

## RO BISHOPTON - SUMMARY OF WATER QUALITY MONITORING RESULTS

EXPLORATORY POINT NUMBER	RESPONSE ZONE		PURGING				PRIOR TO PURGING					AFTER PURGING				
	TOP (mBGL)	BASE (mBGL)	VOLUME OF WATER PURGED (litres)	PURGING FLOW RATE (litres/min)	MAXIMUM WATER LEVEL DECREASE (m)	SAMPLING DEPTH (mBGL)	TEMP. (°C)	pH (units)	DISSOLVED OXYGEN (mg/l)	CONDUCTIVITY (mS)	REDOX POTENTIAL (mV)	TEMP. (°C)	pH (units)	DISSOLVED OXYGEN (mg/l)	CONDUCTIVITY (mS)	REDOX POTENTIAL (mV)
BH 1	1.50	12.00	60.00	6.00	0.75	11.50	13.40	8.96	0.70	1357.00	18.10	14.10	9.02	3.02	1309.00	26.30
BH 2	4.00	9.06	50.00	6.00	1.31	9.00	13.80	8.55	0.70	970.00	73.20	14.20	8.33	0.79	953.00	79.80
BH 3	0.50	4.00	24.00	6.00	0.85	3.95	13.70	8.30	0.59	1238.00	120.02	14.60	7.52	0.66	1272.00	109.30
BH 4	0.50	4.50	30.00	6.00	1.62	4.40	13.60	13.25	0.63	>1400	68.40	14.00	13.25	0.55	>1400	52.50
BH 5	3.50	8.50	55.00	6.00	1.62	8.40	12.90	9.18	0.65	800.00	189.10	13.50	8.06	0.67	830.00	173.60
BH 6	0.50	9.20	50.00	6.00	3.32	9.00	15.70	8.60	3.60	566.00	91.00	15.30	8.52	2.93	590.00	112.30
BH 7	0.50	4.00	25.00	6.00	1.52	3.95	16.00	8.35	1.46	1318.00	130.10	15.70	8.21	1.62	551.00	122.50
BH 8	1.00	12.00	60.00	6.00	0.46	11.95	14.40	8.22	0.24	1318.00	57.40	14.20	8.04	0.33	1295.00	6180.00
BH 9	1.50	12.00	55.00	6.00	1.78	11.95	15.10	9.05	0.63	938.00	87.30	14.80	8.77	0.71	966.00	72.50
BH 10	1.50	12.00	60.00	6.00	0.43	11.95	15.50	9.36	0.56	750.00	-18.10	14.90	9.25	0.48	742.00	-21.30
BH A	8.50	10.00	55.00	6.00	0.77	9.90	14.50	8.87	1.12	733.00	392.00	14.20	9.44	0.91	696.00	450.20
BH B	8.50	10.00	60.00	6.00	1.02	9.90	13.10	6.13	0.63	602.00	477.80	12.60	6.31	0.85	527.00	453.80
BH C	7.00	10.00	75.00	6.00	0.93	9.90	14.10	9.03	1.33	612.00	448.60	13.70	9.11	1.15	636.00	463.70
BH D	8.50	10.00	60.00	6.00	2.21	9.90	14.10	9.49	0.05	842.00	41.80	14.00	9.62	0.00	822.00	49.40

DