	Hand	Hand	PP1	Hand
	Vol. Removed (l)	6	3	4	7	3	3	240	6
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	6.7	6.9	6.5	7.3	6.5	6.9	9.1	7.0
	pH	5.34	4.61	4.12	6.13	5.96	5.90	7.50	4.37
	Eh (mV)	67	52	58	925	652	636	1155	68
	EC (µS/cm)	134.0	105	113	1843	1304	1251	2311	131.0
	DO ₂ (mg/l)	4.7	8.2	10.4	17.6	15.2	16.2	15.9	14.7
	Colour	Brown	Peaty Brown	Peaty Brown	Peaty Brown	Dark Brown	Peaty Brown	Brown	Peaty Brown
	Turbidity	High	Low-Med	Low-Med	Low-Med	Medium	Low-Med	Medium	Low-Med
	Odour	-	-	-	-	-	Slightly sulphurous	-	Slightly sulphurous
	Other	Pumped Dry, Recharged	Pumped Dry	Pumped Dry	Pumped Dry, Recharged	Pumped Dry	Pumped Dry	-	Pumped Dry
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 2 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	19/01/09	Weather:	Overcast, snow showers
Proj. No.:	B0060/00	Name(s):	KI & CON		

Borehole		WS3102							
Pre-purge	GW level (m.bgl)	1.10							
	BH Base (m.bgl)	3.75							
	Datum	Top of cover							
	Water column (m)	2.7							
	1 well vol. (l)	5.3							
	3 well vols. (l)	15.9							
Purge	Method	Hand							
	Vol. Removed (l)	6							
Sample	Method	Bailer							
	Temp (°C)	7.0							
	pH	4.37							
	Eh (mV)	68							
	EC (µS/cm)	131.0							
	DO ₂ (mg/l)	9.6							
	Colour	Brown							
	Turbidity	Med-High							
	Odour	-							
	Other	Pumped Dry							
Comments:					Calibration	Standard	Equipment calibrated to standard		
					EC	1413 µS/cm	yes	∅	
					pH	4.01 / 7.01	yes	∅	
					DO ₂	100%	yes	∅	

Daily Gas Monitoring Record

Sheet 1 of 1

a b c d

Site:	Bishopton	Date:	20/01/09	Weather:	Cold, snow and sleet showers
Proj. No.:	B0060/00	Name(s):	NA, CON	Serial No.:	GA05091 (GA2000) / GA178 (GA 90 MK2)

BH ref	CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	Ba. Pr. (mbar)	Rel. Pr. (mbar)	H ₂ S (ppm)	CO (ppm)	Flow (l/hr)	GW level (m)	BH Base (m)	Datum	Comments
BH2667	0 (0.1)	ND	21.0 (20.7)	975	1.12	ND	1	ND	0.99	6.33	top of cover	
BH2681	2.1 (74.1)	ND	18.3 (3.8)	975	1.05	ND	ND	ND	1.56	24.25	top of cover	
BH2683	0 (0.1)	ND	20.9 (19.7)	975	1.02	ND	ND	ND	4.16	23.23	top of cover	
BH2682	3.6 (34.0)	0.2 (0.6)	18.8 (11.3)	976	2.44	ND	2 (3)	ND	0.65	40.45	top of cover	
BH2678	0.2	2.2 (1.0)	20.8 (18.5)	976	1.17	ND	ND	ND	1.02	7.30	top of cover	
BH3084	ND	0.3 (0.1)	20.8 (21.1)	976	1.28	ND	ND	ND	0.90	7.15	top of cover	
BH2533	ND	0.3 (0.9)	20.8	976	2.11	ND	ND	0.1	0.59	5.32	top of cover	
BH2353	ND	0.2 (0.7)	20.6	976	1.25	ND	ND	ND	0.39	14.15	top of cover	
BH2348	ND	0.9 (1.2)	20.8 (21.0)	977	0.22	ND	ND	ND	1.65	5.38	top of cover	
BH2354	2.5 (2.6)	0.3 (0.4)	20.7 (20.3)	977	1.13	ND	ND	ND	1.37	6.05	top of cover	
BH2531	ND	0.4 (0.6)	20.9 (20.0)	977	1.04	ND	ND	ND	1.85	7.10	top of cover	
BH2666	0.0 (0.2)	1.4 (3.6)	20.7 (19.8)	977	3.92	ND	ND	ND	1.59	5.77	top of cover	
BH2532	ND	0.3 (0.4)	21.2 (21.1)	977	1.18	ND	ND	ND	1.02	7.19	top of cover	

Calibration					Comments: Calibration checks within tolerance limits							
Standard gas	5%	5%	6%	see sheet no.:								
Pre-cal	5.2	5.2	5.9									
Calibrated?	Y	Y	Y									

Daily Groundwater Sampling Record

Sheet 1 of 2

a b c d

Site:	Bishopton	Date:	20/01/09	Weather:	Cold, snow and sleet showers
Proj. No.:	B0060/00	Name(s):	NA, CON		

Borehole		BH2667	BH2681	BH2683	BH2682	BH2678	BH3084	BH2533	BH2353
Pre-purge	GW level (m.bgl)	0.99	1.56	4.16	0.65	1.02	0.9	0.59	0.39
	BH Base (m.bgl)	6.33	24.25	23.23	40.45	7.3	7.15	5.52	14.15
	Datum	COVER	COVER	COVER	COVER	COVER	COVER	COVER	COVER
	Water column (m)	5.34	22.69	19.07	39.8	6.28	6.25	4.93	13.76
	1 well vol. (l)	10.68	45.38	38.14	79.6	12.56	12.5	9.86	27.52
	3 well vols. (l)	32.04	136.14	114.42	238.8	37.68	37.5	29.58	82.56
Purge	Method	Waterra	Waterra	Waterra	Waterra	Waterra	Waterra	Waterra	Waterra
	Vol. Removed (l)	28	55	115	158	14	14	25	80
Insitu Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	6.9	5.1	8.2	7.8	7.4	7.6	7.5	7.9
	pH	8.83	8.23	8.19	7.91	7.36	7.18	7.83	7.35
	Eh (mV)	149	-60	-80	-67	-55	-27	-71	-63
	EC (µS/cm)	776	2301	1716	1181	1523	1133	369	905
	DO ₂ (mg/l)	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction
	Colour	V. Dark Grey	Dark Brown	Dark Brown	Dark Brown	Grey	Grey	Dark Brown	Dark Brown
	Turbidity	High	High	High	High	Medium	High	High	High
	Odour	-	-	-	-	Organic	-	Slight organic	Slight organic
	Other	-	-	-	-	-	-	-	-
Comments:	BH2667, BH2681, BH2682, BH2678 all purged dry.					Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	no
						pH	4.01 / 7.01	yes	no
						DO ₂	100%	yes	no

Daily Groundwater Sampling Record

Sheet 2 of 2

a b c d

Site:	Bishopton	Date:	20/01/2009	Weather:	Cold, snow and sleet showers
Proj. No.:	B0060/00	Name(s):	NA, CON		

Borehole		BH2348	BH2354	BH2531	BH2666	BH2532			
Pre-purge	GW level (m.bgl)	1.65	1.37	1.85	1.59	1.02			
	BH Base (m.bgl)	5.38	6.85	7.1	5.77	7.19			
	Datum	COVER	COVER	COVER	COVER	COVER			
	Water column (m)	3.73	5.48	5.25	4.18	6.17			
	1 well vol. (l)	7.46	10.96	10.5	8.36	12.34			
	3 well vols. (l)	22.38	32.88	31.5	25.08	37.02			
Purge	Method	Waterra	Waterra	Waterra	Waterra	Waterra			
	Vol. Removed (l)	22	16	26	20	38			
Insitu Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer			
	Temp (°C)	8.2	7.5	8.1	7.7	6.9			
	pH	7.35	7.28	7.18	6.81	5.89			
	Eh (mV)	-47	-62	-15	-40	10			
	EC (µS/cm)	2597	2316	605	320	173			
	DO ₂ (mg/l)	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction			
	Colour	Brown	Brown	Brown	Grey	Brown			
	Turbidity	High	High	High	High	High			
	Odour	-	slight organic	slight organic	-	-			
	Other	-	-	-	-	-			
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	no
						pH	4.01 / 7.01	yes	no
						DO ₂	100%	yes	no

Daily Groundwater Sampling Record

Sheet 1 of 1

BAE SYSTEMS

Site:	Bishopton	Date:	20/01/09	Weather:	Broken cloud, showers, mild
Proj. No.:	B0060/00	Name(s):	KI & PM		

Borehole		WS3101	WS3096	WS3097				
Pre-purge	GW level (m.bgl)	0.75	1	1.17				
	BH Base (m.bgl)	2.75	4.5	3.13				
	Datum	Top of cover	Top of cover	Top of cover				
	Water column (m)	2.0	3.5	2.0				
	1 well vol. (l)	4.0	7.0	3.9				
	3 well vols. (l)	12.0	21.0	11.8				
Purge	Method	Hand	Hand	Hand				
	Vol. Removed (l)	10	18	12				
Sample	Method	Bailer	Bailer	Bailer				
	Temp (°C)	5.5	5.8	5.5				
	pH	7.49	7.55	7.06				
	Eh (mV)	116	115	214				
	EC (µS/cm)	236	230	429				
	DO ₂ (mg/l)	4.8	14.6	13.9				
	Colour	Brown	Brown	Brown				
	Turbidity	V.High	V.High	High				
	Odour	-	-	-				
	Other	Pumped Dry	Pumped Dry	Pumped Dry				
Comments:					Calibration	Standard	Equipment calibrated to standard	
					EC	1413 µS/cm	yes	∅
					pH	4.01 / 7.01	yes	∅
					DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 1 of 1

BAE SYSTEMS

Site:	Bishopton	Date:	21/01/09	Weather:	Broken cloud, sleet showers, cold
Proj. No.:	B0060/00	Name(s):	NA, CON		

Borehole		BH2269	BH2584	BH2585	BH2587	BH2588	BH2198	BH2635	
Pre-purge	GW level (m.bgl)	1.47	1.21	0.06	1.60	1.05	1.33	0.96	
	BH Base (m.bgl)	4.45	6.85	6.99	6.39	7.06	5.10	6.82	
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	
	Water column (m)	3.0	5.6	6.9	4.8	6.0	3.8	5.9	
	1 well vol. (l)	6.0	11.3	13.9	9.6	12.0	7.5	11.7	
	3 well vols. (l)	17.9	33.8	41.6	28.7	36.1	22.6	35.2	
Purge	Method	Waterra	Waterra	Waterra	Waterra	Waterra	Waterra	Waterra	
	Vol. Removed (l)	18	29	42	30	28	22	16	
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	
	Temp (°C)	7.0	8.2	9.7	7.1	8.4	8.2	7.5	
	pH	7.14	7.25	7.22	7.04	6.71	6.38	6.34	
	Eh (mV)	-35	-69	-32	-68	-11	28	-24	
	EC (µS/cm)	422	368	230.8	248.4	448	2527	500	
	DO ₂ (mg/l)	13.41	11.62	7.62	9.48	11.57	11.49	10.56	
	Colour	Brown	Dark Brown	Brown	Dark Brown	Brown	Brown	Brown	
	Turbidity	Medium	High	High	High	High	High	High	
	Odour	-	-	-	-	-	-	-	
	Other	-	Pumped Dry	-	-	-	-	Pumped Dry	
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 1 of 1

BAE SYSTEMS

Site:	Bishopton	Date:	21/01/09	Weather:	Broken cloud, sleet showers, cold
Proj. No.:	B0060/00	Name(s):	KI & PM		

Borehole		WS3095	WS3099	BH2380	BH2537				
Pre-purge	GW level (m.bgl)	1.75	0.35	1.30	0.55				
	BH Base (m.bgl)	3.20	2.53	40.00	21.45				
	Datum	Top of cover	Top of cover	Top of cover	Top of cover				
	Water column (m)	1.5	2.2	38.7	20.9				
	1 well vol. (l)	2.9	4.4	77.4	41.8				
	3 well vols. (l)	8.7	13.1	232.2	125.4				
Purge	Method	Hand	Hand	PP1	PP1				
	Vol. Removed (l)	5	14	235	126				
Sample	Method	Bailer	Bailer	Bailer	Bailer				
	Temp (°C)	5.2	4.5	8.5	8.2				
	pH	7.40	7.19	8.61	8.38				
	Eh (mV)	138	118	392	476				
	EC (µS/cm)	279	238	785	951				
	DO ₂ (mg/l)	14.10	18.70	10.90	12.80				
	Colour	Brown	Brown	Dark Brown	Brown				
	Turbidity	High	Medium	Medium	V. High				
	Odour	-	-	-	-				
	Other	Pumped Dry	LNAPL	-	-				
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Gas Monitoring Record

Sheet 1 of 1



Site:	Bishopton	Date:	26/01/09	Weather:	Broken cloud, cold
Proj. No.:	B0060/00	Name(s):	NA, CON	Equipment:	GA2000 (serial no.GA07888) GF60 (serial no.3316)

(Peak readings shown in brackets)

BH ref	CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	Ba. Pr. (mbar)	Rel. Pr. (mbar)	H ₂ S (ppm)	CO (ppm)	Flow (l/hr)	GW level (m)	BH Base (m)	Datum	Comments
BH2636	ND	ND	21.0 (20.8)	997	0.91	ND	ND	ND	0.78	6.84	top of cover	
BH2379	-	-	-	-	-	-	-	ND	0.34	14.53	top of cover	Pipe full of water
BH2266	0.3 (0.5)	2.7	19.4 (16.6)	996	8.94	ND	ND	-0.2	1.40	6.90	top of cover	
BH2261	-	-	-	-	-	-	-	ND	0.12	7.13	top of cover	Pipe full of water
BH2662	ND	1.5 (2.1)	19.5	995	1.27	ND	ND	ND	1.52	7.00	top of cover	
BH2003	ND	2.5 (2.6)	20.3 (20.2)	996	2.58	ND	ND	0.2 (0.6)	1.02	3.78	top of cover	
BH2663	ND	0.2 (0.5)	19.5 (19.2)	994	1.48	ND	ND	ND	1.11	7.09	top of cover	
BH2725	ND	ND	21.1	995	1.48	ND	ND	ND	2.08	6.55	top of cover	
BH2091	ND	0.5	18.0 (17.3)	997	0.98	ND	ND	ND	0.65	6.26	top of cover	
BH2092	ND	ND	20.7 (20.4)	998	1.09	ND	ND	ND	2.41	3.39	top of cover	
BH2093	ND	0.0 (0.8)	20.7	998	0.81	0 (1)	0 (2)	ND	1.17	5.58	top of cover	
BH2583	ND	ND	21.2	998	1.19	ND	0 (1)	ND	1.28	4.36	top of cover	
BH2259	ND	0.0 (1.1)	20.8	999	0.95	ND	0 (1)	-0.1	1.82	5.84	top of cover	
BH2260	ND	1.9	21.0 (20.8)	999	1.47	ND	ND	ND	0.75	7.01	top of cover	
BH2001	0.0 (1.4)	0.0 (4.1)	20.1 (19.2)	999	-2.87	ND	0 (1)	ND	0.94	7.01	top of cover	
BH2263	ND	0.7 (0.4)	21.1 (21.0)	999	0.03	ND	ND	ND	0.70	7.3	top of cover	
BH2002	-	-	-	-	-	-	-	-	0.00	5.95	top of cover	Water at top of headworks
BH2268	0.5	2.7 (2.8)	20.4 (20.0)	1000	0.76	ND	ND	ND	1.66	6.91	top of cover	
BH2265	ND	ND	21.2	999	0.86	ND	ND	ND	1.14	7.36	top of cover	

Calibration						Comments: Calibration checks within tolerance limits						
Standard gas	5%	5%	6%	see sheet no.:								
Pre-cal	5.1	4.9	5.8									
Calibrated?	N	N	N									

Daily Groundwater Sampling Record

Sheet 1 of 3

BAE SYSTEMS

Site:	Bishopton	Date:	26/01/09	Weather:	Broken cloud, cold
Proj. No.:	B0060/00	Name(s):	NA, CON		

Borehole		BH2636	BH2379	BH2266	BH2261	BH2662	BH2003	BH2663	BH2725
Pre-purge	GW level (m.bgl)	0.78	0.34	1.40	0.12	1.52	1.02	1.11	2.08
	BH Base (m.bgl)	6.84	14.53	6.90	7.13	7.13	3.78	7.09	6.55
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	6.1	14.2	5.5	7.0	5.6	2.8	6.0	4.5
	1 well vol. (l)	12.1	28.4	11.0	14.0	11.2	5.5	12.0	8.9
	3 well vols. (l)	36.4	85.1	33.0	42.1	33.7	16.6	35.9	26.8
Purge	Method	Waterra	Waterra	Waterra	Waterra	Waterra	Waterra	Waterra	Waterra
	Vol. Removed (l)	12	85	33	42	14	16	26	23
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	8.1	8.6	8.1	8.6	6.8	6.5	8.0	8.6
	pH	4.77	4.82	5.02	5.03	4.97	5.83	5.46	4.59
	Eh (mV)	29	2	86	116	134	273	303	354
	EC (µS/cm)	655	1195	165.9	146.7	2197	257.4	800	947
	DO ₂ (mg/l)	1.20	2.25	2.50	1.16	2.20	2.37	0.26	0.42
	Colour	Dark Brown	Dark Brown	Brown / Grey	Brown	Brown	Brown	Brown	Brown
	Turbidity	High	Medium	High	High	High	-	Medium	Medium
	Odour	-	Organic	-	-	-	-	-	-
	Other	Purged Dry	-	-	-	Purged Dry	-	Purged Dry	Purged Dry
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 2 of 3

BAE SYSTEMS

Site:	Bishopton	Date:	26/01/09	Weather:	Broken cloud, cold
Proj. No.:	B0060/00	Name(s):	NA & CON		

Borehole		BH2091	BH2092	BH2093	BH2583	BH2259	BH2260	BH2001	BH2263
Pre-purge	GW level (m.bgl)	0.65	2.41	1.17	1.28	1.82	0.75	0.94	0.71
	BH Base (m.bgl)	2.26	3.39	5.58	4.36	5.36	7.01	7.01	7.30
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	1.6	1.0	4.4	3.1	3.5	6.3	6.1	6.6
	1 well vol. (l)	3.2	2.0	8.8	6.2	7.1	12.5	12.1	13.2
	3 well vols. (l)	9.7	5.9	26.5	18.5	21.2	37.6	36.4	39.5
Purge	Method	Waterra	Waterra	Waterra	Waterra	Waterra	Waterra	Waterra	Waterra
	Vol. Removed (l)	10	5	26	20	16	38	38	32
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	8.2	7.2	7.8	8.2	7.3	8.1	8.0	8.2
	pH	4.96	5.02	4.97	6.88	6.12	6.39	6.76	6.84
	Eh (mV)	85	125	132	305	305	83	25	-19
	EC (µS/cm)	831	554	373	820	854	840	984	833
	DO ₂ (mg/l)	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction
	Colour	Brown	Brown	Brown	Brown	Brown	Brown	Brown	Grey
	Turbidity	Medium	Medium	High	Medium	Medium	-	Medium	High
	Odour	-	-	-	-	-	Sulphurous	Sulphurous	-
	Other	-	-	Slight oily sheen	-	-	-	-	-
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 3 of 3

BAE SYSTEMS

Site:	Bishopton	Date:	26/01/09	Weather:	Broken cloud, cold
Proj. No.:	B0060/00	Name(s):	NA & CON		

Borehole		BH2002	BH2268	BH2265				
Pre-purge	GW level (m.bgl)	0.00	1.66	1.14				
	BH Base (m.bgl)	5.95	6.91	7.36				
	Datum	Top of cover	Top of cover	Top of cover				
	Water column (m)	6.0	5.3	6.2				
	1 well vol. (l)	11.9	10.5	12.4				
	3 well vols. (l)	35.7	31.5	37.3				
Purge	Method	Waterra	Waterra	Waterra				
	Vol. Removed (l)	50	32	38				
Sample	Method	Bailer	Bailer	Bailer				
	Temp (°C)	7.1	8.0	7.3				
	pH	7.20	778.00	6.30				
	Eh (mV)	51	187	-38				
	EC (µS/cm)	379	471	1403				
	DO ₂ (mg/l)	4.02	4.11	3.94				
	Colour	Dark Brown	Grey	Brown				
	Turbidity	High	Very High	High				
	Odour	-	-	-				
	Other	-	-	Slight Acetone				
Comments:					Calibration	Standard	Equipment calibrated to standard	
					EC	1413 µS/cm	yes	∅
					pH	4.01 / 7.01	yes	∅
					DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 1 of 1

BAE SYSTEMS

Site:	Bishopton	Date:	26/01/09	Weather:	Broken cloud, cold
Proj. No.:	B0060/00	Name(s):	KI & PM		

Borehole		BH2356	BH2652	BH2679	BH2677	BH2678	BH3084		
Pre-purge	GW level (m.bgl)	0.00	2.05	2.46	0.90	3.90	1.20		
	BH Base (m.bgl)	40.00	40.00	8.92	7.55	7.40	7.20		
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover		
	Water column (m)	40.0	38.0	6.5	6.7	3.5	6.0		
	1 well vol. (l)	80.0	75.9	12.9	13.3	7.0	12.0		
	3 well vols. (l)	240.0	227.7	38.8	39.9	21.0	36.0		
Purge	Method	PP1	PP1	PP1	PP1	Hand	Hand		
	Vol. Removed (l)	240	230	16	20	6	12		
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer		
	Temp (°C)	8.4	8.9	8.6	7.6	8.3	8.3		
	pH	5.35	5.63	4.34	5.39	5.36	7.53		
	Eh (mV)	97	56	301	78	78	316		
	EC (µS/cm)	514	1614	1438	283.7	1509	519		
	DO ₂ (mg/l)	1.70	2.93	6.44	7.62	9.54	11.26		
	Colour	Brown	Brown	Dark Brown	Dark Brown	Grey Brown	Grey Brown		
	Turbidity	Low	Medium	Medium	High	Medium	High		
	Odour	Sulphurous	-	-	Slightly sulphurous	-	-		
	Other	Artesian	-	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry		
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	27/01/09	Weather:	Light showers
Proj. No.:	B0060/00	Name(s):	JM & CON		

Borehole		BH2267	BH2264	BH2262	BH2041	BH2349	BH2351	BH2534	BH2535
Pre-purge	GW level (m.bgl)	1.20	0.71	1.26	0.84	1.23	0.53	0.50	1.90
	BH Base (m.bgl)	7.26	10.65	6.89	6.94	6.58	6.59	6.52	6.71
	Datum	Top of Cover	Top of Cover	Top of Cover	Top of Cover	Top of Cover	Top of Cover	Top of cover	Top of Cover
	Water column (m)	6.06	9.94	5.72	6.10	5.35	5.95	6.02	4.81
	1 well vol. (l)	12.12	19.88	11.44	12.20	10.70	11.90	12.04	9.62
	3 well vols. (l)	36.36	59.64	34.32	36.60	32.10	35.70	36.12	28.86
Purge	Method	Waterra	Waterra	Waterra	Waterra	Waterra	Waterra	Waterra	Waterra
	Vol. Removed (l)	36	60	14	36	12	36	14	30
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	8.0	8.5	7.8	8.3	8.2	8.0	8.4	7.5
	pH	6.77	5.56	4.81	5.34	7.34	5.18	7.1	4.1
	Eh (mV)	-75	44	64	71	306	307	168	219
	EC (µS/cm)	781	647	636	715	569	515	977	574.0
	DO ₂ (mg/l)	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction
	Colour	Dark Grey	Dark Brown	Grey	Brown	Brown / Grey	Dark Brown	Brown	Dark Brown
	Turbidity	High	High	High	Medium	Medium	High	High	High
	Odour	-	-	-	-	-	Slightly Organic	-	-
	Other	-	-	Pumped Dry	-	Pumped Dry	-	-	-
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 2 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	27/01/09	Weather:	Overcast am, with light showers pm
Proj. No.:	B0060/00	Name(s):	NA & CON		

Borehole		BH2530	BH2529						
Pre-purge	GW level (m.bgl)	0.64	1.53						
	BH Base (m.bgl)	6.87	7.03						
	Datum	Top of cover	Top of cover						
	Water column (m)	6.23	5.50						
	1 well vol. (l)	12.46	11.00						
	3 well vols. (l)	37.38	33.00						
Purge	Method	Waterra	Waterra						
	Vol. Removed (l)	30	12						
Sample	Method	Bailer	Bailer						
	Temp (°C)	7.8	7.6						
	pH	7.52	5.54						
	Eh (mV)	-1	107						
	EC (µS/cm)	840	462						
	DO ₂ (mg/l)	Malfunction	Malfunction						
	Colour	Brown	Grey						
	Turbidity	High	High						
	Odour	-	Organic						
	Other	Pumped Dry	-						
Comments:					Calibration	Standard	Equipment calibrated to standard		
					EC	1413 µS/cm	yes	∅	
					pH	4.01 / 7.01	yes	∅	
					DO ₂	100%	yes	∅	

Daily Groundwater Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	27/01/09	Weather:	Cloudy, mild, showers
Proj. No.:	B0060/00	Name(s):	KI, PM		

Borehole		BH2355	BH3085	BH2680	BH2676	BH2675	BH2673	BH2672	BH2670
Pre-purge	GW level (m.bgl)	0.58	0.95	3.80	1.55	1.15	0.78	0.90	1.55
	BH Base (m.bgl)	7.32	5.90	14.85	7.25	6.95	7.08	6.90	7.25
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	6.7	5.0	11.1	5.7	5.8	6.3	6.0	5.7
	1 well vol. (l)	13.5	9.9	22.1	11.4	11.6	12.6	12.0	11.4
	3 well vols. (l)	40.4	29.7	66.3	34.2	34.8	37.8	36.0	34.2
Purge	Method	PP1	HAND	PP1	PP1	PP1	PP1	PP1	PP1
	Vol. Removed (l)	16	12	19	33	23	15	12	28
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	7.5	8.2	9.2	8.8	8.3	6.3	7.9	8.7
	pH	5.91	5.54	5.80	6.07	7	7.30	3.20	5.79
	Eh (mV)	12	88	25	76	-24	48	240	73
	EC (µS/cm)	648	955	1573	972	937	944	2155	821
	DO ₂ (mg/l)	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction
	Colour	Dark Brown	Dark Brown	Dark Brown	Dark Grey-Brown	Dark Grey-Brown	Dark Brown	Dark Brown	Dark Grey-Brown
	Turbidity	High	Medium	High	High	High	V. High	V. High-Med	High
	Odour	-	Sulphurous	-	Sulphurous	-	-	-	-
	Other	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 2 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	27/01/09	Weather:	Cloudy, mild, showers
Proj. No.:	B0060/00	Name(s):	KI, PM		

Borehole		BH2671	BH2668	BH2669	BH2674				
Pre-purge	GW level (m.bgl)	1.25	0.85	0.40	1.17				
	BH Base (m.bgl)	6.75	7.25	7.10	7.17				
	Datum	Top of cover	Top of cover	Top of cover	Top of cover				
	Water column (m)	5.5	6.4	6.7	6.0				
	1 well vol. (l)	11.0	12.8	13.4	12.0				
	3 well vols. (l)	33.0	38.4	40.2	36.0				
Purge	Method	PP1	PP1	PP1	PP1				
	Vol. Removed (l)	33	30	23	36				
Sample	Method	Bailer	Bailer	Bailer	Bailer				
	Temp (°C)	7.5	8.4	8.1	7.6				
	pH	4.40	3.66	4.61	3.54				
	Eh (mV)	207	355	165	250				
	EC (µS/cm)	259.2	1857	1453	801				
	DO ₂ (mg/l)	Malfunction	Malfunction	Malfunction	Malfunction				
	Colour	Dark Grey-Brown	Dark Grey	Brown	Dark Grey-Brown				
	Turbidity	High	High	High	High				
	Odour	-	Sulphurous	Sulphurous	Sulphurous				
	Other	-	Pumped Dry	Pumped Dry	-				
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 1 of 1

BAE SYSTEMS

Site:	Bishopton	Date:	28/01/09	Weather:	Dry with sunny spells
Proj. No.:	B0060/00	Name(s):	NA, CON		

Borehole		BH2223	BH2528	BH2536	BH2477	BH2226			
Pre-purge	GW level (m.bgl)	1.80	2.82	2.06	1.15	1.58			
	BH Base (m.bgl)	23.78	20.32	40.82	5.35	6.77			
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover			
	Water column (m)	22.0	17.5	38.8	4.2	5.2			
	1 well vol. (l)	44.0	35.0	77.5	8.4	10.4			
	3 well vols. (l)	131.9	105.0	232.6	25.2	31.1			
Purge	Method	PP1	PP1	PP1	PP1	PP1			
	Vol. Removed (l)	70	68	75	18	32			
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer			
	Temp (°C)	8.1	7.7	8.3	7.5	8.1			
	pH	7.49	6.30	6.11	7.47	7.74			
	Eh (mV)	-25	45	92	126	23			
	EC (µS/cm)	175	1426	186	477	650			
	DO ₂ (mg/l)	5.02	7.10	14.61	9.32	3.42			
	Colour	Brown	Pale Brown	Dark Brown	Dark Brown	Brown			
	Turbidity	High	Medium	High	High	High			
	Odour	-	-	-	-	-			
	Other	Pumped Dry	Pumped Dry	Pumped Dry	-	-			
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Gas Monitoring Record

Sheet 1 of 2



Site:	Bishopton	Date:	29/01/09	Weather:	Cloudy, cold
Proj. No.:	B0060/00	Name(s):	KI, PM	Equipment:	GA2000 (serial no.GA07888) GF60 (serial no.3316)

(Peak readings shown in brackets)

BH ref	CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	Ba. Pr. (mbar)	Rel. Pr. (mbar)	H ₂ S (ppm)	CO (ppm)	Flow (l/hr)	GW level (m)	BH Base (m)	Datum	Comments
BH2091	ND	0.3	20.3	1005	0.31	ND	ND	0.2 (10.5)	0.63	6.32	top of cover	
WS3097	ND	0.3 (0.4)	20.4	1005	0.38	ND	ND	ND	1.39	3.13	top of cover	
BH2092	ND	1.4	15.6	1005	0.40	ND	ND	0.1	2.69	3.48	top of cover	
WS3096	ND	ND	20.5	1005	0.33	ND	ND	ND	1.18	4.50	top of cover	
WS3095	ND	1.2	18.9	1005	0.35	ND	ND	0.2	1.96	3.18	top of cover	
BH2093	ND	1.0 (1.2)	19.3	1005	0.34	ND	ND	0.4	1.27	5.67	top of cover	
WS3098	ND	0.5	20.0	1005	0.64	ND	ND	0.1	1.57	4.50	top of cover	Gas tap part open
BH2259	ND	0.4	20.4	1005	0.36	ND	ND	0.1	1.93	5.12	top of cover	
BH2260	ND	1.2	20.3	1005	0.55	ND	ND	ND	0.83	7.06	top of cover	
BH2001	0.1	1.1	20.1	1005	1.20	ND	ND	0 (12)	1.12	6.22	top of cover	
BH2263	ND	1.9	20.0	1005	0.20	ND	ND	-1.8	0.87	6.77	top of cover	
BH2261	-	-	-	-	-	-	-	-	0	7.24	top of cover	Artesian
BH2662	ND	0.5 (0.7)	19.9	1003	0.21	ND	ND	ND	1.77	6.21	top of cover	
BH2663	ND	0.2 (0.3)	20.3	1003	0.33	ND	ND	ND	1.27	6.36	top of cover	
BH2003	ND	0.6 (0.7)	20.1	1004	0.1	ND	ND	ND	1.07	3.9	top of cover	
WS3099	ND	0.2	20.5	1004	0.27	ND	ND	ND	0.71	2.53	top of cover	
BH2002	-	-	-	-	-	-	-	-	0	5.91	top of cover	Artesian
BH2265	ND	ND	20.4	1004	0.65	ND	ND	ND	1.3	7.5	top of cover	
BH2264	ND	0.1	20.4	1004	0.39	ND	ND	ND	0.8	10.79	top of cover	
BH2262	ND	0.8 (1.4)	16.6	1004	0.4	ND	ND	0.1	1.43	7.08	top of cover	

Calibration						Comments: Calibration checks within tolerance limits								
Standard gas			5%	5%	6%								see sheet no.: Dated 26/01/09	
Pre-cal														
Calibrated?			N	N	N									

Daily Groundwater Sampling Record

Sheet 1 of 1

BAE SYSTEMS

Site:	Bishopton	Date:	29/01/09	Weather:	Overcast, still, cold
Proj. No.:	B0060/00	Name(s):	NA, CON		

Borehole		BH2416	BH2348	BH2681				
Pre-purge	GW level (m.bgl)	1.45	1.68	1.92				
	BH Base (m.bgl)	22.47	5.77	24.23				
	Datum	Top of cover	Top of cover	Top of cover				
	Water column (m)	21.0	4.1	22.3				
	1 well vol. (l)	42.0	8.2	44.6				
	3 well vols. (l)	126.1	24.5	133.9				
Purge	Method	PP1	PP1	PP1				
	Vol. Removed (l)	127	25	80				
Sample	Method	Bailer	Bailer	-				
	Temp (°C)	8.9	7.6	-				
	pH	7.96	6.96	-				
	Eh (mV)	78	35	-				
	EC (µS/cm)	515	112	-				
	DO ₂ (mg/l)	1.50	0.65	-				
	Colour	Pale Brown	Brown	-				
	Turbidity	Medium	Medium	-				
	Odour	-	-	-				
	Other	-	-	-				
Comments:	BH2681 - purge volume not complete; foot valve continually blocking - only 80 litres purged.	Calibration	Standard	Equipment calibrated to standard				
		EC	1413 µS/cm	yes	⌘			
		pH	4.01 / 7.01	yes	⌘			
		DO ₂	100%	yes	⌘			

Daily Gas Monitoring Record

Sheet 1 of 1



Site:	Bishopton	Date:	02/02/09	Weather:	Cold with some heavy snow showers
Proj. No.:	B0060/00	Name(s):	NA, PM	Equipment:	GA2000 (serial no.GA07888) GF60 (serial no.3316)

(Peak readings shown in brackets)

BH ref	CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	Ba. Pr. (mbar)	Rel. Pr. (mbar)	H ₂ S (ppm)	CO (ppm)	Flow (l/hr)	GW level (m)	BH Base (m)	Datum	Comments
WS3100	ND	0.0 (0.3)	21.4 (21.1)	1012	0.76	ND	ND	-0.1	2.52	5.57	top of cover	
WS3098	ND	ND	21.6	1012	0.88	ND	0 (1)	ND	3.04	6.08	top of cover	
BH2664	ND	ND	21.4 (21.1)	1008	0.89	ND	0 (2)	ND	0.87	25.40	top of cover	
BH2653	2.1 (2.3)	0.8 (0.9)	21.3	1009	1.07	ND	ND	ND	1.42	39.47	top of cover	
BH2648	0.0 (1.2)	2.0 (5.2)	19.6	1009	1.03	ND	ND	ND	0.90	14.92	top of cover	
BH2061	ND	ND	21.2 (21.1)	1008	0.95	ND	ND	0.1 (-1.6)	Dry	2.07	top of cover	
BH2063	ND	ND	21.3	1010	0.99	ND	ND	0.4 (18.2)	1.11	2.23	top of cover	
BH2644	ND	ND	21.3	1006	1.15	ND	ND	0.0 (0.3)	1.51	7.12	top of cover	
BH2199	ND	1.2 (2.3)	20.0 (19.8)	1006	1.15	ND	ND	ND	2.03	7.11	top of cover	
BH2537	0.0 (0.1)	ND	21.5 (21.2)	1006	1.07	ND	ND	ND	0.67	21.37	top of cover	
Calibration						Comments: Calibration checks within tolerance limits						
Standard gas	5%	5%	6%	see sheet no.:								
Pre-cal	5.2	5.0	5.9									
Calibrated?	Y	Y	Y									

Daily Groundwater Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	02/02/09	Weather:	Cold, with heavy snow showers.
Proj. No.:	B0060/00	Name(s):	NA, PM		

Borehole		WS3100	WS3098	BH2664	BH2063	BH2648	BH2653	BH2644	BH2199
Pre-purge	GW level (m.bgl)	2.52	1.48	0.87	1.11	0.90	1.42	1.51	2.03
	BH Base (m.bgl)	5.57	4.42	25.40	2.23	14.92	39.47	7.12	7.11
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	3.1	2.9	24.5	1.1	14.0	38.1	5.6	5.1
	1 well vol. (l)	6.1	5.9	49.1	2.2	28.0	76.1	11.2	10.2
	3 well vols. (l)	18.3	17.6	147.2	6.7	84.1	228.3	33.7	30.5
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	PP1	PP1
	Vol. Removed (l)	8	7	85	7	50	230	21	30
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	8.3	6.3	7.9	6.0	7.7	7.5	7.6	8.1
	pH	5.13	5.39	5.99	5.95	5.88	5.26	5.41	5.45
	Eh (mV)	94	38	84	116	153	305	138	305
	EC (µS/cm)	307	581	515	834	125	255	1367	1849
	DO ₂ (mg/l)	2.61	4.56	5.06	6.03	5.93	6.00	3.33	4.15
	Colour	Brown	Brown	Brown / Grey	Brown	Brown	Grey	Dark Brown	Brown
	Turbidity	High	High	Medium	High	High	High	High	High
	Odour	-	-	-	-	-	-	-	-
	Other	Pumped Dry	Pumped Dry	Pumped Dry	-	Pumped Dry	-	Pumped Dry	-
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 2 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	02/02/09	Weather:	Cold, with heavy snow showers.
Proj. No.:	B0060/00	Name(s):	NA, PM		

Borehole		BH2537							
Pre-purge	GW level (m.bgl)	0.67							
	BH Base (m.bgl)	21.37							
	Datum	Top of cover							
	Water column (m)	20.7							
	1 well vol. (l)	41.4							
	3 well vols. (l)	124.2							
Purge	Method	Waterra							
	Vol. Removed (l)	125							
Sample	Method	Bailer							
	Temp (°C)	7.2							
	pH	6.17							
	Eh (mV)	147							
	EC (µS/cm)	1016							
	DO ₂ (mg/l)	6.63							
	Colour	Brown							
	Turbidity	High							
	Odour	-							
	Other	-							
Comments:					Calibration	Standard	Equipment calibrated to standard		
					EC	1413 µS/cm	yes	∅	
					pH	4.01 / 7.01	yes	∅	
					DO ₂	100%	yes	∅	

Daily Groundwater Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	02/02/09	Weather:	Cold, with heavy snow showers.
Proj. No.:	B0060/00	Name(s):	AH, CON		

Borehole		WS3102	WS3101	WS3099	WS3096	WS3097	WS3095	WS2645	WS3086
Pre-purge	GW level (m.bgl)	1.20	1.08	0.56	1.18	1.40	1.91	1.05	0.59
	BH Base (m.bgl)	3.72	2.79	2.56	4.49	2.55	3.18	6.13	6.19
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	2.5	1.7	2.0	3.3	1.2	1.3	5.1	5.6
	1 well vol. (l)	5.0	3.4	4.0	6.6	2.3	2.5	10.2	11.2
	3 well vols. (l)	15.1	10.3	12.0	19.9	6.9	7.6	30.5	33.6
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	PP1	PP1
	Vol. Removed (l)	13	8	10	15	10	4	12	10
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	6.0	5.6	4.3	4.8	5.2	5.7	7.8	7.4
	pH	5.65	6.45	6.47	6.52	6.47	6.24	6.41	6.48
	Eh (mV)	40	145	-4	40	75	42	-58	-26
	EC (µS/cm)	229.5	153.8	161.5	207.5	205.8	219.9	676	773
	DO ₂ (mg/l)	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction
	Colour	Brown	Brown	Brown	Brown	Brown	Dark Brown	Light brown	Grey
	Turbidity	Medium	Medium	Medium	Medium	Medium	Medium	High	Medium
	Odour	-	-	-	-	-	-	-	Sulphurous
	Other	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry	-	Pumped Dry	Pumped Dry	Pumped Dry
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 2 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	02/02/09	Weather:	Cold, with heavy snow showers.
Proj. No.:	B0060/00	Name(s):	AH, CON		

Borehole		WS3092	WS3089	WS3088	WS3090	WS3091			
Pre-purge	GW level (m.bgl)	0.64	2.84	1.05	0.90	0.49			
	BH Base (m.bgl)	3.64	5.48	6.15	5.40	4.81			
	Datum	Top of Cover	Top of Cover	Top of Cover	Top of Cover	Top of Cover			
	Water column (m)	3.0	2.6	5.1	4.5	4.3			
	1 well vol. (l)	1.5	5.3	10.2	9.0	2.2			
	3 well vols. (l)	4.5	15.8	30.6	27.0	6.5			
Purge	Method	PP1	PP1	PP1	PP1	PP1			
	Vol. Removed (l)	4	6	11	11	6			
Sample	Method	Waterra	Bailer	Bailer	Bailer	Waterra			
	Temp (°C)	6.4	6.7	7.9	7.7	5.5			
	pH	5.63	5.40	5.08	5.14	4.57			
	Eh (mV)	163	18	51	34	158			
	EC (µS/cm)	72.1	335	303	884	87.5			
	DO ₂ (mg/l)	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction			
	Colour	Dark Brown	Dark Grey	Dark brown	Dark brown	Dark brown			
	Turbidity	Medium	High	High	Medium	Medium			
	Odour	-	-	Sulphurous	-	-			
	Other	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry			
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 1 of 1

BAE SYSTEMS

Site:	Bishopton	Date:	03/02/09	Weather:	Cold, with heavy snow showers.
Proj. No.:	B0060/00	Name(s):	NA, PM		

Borehole		BH2223	BH2528	BH2224	BH2222	BH2221	BH2225	BH2353	BH2354
Pre-purge	GW level (m.bgl)	1.37	2.83	1.12	1.08	0.00	0.85	0.87	1.42
	BH Base (m.bgl)	23.78	20.30	1.31	1.52	18.37	14.57	15.14	6.02
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	22.4	17.5	0.2	0.4	18.4	13.7	14.3	4.6
	1 well vol. (l)	44.8	34.9	0.4	0.9	36.7	27.4	28.5	9.2
	3 well vols. (l)	134.5	104.8	1.1	2.6	110.2	82.3	85.6	27.6
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	PP1	PP1
	Vol. Removed (l)	70	65	0.5	3	110	85	85	12
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	8.0	8.0	-	7.6	8	7.7	8.4	7.1
	pH	7.49	7.67	-	7.86	6.9	6.73	7.15	50.74
	Eh (mV)	61	109	-	-97	-97	132	72	72
	EC (µS/cm)	891	163	-	424	424	567	439	275
	DO ₂ (mg/l)	9.25	7.10	-	6.26	6.26	4.48	4.40	5.55
	Colour	Pale Brown	Pale Brown	Brown	Brown	Brown	Dark Brown	Brown	Brown
	Turbidity	Medium	medium	High	High	High	High	High	High
	Odour	-	-	-	-	-	Organic	-	-
	Other	Pumped Dry	Pumped Dry	Pumped Dry	-	-	-	-	Pumped Dry
Comments:	BH2224 - not enough water to use monitoring probes.					Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 1 of 1

BAE SYSTEMS

Site:	Bishopton	Date:	03/02/09	Weather:	Cold, with rain showers.
Proj. No.:	B0060/00	Name(s):	AH, CON		

Borehole		WS2646	WS2647	WS3093				
Pre-purge	GW level (m.bgl)	1.22	0.59	0.42				
	BH Base (m.bgl)	3.70	5.05	4.95				
	Datum	Top of cover	Top of cover	Top of cover				
	Water column (m)	2.5	4.5	4.5				
	1 well vol. (l)	5.0	8.9	9.1				
	3 well vols. (l)	14.9	26.8	27.2				
Purge	Method	PP1	PP1	PP1				
	Vol. Removed (l)	10	16	4				
Sample	Method	Waterra	Waterra	Waterra				
	Temp (°C)	6.2	6.8	7.4				
	pH	5.74	3.95	6.63				
	Eh (mV)	115	242	11				
	EC (µS/cm)	80	73.1	203				
	DO ₂ (mg/l)	Malfunction	Malfunction	Malfunction				
	Colour	Brown	Brown	Brown				
	Turbidity	Medium	Medium	Medium				
	Odour	Sulphurous	-	-				
	Other	Pumped Dry	Pumped Dry	Pumped Dry				
Comments:					Calibration	Standard	Equipment calibrated to standard	
					EC	1413 µS/cm	yes	∅
					pH	4.01 / 7.01	yes	∅
					DO ₂	100%	yes	∅

Daily Gas Monitoring Record

Sheet 1 of 2



Site:	Bishopton	Date:	04/02/09	Weather:	Frosty, with light snow showers
Proj. No.:	B0060/00	Name(s):	NA, PM	Equipment:	GA2000 (serial no.GA07888) GF60 (serial no.3316)

(Peak readings shown in brackets)

BH ref	CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	Ba. Pr. (mbar)	Rel. Pr. (mbar)	H ₂ S (ppm)	CO (ppm)	Flow (l/hr)	GW level (m)	BH Base (m)	Datum	Comments
BH2662	ND	0.7 (1.4)	21.0 (20.4)	991	1.03	ND	ND	ND	1.92	6.98	Top of Cover	
WS3099	ND	ND	21.0 (20.9)	992	1.11	ND	ND	ND	0.76	1.46	Top of Cover	
BH2002	-	-	-	-	-	-	-	-	0.00	5.86	Top of Cover	Artestian
BH2260	ND	1.5 (2.0)	20.9 (20.7)	993	1.10	ND	ND	ND	0.92	7.97	Top of Cover	
BH2001	0.2	3.5	20.9 (19.8)	992	1.02	ND	ND	ND	1.18	7.01	Top of Cover	
BH2259	ND	0.1 (0.3)	20.7 (20.6)	994	1.18	ND	ND	ND	2.00	5.05	Top of Cover	
BH2416	ND	ND	20.8	992	1.11	ND	ND	ND	1.57	22.96	Top of Cover	
BH2635	ND	1.8 (2.0)	21.6 (20.6)	994	0.83	ND	ND	ND	1.36	6.80	Top of Cover	
BH2644	ND	1.8	21.5 (21.1)	994	0.93	ND	ND	ND	1.98	7.10	Top of Cover	
BH2380	ND	ND	21.6 (20.5)	993	0.87	ND	ND	ND	1.50	37.15	Top of Cover	
Calibration						Comments: Calibration checks within tolerance limits						
Standard gas	5%	5%	6%	see sheet no.: Dated 02/02/09								
Pre-cal												
Calibrated?	N	N	N									

Daily Gas Monitoring Record

Sheet 2 of 2



Site:	Bishopton	Date:	04/02/09	Weather:	Frosty, with light snow showers
Proj. No.:	B0060/00	Name(s):	NA, PM	Equipment:	GA2000 (serial no.GA07888) GF60 (serial no.3316)

(Peak readings shown in brackets)

BH ref	CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	Ba. Pr. (mbar)	Rel. Pr. (mbar)	H ₂ S (ppm)	CO (ppm)	Flow (l/hr)	GW level (m)	BH Base (m)	Datum	Comments
BH2531	ND	1.2 (2.0)	20.3 (19.7)	993	1.82	ND	ND	ND	1.94	7.12	Top of Cover	
BH2533	ND	0.4 (0.7)	20.6 (20.5)	992	1.64	ND	ND	ND	0.95	5.35	Top of Cover	
BH2350	ND	0.8 (1.1)	20.4	992	1.86	ND	ND	ND	1.27	6.67	Top of Cover	
BH2352	1.9 (2.0)	0.2	20.6 (20.4)	992	1.49	ND	ND	0.0 (-0.3)	0.93	7.24	Top of Cover	
BH2356	-	-	-	-	-	-	-	-	0.00	42.89	Top of Cover	Artesian
BH2412	-	-	-	-	-	-	-	-	0.24	7.23	Top of Cover	Water to top of monitoring pipe,
BH2415	ND	0.9 (1.4)	20.7 (21.0)	990	1.45	ND	ND	0.0 (-0.6)	1.34	7.08	Top of Cover	
BH2414	ND	ND	21.0	990	1.29	ND	ND	ND	0.80	7.24	Top of Cover	
BH2413	ND	ND	21.1 (21.0)	990	1.49	ND	ND	0.0 (-0.4)	0.91	7.21	Top of Cover	
Calibration							Comments: Calibration checks within tolerance limits					
Standard gas	5%	5%	6%	see sheet no.: Dated 02/02/09								
Pre-cal												
Calibrated?	N	N	N									

Daily Gas Monitoring Record

Sheet 1 of 1



Site:	Bishopton	Date:	04/02/09	Weather:	Cold with rain showers, some sunny spells
Proj. No.:	B0060/00	Name(s):	AH, CON	Equipment:	GA2000 (serial no.GA07888) GF60 (serial no.3316)

(Peak readings shown in brackets)

BH ref	CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	Ba. Pr. (mbar)	Rel. Pr. (mbar)	H ₂ S (ppm)	CO (ppm)	Flow (l/hr)	GW level (m)	BH Base (m)	Datum	Comments
WS2649	ND	ND	20.2	996	-	ND	ND	(<<) -2.4	0.75	5.15	Top of Cover	
WS3094	0.4 (0.6)	1.7 (3.5)	20.4	996	-	ND	ND	(-1.9) 3	0.64	4.97	Top of Cover	
WS3087	ND	2.3	20.8 (20.5)	994	-	ND	ND	ND	1.57	6.15	Top of Cover	
WS2650	ND	ND	21.5	992	-	ND	ND	ND	1.48	5.78	Top of Cover	
BH2681	68.3 (98.1)	0.1	6.2	991	-	ND	ND	0.3	2.00	24.92	Top of Cover	
BH2683	2.6	ND	19.3	988	-	ND	ND	ND	3.00	21.80	Top of Cover	
BH2666	0.3	3.7	18.1	988	-	ND	ND	<-4.0	1.20	5.90	Top of Cover	
BH2536	1 (2.3)	0.3	20.2	988	-	ND	ND	ND	3.63	40.00	Top of Cover	
BH2532	ND (0.1)	0.2	20.7	987	-	ND	ND	ND	1.33	7.30	Top of Cover	
Calibration						Comments: Calibration checks within tolerance limits						
Standard gas	5%	5%	6%	see sheet no.: Dated 02/02/09								
Pre-cal												
Calibrated?	N	N	N									

Daily Groundwater Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	04/02/09	Weather:	Frosty, with snowy showers
Proj. No.:	B0060/00	Name(s):	NA, PM		

Borehole		BH2531	BH2533	BH2350	BH2352	BH2356	BH2412	BH2415	BH2414
Pre-purge	GW level (m.bgl)	1.94	0.95	1.27	0.93	0.00	0.24	1.34	0.80
	BH Base (m.bgl)	7.12	5.35	6.67	7.24	42.89	7.23	7.08	7.24
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	5.2	4.4	5.4	6.3	42.9	7.0	5.7	6.4
	1 well vol. (l)	10.4	8.8	10.8	12.6	85.8	14.0	11.5	12.9
	3 well vols. (l)	31.1	26.4	32.4	37.9	257.3	41.9	34.4	38.6
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	PP1	PP1
	Vol. Removed (l)	30	22	24	20	250	35	30	34
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	7.3	7.5	7.1	7.2	7	6.9	7.1	7.1
	pH	7.10	6.39	Malfunction	Malfunction	6.89	6.42	6.48	6.81
	Eh (mV)	306	306	Malfunction	Malfunction	127	67	11	18
	EC (µS/cm)	1421	594	1451.0	914	1354	1813	1412	892
	DO ₂ (mg/l)	8.31	5.29	8.5	4.40	7.49	4.43	5.11	6.36
	Colour	Grey	Dark Brown	Brown	Brown / Grey	Very Pale Brown	Brown	Brown / Grey	Brown
	Turbidity	High	High	High	High	Medium / Low	High	High	High
	Odour	Sulphurous	Sulphurous	-	-	-	-	Slightly Organic	-
	Other	-	Pumped Dry	Pumped Dry	Pumped Dry	-	Pumped Dry	Pumped Dry	Pumped Dry
Comments:	BH2350 and BH2352 - pH probe malfunction. Calibrated prior to continuing monitoring					Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 2 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	04/02/09	Weather:	Frosty, with snowy showers
Proj. No.:	B0060/00	Name(s):	NA, PM		

Borehole		BH2413							
Pre-purge	GW level (m.bgl)	0.91							
	BH Base (m.bgl)	7.21							
	Datum	Top of cover							
	Water column (m)	6.3							
	1 well vol. (l)	12.6							
	3 well vols. (l)	37.8							
Purge	Method	PP1							
	Vol. Removed (l)	23							
Sample	Method	Bailer							
	Temp (°C)	7.5							
	pH	6.78							
	Eh (mV)	-14							
	EC (µS/cm)	737							
	DO ₂ (mg/l)	7.46							
	Colour	Brown							
	Turbidity	High							
	Odour	Organic							
	Other	Pumped Dry							
Comments:					Calibration	Standard	Equipment calibrated to standard		
					EC	1413 µS/cm	yes	∅	
					pH	4.01 / 7.01	yes	∅	
					DO ₂	100%	yes	∅	

Daily Groundwater Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	04/02/09	Weather:	Cold, with rain showers.
Proj. No.:	B0060/00	Name(s):	AH, CO		

Borehole		WS2649	WS3094	WS3087	WS2650	BH2681	BH2683	BH2666	BH2536
Pre-purge	GW level (m.bgl)	0.75	0.64	1.57	1.48	2.00	3.00	1.20	3.60
	BH Base (m.bgl)	5.15	4.97	6.15	5.78	24.92	21.80	5.90	40.00
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	4.4	4.3	4.6	4.3	22.9	18.8	4.7	36.4
	1 well vol. (l)	8.8	8.7	9.2	8.6	45.8	37.6	9.4	72.8
	3 well vols. (l)	26.4	26.0	27.5	25.8	137.5	112.8	28.2	218.4
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	PP1	PP1
	Vol. Removed (l)	20	5	8	8	130	110	25	75
Sample	Method	Waterra	Waterra	Waterra	Waterra	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	3.8	4.8	7.9	8.4	6.4	7.7	6.9	7.3
	pH	6.41	6.27	6.27	6.14	7.2	7.21	6.87	7.67
	Eh (mV)	-2.5	18	-46	-55	-26	-49	-26	13
	EC (µS/cm)	742	896	1265	700	1791	1156	454	1125
	DO ₂ (mg/l)	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction
	Colour	Dark Brown	Black	Dark Brown	Dark grey	Brown	Brown	Brown	Dark Grey
	Turbidity	Medium	Low	Medium	High	Medium	Medium	Medium	Medium
	Odour	-	-	-	Peat	-	-	-	-
	Other		Pumped Dry	Pumped Dry	Pumped Dry	-			Pumped Dry
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 2 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	04/02/09	Weather:	Cold, with rain showers.
Proj. No.:	B0060/00	Name(s):	AH, CON		

Borehole		BH2532							
Pre-purge	GW level (m.bgl)	1.33							
	BH Base (m.bgl)	7.30							
	Datum	Top of cover							
	Water column (m)	6.0							
	1 well vol. (l)	11.9							
	3 well vols. (l)	35.8							
Purge	Method	PP1							
	Vol. Removed (l)	20							
Sample	Method	Bailer							
	Temp (°C)	7.0							
	pH	6.62							
	Eh (mV)	-43							
	EC (µS/cm)	246							
	DO ₂ (mg/l)	Malfunction							
	Colour	Dark Brown							
	Turbidity	Medium							
	Odour	-							
	Other	Pumped Dry							
Comments:					Calibration	Standard	Equipment calibrated to standard		
					EC	1413 µS/cm	yes	∅	
					pH	4.01 / 7.01	yes	∅	
					DO ₂	100%	yes	∅	

Daily Gas Monitoring Record

Sheet 1 of 1



Site:	Bishopton	Date:	11/02/09	Weather:	Snow on ground, sunny
Proj. No.:	B0060/00	Name(s):	AW & PM	Equipment:	GA2000 (serial no.GA07888) GF60 (serial no.3316)

(Peak readings shown in brackets)

BH ref	CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	Ba. Pr. (mbar)	Rel. Pr. (mbar)	H ₂ S (ppm)	CO (ppm)	Flow (l/hr)	GW level (m)	BH Base (m)	Datum	Comments
BH2662	ND	0.3 (0.7)	19.9 (20.1)	1011	1.31	ND	ND	ND	1.72	6.00	Ground	
BH2663	ND	0.1 (0.4)	19.9 (20.4)	1011	0.25	ND	ND	ND	1.00	6.80	Ground	
BH2003	ND	0.1	20.4	1012	0.66	ND	ND	ND	0.36	3.53	Ground	
WS3099	ND	0.1	20.3	1012	0.43	ND	ND	ND	0.70	2.25	Ground	
BH2268	0.4	0.8 (1.0)	20.1	1013	0.46	ND	1	ND	1.78	6.62	Ground	
BH2583	ND	0.1	20.2	1013	0.41	ND	ND	-0.2	1.60	3.90	Ground	
BH2092	ND	1.8 (1.9)	13.2 (13.3)	1014	0.34	ND	2	ND	2.38	3.18	Ground	
BH2259	ND	0.1 (0.2)	20.5	1014	0.27	ND	5	ND	1.80	4.68	Ground	
BH2260	ND	0.4 (0.7)	20.4	1014	0.74	ND	4	0.1	0.80	6.80	Ground	
BH2001	0.4	1.8	19.2 (19.6)	1015	-7.71	ND	2	ND	0.90	6.80	Ground	
BH2263	ND	0.1 (0.2)	20.5	1015	0.3	ND	3	ND	0.48	6.80	Ground	
BH2002	-	-	-	-	-	-	-	-	-	-	-	Standpipe full of ice
BH2261	-	-	-	-	-	-	-	-	-	-	-	Artesian
BH2380	ND	ND	20.7	1015	0.15	ND	1	ND	1.14	>30	Ground	
BH2588	ND	0.4 (1.1)	20.3	1016	0.32	ND	1	-0.7	1.00	6.80	Ground	
BH2587	ND	0.0 (0.1)	20.6	1015	0.21	ND	3	ND	1.19	6.05	Ground	
BH2269	0.4 (0.6)	0.3 (0.7)	19.9	1016	0.31	ND	ND	-2	1.65	4.20	Ground	
BH2585	ND	0.1	20.4	1016	1.9	ND	1	0	0.30	6.60	Ground	
WS3100	ND	0.6 (0.8)	21.0	1016	1.01	ND	ND	ND	2.85	5.23	top of cover	

Calibration					Comments: Calibration checks within tolerance limits. Unable to sample BH2002 due to ice
Standard gas	5%	5%	6%	see sheet no.:	
Pre-cal	5.4	5.1	6.4		
Calibrated?	Y	Y	Y		

Daily Groundwater Sampling Record

Sheet 1 of 1

BAE SYSTEMS

Site:	Bishopton	Date:	11/02/09	Weather:	Clear, cold
Proj. No.:	B0060/00	Name(s):	KI & CON		

Borehole		BH2664	WS3100	WS3098	BH2586	BH2667	BH2682	BH2648	BH2651
Pre-purge	GW level (m.bgl)	1.06	2.85	1.56	1.00	1.48	0.33	1.20	1.05
	BH Base (m.bgl)	25.56	5.23	4.42	6.32	6.22	40.67	15.22	13.49
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	24.5	2.4	2.9	5.3	4.7	40.3	14.0	12.4
	1 well vol. (l)	49.0	4.8	5.7	10.6	9.5	80.7	28.0	24.9
	3 well vols. (l)	147.0	14.3	17.2	31.9	28.4	242.0	84.1	74.6
Purge	Method	PP1	Hand	Hand	PP1	Hand	PP1	PP1	PP1
	Vol. Removed (l)	150	8	8	32	21	156	37	75
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	7.2	7.3	6.1	7.8	6	5.8	7.8	7.3
	pH	5.45	5.81	6.36	6.42	9.04	7.84	7.75	7.64
	Eh (mV)	184	23	-10	-53	-34	14	1	-95
	EC (µS/cm)	102.3	526	514	757	417	6.17ms	1046	780
	DO ₂ (mg/l)	7.18	5.61	6.58	6.09	3.72	7.28	7.90	7.53
	Colour	Light brown	Brown	Brown	Grey Brown	Dark grey/black	Dark Grey	Grey-Brown	Brown
	Turbidity	V. Low	Medium	Medium	High	High	High	High	Low
	Odour	-	-	-	Sulphurous	Peaty/Sulphurous	-	-	-
	Other	-	Pumped Dry	Pumped Dry	-	Pumped Dry	Pumped Dry	Pumped Dry	-
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Gas Monitoring Record

Sheet 1 of 1



Site:	Bishopton	Date:	12/02/09	Weather:	Snow on ground
Proj. No.:	B0060/00	Name(s):	AW & JM	Equipment:	GA2000 (serial no.GA07888) GF60 (serial no.3316)

(Peak readings shown in brackets)

BH ref	CH ₄ (% v/v)	CO ₂ (% v/v)	O ₂ (% v/v)	Ba. Pr. (mbar)	Rel. Pr. (mbar)	H ₂ S (ppm)	CO (ppm)	Flow (l/hr)	GW level (m)	BH Base (m)	Datum	Comments
WS3097	0.1	(0.4) 0.2	20.1	1012	0.44	ND	ND	ND	1.90	3.10	Top of Cover	
BH2091	ND	(0.3) 0.1	19.9	1012	4.14	ND	1	-3.1	0.72	6.32	Top of Cover	
BH2635	(0.5) 0.3	2.3	19.8	1014	2.49	ND	ND	-0.3	1.38	6.80	Top of Cover	
BH2644	0.4	0.2	19.6	1013	0.53	ND	ND	ND	1.60	7.10	Top of Cover	
BH2584	0.1	0.2	20.4	1013	0.53	ND	ND	ND	1.26	6.85	Top of Cover	
BH2413	ND	(0.6) 0.2	20.3	1014	0.49	ND	2	ND	0.90	7.30	Top of Cover	
BH2199	ND	2.5	15.4	1014	0.49	ND	ND	-0.1	3.76	7.20	Top of Cover	
BH2198	ND	.3.2	18.9	1014	0.93	ND	ND	0.4	1.74	6.20	Top of Cover	
WS3095	0.1	0.8	19.3	1015	2.15	ND	ND	ND	2.05	3.20	Top of Cover	
WS3096	ND	0.1	20.4	1015	2.05	ND	ND	ND	1.32	4.50	Top of Cover	
BH2093	ND	(0.2) 0.1	20.4	1014	0.44	ND	ND	ND	1.34	5.64	Top of Cover	
BH2586	ND	(1.0) 0.3	19.8	1014	0.28	ND	ND	ND	0.87	0.87	Top of Cover	
WS3098	ND	0.3	20.2	1012	0.38	ND	1	0.2	1.78	4.03	Top of Cover	
BH2264	(0.2) 0.1	(0.3) 0.2	20.2	1011	0.37	ND	ND	-0.3	0.75	10.68	Top of Cover	
BH2262	ND	(0.9) 0.6	19.3	1011	0.37	ND	ND	ND	1.57	7.07	Top of Cover	
BH2265	ND	0.2	19.5	1011	5.04	ND	2	ND	1.40	7.45	Top of Cover	
BH2267	0.2	(1.8) 1.1	19.9	1011	2.63	ND	ND	ND	1.36	7.20	Top of Cover	
BH2266	0.2	1.2	19.6	1011	1.54	ND	2	ND	1.41	6.96	Top of Cover	
BH2412	-	-	-	-	-	-	-	-	-	-	-	Ice in headworks

Calibration					Comments: Calibration checks within tolerance limits.							
Standard gas	5%	5%	6%	see sheet no.:								
Pre-cal				Dated 11/02/09								
Calibrated?	N	N	N									

Daily Groundwater Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	12/02/09	Weather:	Dry, cold and overcast
Proj. No.:	B0060/00	Name(s):	AW, JM		

Borehole		BH2092	BH2093	WS3098	WS3097	WS3096	BH2380	BH2643	BH2653
Pre-purge	GW level (m.bgl)	2.70	1.33	1.49	1.50	1.38	1.59	0.79	11.45
	BH Base (m.bgl)	3.45	5.70	4.50	4.15	4.50	37.62	7.20	39.40
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	0.8	4.4	3.0	2.7	3.1	36.0	6.4	28.0
	1 well vol. (l)	1.5	8.7	6.0	5.3	6.2	72.1	12.8	55.9
	3 well vols. (l)	4.5	26.2	18.1	15.9	18.7	216.2	38.5	167.7
Purge	Method	Hand	PP1	PP1	PP1	PP1	PP1	Hand	PP1
	Vol. Removed (l)	-	20	8	12	20	230	45	170
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	-	6.6	6.1	6.3	6.1	9.3	8.7	8.8
	pH	-	7.01	7.10	6.70	6.61	4.20	5.00	6.61
	Eh (mV)	-	109	268	100	5	110	130	37
	EC (µS/cm)	-	538	536	391	330	645	563	1276
	DO ₂ (mg/l)	-	5.52	7.45	8.10	Malfunction	4.07	11.63	5.10
	Colour	-	Brown	Brown	Brown	Brown	Dark Brown	Dark Brown	Grey
	Turbidity	-	Medium	Medium	Medium	Medium	Medium	Medium	Medium
	Odour	-	-	-	-	-	-	Sulphur	-
	Other	-	Pumped Dry	Pumped Dry	-	Pumped Dry	-	Pumped Dry	-
Comments:	BH2092: Insufficient water to monitor					Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	Ne
						pH	4.01 / 7.01	yes	Nie
						DO ₂	100%	yes	Ne

Daily Groundwater Sampling Record

Sheet 2 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	12/02/09	Weather:	Dry, cold and overcast
Proj. No.:	B0060/00	Name(s):	AW, JM		

Borehole		BH2003	BH2261	WS3099	WS3095				
Pre-purge	GW level (m.bgl)	1.11	0.37	0.97	2.03				
	BH Base (m.bgl)	3.92	7.25	2.55	3.20				
	Datum	Top of cover	Top of cover	Top of cover	Top of cover				
	Water column (m)	2.8	6.9	1.6	1.2				
	1 well vol. (l)	5.6	13.8	3.2	2.3				
	3 well vols. (l)	16.9	41.3	9.5	7.0				
Purge	Method	PP1	PP1	PP1	PP1				
	Vol. Removed (l)	15	45	10	6				
Sample	Method	Bailer	Bailer	Bailer	Bailer				
	Temp (°C)	5.6	8.1	4.6	6.3				
	pH	5.71	6.59	6.63	6.30				
	Eh (mV)	169	101	10	44				
	EC (µS/cm)	260	868	306	372				
	DO ₂ (mg/l)	6.21	6.98	6.23	6.15				
	Colour	Grey/Brown	Grey/Brown	Light Brown	Light Brown				
	Turbidity	Medium	Medium	Low	Low				
	Odour	-	-	Sulphurous	-				
	Other	-	-	LNAPL sheen	Pumped Dry				
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	Ne
						pH	4.01 / 7.01	yes	Ne
						DO ₂	100%	yes	Ne

Daily Groundwater Sampling Record

Sheet 1 of 1

BAE SYSTEMS

Site:	Bishopton	Date:	17/03/09	Weather:	Dry, sunny
Proj. No.:	B0060/00	Name(s):	JT		

Borehole		BH2682	BH2536	BH2683				
Pre-purge	GW level (m.bgl)	0.68	1.35	1.23				
	BH Base (m.bgl)	40.44	40.82	22.82				
	Datum	Top of cover	Top of cover	Top of cover				
	Water column (m)	39.8	39.5	21.6				
	1 well vol. (l)	79.5	78.9	43.2				
	3 well vols. (l)	238.6	236.8	129.5				
Purge	Method	PP1	PP1	PP1				
	Vol. Removed (l)	151	75	140				
Sample	Method	Waterra	Waterra	Waterra				
	Temp (°C)	10.5	10.3	9.9				
	pH	6.92	7.33	7.36				
	Eh (mV)	136	62	-36				
	EC (µS/cm)	7.45	1973	1517				
	DO ₂ (mg/l)	Malfunction	Malfunction	Malfunction				
	Colour	Brown	Brown	Brown				
	Turbidity	High	High	High				
	Odour	None	None	None				
	Other	Pumped Dry	Pumped Dry	-				
Comments:	Conductivity reading in BH2682 given in ms.				Calibration	Standard	Equipment calibrated to standard	
					EC	1413 µS/cm	yes	∅
					pH	4.01 / 7.01	yes	∅
					DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	23/03/09	Weather:	Wet with sunny spells
Proj. No.:	B0060/00	Name(s):	JM, CON		

Borehole		BH2664	BH1046	BH2380	BH2528	BH2223	BH1074D	BH2416	BH1621D	
Pre-purge	GW level (m.bgl)	1.00	0.78	1.57	3.57	1.23	1.02	1.71	1.40	
	BH Base (m.bgl)	25.75	10.27	37.53	20.57	23.69	12.32	23.24	13.16	
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	
	Water column (m)	24.6	9.5	36.0	17.0	22.5	11.3	21.5	11.7	
	1 well vol. (l)	49.1	19.0	71.9	34.0	44.9	22.6	43.0	24.0	
	3 well vols. (l)	147.4	56.9	215.8	102.0	134.8	68.0	129.0	72.0	
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	PP1	PP1	
	Vol. Removed (l)	150	50	220	100	120	70	130	60	
Sample	Method	Waterra	Waterra	Waterra	Waterra	Waterra	Waterra	Waterra	Waterra	
	Temp (°C)	9.6	9.6	9.0	9.2	8.5	9.6	9.2	8.9	
	pH	6.61	6.78	6.91	7.00	7.12	7.13	7.12	7.01	
	Eh (mV)	53	45	62	68	79	64	67	64	
	EC (µS/cm)	109.2	78	559	231.8	190.1	321	114	423.1	
	DO ₂ (mg/l)	5.62	292.40	6.48	6.10	8.05	6.20	6.50	7.50	
	Colour	Clear	Brown	Brown	Light Brown	Light Brown	Light Brown	Clear	Dark Brown	
	Turbidity	Low	Low	Low	Low	Low	Low	Low	Low	
	Odour	-	-	-	-	-	-	-	-	
	Other	-	Pumped Dry	-	-	-	-	-	-	
Comments:						Calibration	Standard	Equipment calibrated to standard		
						EC	1413 µS/cm	yes	∅	
						pH	4.01 / 7.01	yes	∅	
						DO ₂	100%	yes	∅	

Daily Groundwater Sampling Record

Sheet 2 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	23/03/09	Weather:	Wet with sunny spells
Proj. No.:	B0060/00	Name(s):	JM, CON		

Borehole		BH2356	BH652	BH2682				
Pre-purge	GW level (m.bgl)	Top of cover	2.25	0.37				
	BH Base (m.bgl)	43.20	39.89	40.58				
	Datum	Top of cover	Top of cover	Top of cover				
	Water column (m)	43.2	37.6	40.2				
	1 well vol. (l)	86.4	75.3	80.4				
	3 well vols. (l)	259.2	225.8	241.3				
Purge	Method	PP1	PP2	PP3				
	Vol. Removed (l)	250	225	220				
Sample	Method	Waterra	Waterra	Waterra				
	Temp (°C)	9.6	9.4	8.6				
	pH	7.24	7.01	6.98				
	Eh (mV)	51	57	115				
	EC (µS/cm)	686	314	Malfunction				
	DO ₂ (mg/l)	5.80	6.10	7.23				
	Colour	Brown	Brown	Brown				
	Turbidity	Low	Low	Low				
	Odour	-	-	-				
	Other	-	-	Pumped Dry				
Comments:					Calibration	Standard	Equipment calibrated to standard	
					EC	1413 µS/cm	yes	∅
					pH	4.01 / 7.01	yes	∅
					DO ₂	100%	yes	∅

Daily Surface Water Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	06/04/09	Weather:	Overcast
Proj. No.:	B0060/00	Name(s):	JVN/CON		

Monitoring Point		SW2	SW9	SW7	SW8	SW5	SW4	SW6	SW10
Sample	Method	Telescoop	Telescoop	Telescoop	Telescoop	Telescoop	Telescoop	Telescoop	Telescoop
	Temp (°C)	8.9	9.1	8.8	8.0	8.1	8.7	9.2	7.7
	pH	7.23	7.18	7.14	7.36	7.28	7.29	7.32	7.23
	Eh (mV)	90	-8	108	80	62	86	101	63
	EC (µS/cm)	malfunction	malfunction	malfunction	malfunction	malfunction	malfunction	malfunction	malfunction
	DO ₂ (mg/l)	8.22	10.57	9.78	9.91	10.89	10.08	11.43	10.28
	Colour	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
	Turb.	Low	Low	Low	Low	Low	Low	Low	low
	Odour	-	-	-	-	-	-	-	-
	Other	-	-	-	-	-	-	-	-

Comments:			
	Calibration	Standard	Equipment calibrated to standard
	EC	1413 µS/cm	yes no
	pH	4.01 / 7.01	yes no
	DO ₂	100%	yes no

Daily Surface Water Sampling Record

Sheet 2 of 2



Site:	Bishopton	Date:	06/04/09	Weather:	Overcast
Proj. No.:	B0060/00	Name(s):	JVN/CON		

Monitoring Point		SW 3	SW23	SW22				
Sample	Method	Telescoop	Telescoop	Telescoop				
	Temp (°C)	8.4	8.9	7.9				
	pH	7.37	7.29	6.89				
	Eh (mV)	-20	66	179				
	EC (µS/cm)	malfunction	malfunction	malfunction				
	DO ₂ (mg/l)	10.02	9.76	7.01				
	Colour	Clear	Clear	Clear				
	Turb.	Low	Low	Low				
	Odour	-	-	-				
	Other	-	-	-				

Comments:																	
				<table border="1"> <thead> <tr> <th>Calibration</th> <th>Standard</th> <th>Equipment calibrated to standard</th> </tr> </thead> <tbody> <tr> <td>EC</td> <td>1413 µS/cm</td> <td>yes no</td> </tr> <tr> <td>pH</td> <td>4.01 / 7.01</td> <td>yes no</td> </tr> <tr> <td>DO₂</td> <td>100%</td> <td>yes no</td> </tr> </tbody> </table>		Calibration	Standard	Equipment calibrated to standard	EC	1413 µS/cm	yes no	pH	4.01 / 7.01	yes no	DO ₂	100%	yes no
				Calibration	Standard	Equipment calibrated to standard											
				EC	1413 µS/cm	yes no											
				pH	4.01 / 7.01	yes no											
DO ₂	100%	yes no															

Daily Surface Water Sampling Record

Sheet 1 of 2



Site:	Bishopton	Date:	07/04/09	Weather:	Overcast, Showers
Proj. No.:	B0060/00	Name(s):	JVN/CON		

Monitoring Point		SW20	SW18	SW19	SW17	SW24	SW01	SW16	SW13
Sample	Method	Telescoop	Telescoop	Telescoop	Telescoop	Telescoop	Telescoop	Telescoop	Bucket
	Temp (°C)	7.9	7.7	7.8	8.8	9.6	8.6	8.5	10.5
	pH	7.54	7.14	6.89	6.41	7.03	7.51	7.38	7.58
	Eh (mV)	71	110	137	188	140	106	109	7.58
	EC (µS/cm)	malfunction	malfunction	malfunction	malfunction	malfunction	malfunction	malfunction	malfunction
	DO ₂ (mg/l)	11.90	9.93	13.91	20.66	13.57	19.21	17.11	11.38
	Colour	Clear	Brown	Clear	Clear	Clear	Clear	Clear	Clear
	Turb.	Low	Low	Low	Low	Low	Low	Low	low
	Odour	-	-	-	-	-	-	-	-
	Other	-	-	-	-	-	-	-	-

Comments:						
				Calibration	Standard	Equipment calibrated to standard
				EC	1413 µS/cm	yes no
				pH	4.01 / 7.01	yes no
				DO ₂	100%	yes no

Daily Surface Water Sampling Record

Sheet 2 of 2



Site:	Bishopton	Date:	07/04/09	Weather:	Overcast
Proj. No.:	B0060/00	Name(s):	JVN/CON		

Monitoring Point		SW15	SW14	SW21	SW12				
Sample	Method	Direct	Direct	Direct	Bulk				
	Temp (°C)	11.4	10.7	8.8	10.1				
	pH	7.48	7.44	7.46	7.42				
	Eh (mV)	92	100	95	100				
	EC (µS/cm)	malfunction	malfunction	malfunction	malfunction				
	DO ₂ (mg/l)	11.78	16.00	14.46	15.39				
	Colour	Clear	Clear	Clear	Clear				
	Turb.	Low	Low	Low	Low				
	Odour	-	-	-	-				
	Other	-	-	-	-				

Comments:																	
				<table border="1"> <thead> <tr> <th>Calibration</th> <th>Standard</th> <th>Equipment calibrated to standard</th> </tr> </thead> <tbody> <tr> <td>EC</td> <td>1413 µS/cm</td> <td>yes no</td> </tr> <tr> <td>pH</td> <td>4.01 / 7.01</td> <td>yes no</td> </tr> <tr> <td>DO₂</td> <td>100%</td> <td>yes no</td> </tr> </tbody> </table>		Calibration	Standard	Equipment calibrated to standard	EC	1413 µS/cm	yes no	pH	4.01 / 7.01	yes no	DO ₂	100%	yes no
				Calibration	Standard	Equipment calibrated to standard											
				EC	1413 µS/cm	yes no											
				pH	4.01 / 7.01	yes no											
DO ₂	100%	yes no															

Daily Groundwater Sampling Record

Sheet 1 of 3

BAE SYSTEMS

Site:	Bishopton	Date:	08/04/09	Weather:	Overcast, Showers
Proj. No.:	B0060/00	Name(s):	JVN, CON		

Borehole		BH1134	BH1027	BH1623	BH1429	BH1430	BH1412	BH1366	BH1375
Pre-purge	GW level (m.bgl)	0.69	1.54	1.06	0.00	1.82	1.82	1.40	0.43
	BH Base (m.bgl)	4.69	9.16	4.85	4.78	4.58	4.58	4.65	7.54
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	4.0	7.6	3.8	4.8	2.8	2.8	3.3	7.1
	1 well vol. (l)	8.0	15.2	7.6	9.6	5.5	5.5	6.5	14.2
	3 well vols. (l)	24.0	45.7	22.7	28.7	16.6	16.6	19.5	42.7
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	Hand	PP1
	Vol. Removed (l)	12	45	7	15	5	17	20	43
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	10.0	9.1	9.0	9.6	9.3	9.3	8.9	10.3
	pH	6.85	6.67	6.43	6.87	6.86	7.26	6.77	7.38
	Eh (mV)	11	-53	1	-7	-12	-5	41	17
	EC (µS/cm)	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction
	DO ₂ (mg/l)	18.01	8.20	18.34	8.95	5.07	3.45	1.25	7.83
	Colour	Dark Grey	Clear	Grey	Grey	Clear/Grey	Grey	Brown	Grey
	Turbidity	High	Low	High	High	Very Low	Medium	Low	Medium
	Odour	-	-	-	-	-	-	-	-
	Other	Pumped Dry	-	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry	-	-
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 2 of 3

BAE SYSTEMS

Site:	Bishopton	Date:	08/04/09	Weather:	Overcast, Showers
Proj. No.:	B0060/00	Name(s):	JVN, CON		

Borehole		BH1505	GT13	ESG A	ASP C	ESG C	ASP D	ASP A	ESG D
Pre-purge	GW level (m.bgl)	0.86	1.16	1.87	0.96	0.78	1.81	3.57	0.95
	BH Base (m.bgl)	3.76	9.27	9.82	5.25	4.46	9.37	10.37	4.12
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	2.9	8.1	8.0	4.3	3.7	7.6	6.8	3.2
	1 well vol. (l)	5.8	16.2	15.9	8.6	7.4	15.1	13.6	6.3
	3 well vols. (l)	17.4	48.7	47.7	25.7	22.1	45.4	40.8	19.0
Purge	Method	Hand	PP1	PP1	Hand	Hand	Hand	PP1	PP1
	Vol. Removed (l)	6	30	50	25	22	45	32	20
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	7.1	8.0	8.5	7.9	7.3	7.8	9.3	7.7
	pH	5.72	5.68	5.86	5.25	5.6	4.73	6.16	6.79
	Eh (mV)	87	-13	143	-15	71	19	6	-23
	EC (µS/cm)	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction
	DO ₂ (mg/l)	9.98	3.94	9.63	8.86	8.78	10.66	14.19	19.73
	Colour	Grey	Grey/Brown	Dark Grey	Clear	Brown	Grey	Dark Brown	Dark Brown
	Turbidity	High	High	High	Low	Medium	Low	Medium	Medium
	Odour	-	-	-	-	Organic	-	-	-
	Other	Pumped Dry	Pumped Dry	-	-	-	-	-	-
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	Ne
						pH	4.01 / 7.01	yes	Ne
						DO ₂	100%	yes	Ne

Daily Groundwater Sampling Record

Sheet 3 of 3

BAE SYSTEMS

Site:	Bishopton	Date:	08/04/09	Weather:	Overcast, Showers
Proj. No.:	B0060/00	Name(s):	JVN, CON		

Borehole		GT 10	ESG J	ESG H	BH1167	PER22	BH1046		
Pre-purge	GW level (m.bgl)	0.83	1.55	0.96	1.37	1.29	1.24		
	BH Base (m.bgl)	8.77	7.25	6.67	4.80	5.19	10.29		
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover		
	Water column (m)	7.9	5.7	5.7	3.4	3.9	9.1		
	1 well vol. (l)	15.9	11.4	11.4	6.9	7.8	18.1		
	3 well vols. (l)	47.6	34.2	34.3	20.6	23.4	54.3		
Purge	Method	PP1	PP1	PP1	PP1	Hand	PP1		
	Vol. Removed (l)	28	25	31	6	12	27		
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer		
	Temp (°C)	8.1	9.0	9.0	9.3	-	10.5		
	pH	6.14	6.54	7.40	7.81	-	8.00		
	Eh (mV)	48	-3	-31	0	-	28		
	EC (µS/cm)	Malfunction	Malfunction	Malfunction	Malfunction	-	Malfunction		
	DO ₂ (mg/l)	19.91	15.58	14.80	4.52	-	5.27		
	Colour	Grey	Dark Grey	Dark Grey	Dark Grey	-	Light Brown		
	Turbidity	Medium	High	High	High	V.High	Low/Medium		
	Odour	-	-	-	-	-	-		
	Other	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry		
Comments:	PER 22 -Too silty to monitor with probes					Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	Ne
						pH	4.01 / 7.01	yes	Ne
						DO ₂	100%	yes	Ne

Daily Groundwater Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	14/04/09	Weather:	Wet
Proj. No.:	B0060/00	Name(s):	JM, CON		

Borehole		BH1445	BH1621S	BH1621D	BH1455	BH1108	BH1089	BH1231	BH1194S
Pre-purge	GW level (m.bgl)	1.36	1.33	1.38	1.69	0.83	2.86	1.67	0.87
	BH Base (m.bgl)	4.99	5.68	13.17	4.35	3.61	5.96	10.45	8.43
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover
	Water column (m)	3.6	4.4	11.2	2.6	2.9	3.1	8.8	7.5
	1 well vol. (l)	7.3	8.7	22.4	5.2	6.0	6.2	17.6	15.0
	3 well vols. (l)	21.6	26.1	67.2	15.6	9.0	9.6	52.8	45.0
Purge	Method	Hand	PP1	PP1	Hand	Hand	Hand	PP1	PP1
	Vol. Removed (l)	19	27	32	5	9	10	15	50
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer
	Temp (°C)	9.9	8.8	9.3	8.1	8.7	9.1	9.5	9.8
	pH	9.23	7.82	6.86	7.80	7.58	7.64	4.79	7.52
	Eh (mV)	-65	-33	-4	-4	15	-5	81	-24.2
	EC (µS/cm)	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	Malfunction	474	551
	DO ₂ (mg/l)	5.06	7.38	8.22	5.45	5.03	6.03	4.32	2.29
	Colour	Brown	Brown	Brown	Brown	Brown	Light Brown	Brown	Dark Brown
	Turbidity	Low	Low	Low	Low	Low	Low	Low	Low
	Odour	-	-	-	-	-	-	-	-
	Other	-	-	Pumped Dey	Pumped Dry	-	-	Pumped Dry	-
Comments:	New Probes used from BH1231 onwards.					Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 2 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	14/04/09	Weather:	Wet
Proj. No.:	B0060/00	Name(s):	JM, CON		

Borehole		BH1074S	BH1219	BH1532	BH1306	BH1349	ESGF		
Pre-purge	GW level (m.bgl)	1.16	1.11	0.83	1.11	0.93	1.16		
	BH Base (m.bgl)	4.26	4.58	5.12	4.98	4.60	9.83		
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover		
	Water column (m)	3.1	3.5	4.5	3.9	3.8	9.7		
	1 well vol. (l)	6.2	7.0	9.0	8.0	8.0	20.0		
	3 well vols. (l)	18.6	21.0	27.0	24.0	24.0	60.0		
Purge	Method	Hand	Hand	Hand	PP1	Hand	PP1		
	Vol. Removed (l)	10	14	15	18	25	65		
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer		
	Temp (°C)	8.9	8.1	8.1	8.5	8.21	9.2		
	pH	7.04	7.23	7.61	7.64	8.1	7.86		
	Eh (mV)	27.9	-0.7	67.4	-7.1	7.27	84.4		
	EC (µS/cm)	317	377	1478	911	431	382		
	DO ₂ (mg/l)	4.04	5.12	4.54	3.34	3.61	2.47		
	Colour	Brown	Brown	Light Brown	Grey	Light Brown	Brown		
	Turbidity	Low	Low	Low	Low	Low	Low		
	Odour	-	-	-	-	-	-		
	Other	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry	-	-		
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 1 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	15/04/09	Weather:	Hazy sun, mild
Proj. No.:	B0060/00	Name(s):	KI, CON		

Borehole		BH1622	BH1531	PER06	PER05	PER04	PER02	PER01	
Pre-purge	GW level (m.bgl)	1.13	0.85	1.78	0.92	1.35	1.88	1.60	
	BH Base (m.bgl)	9.53	14.10	6.70	9.00	6.65	8.78	6.18	
	Datum	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	Top of cover	
	Water column (m)	8.4	13.3	4.9	8.1	5.3	6.9	4.6	
	1 well vol. (l)	16.8	26.5	9.8	16.2	10.6	13.8	9.2	
	3 well vols. (l)	50.4	79.5	29.5	48.5	31.8	41.4	27.5	
Purge	Method	PP1	PP1	PP1	PP1	PP1	PP1	PP1	
	Vol. Removed (l)	33	80	20	20	11	18	15	
Sample	Method	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	
	Temp (°C)	9.53	9.52	9.45	9.21	8.99	9.5	9.7	
	pH	8.01	7.44	7.64	6.72	7.35	7.88	6.55	
	Eh (mV)	-15.8	-35.6	58	52.3	-168.2	-10.9	-48	
	EC (µS/cm)	459	429	362	371	1334	5781	514	
	DO ₂ (mg/l)	1.31	1.35	1.67	0.24	0.00	1.10	0.00	
	Colour	Brown	Brown	Grey Brown	Brown	Grey Brown	Grey Brown	Grey Brown	
	Turbidity	Low	High	V. High	V.High	V. High	High	High	
	Odour	Slight sulphurous	Sulphurous	-	Sulphurous	-	-	Metallic odour	
	Other	-	-	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry	Pumped Dry	
Comments:						Calibration	Standard	Equipment calibrated to standard	
						EC	1413 µS/cm	yes	∅
						pH	4.01 / 7.01	yes	∅
						DO ₂	100%	yes	∅

Daily Groundwater Sampling Record

Sheet 2 of 2

BAE SYSTEMS

Site:	Bishopton	Date:	15/04/09	Weather:	Hazy sun, wind, mlid
Proj. No.:	B0060/00	Name(s):	KI, CON		

Borehole		GT06	BH1624	BH1504				
Pre-purge	GW level (m.bgl)	1.63	1.68	1.06				
	BH Base (m.bgl)	9.93	4.38	3.86				
	Datum	Top of cover	Top of cover	Top of cover				
	Water column (m)	8.3	2.7	2.8				
	1 well vol. (l)	16.6	5.4	5.6				
	3 well vols. (l)	49.8	16.2	16.8				
Purge	Method	PP1	PP1	PP1/Hand				
	Vol. Removed (l)	18	16	11				
Sample	Method	Bailer	Bailer	Bailer				
	Temp (°C)	9.00	7.99	8.52				
	pH	7.67	7.69	5.56				
	Eh (mV)	54.6	102.7	213.2				
	EC (µS/cm)	1048	454	6.29				
	DO ₂ (mg/l)	1.13	2.29	1.38				
	Colour	Grey Brown	Dark Brown	Brown				
	Turbidity	Medium	High	Medium				
	Odour	Slight sulphurous	-	-				
	Other	Pumped Dry	-	Pumped Dry				
Comments:					Calibration	Standard	Equipment calibrated to standard	
					EC	1413 µS/cm	yes	∅
					pH	4.01 / 7.01	yes	∅
					DO ₂	100%	yes	∅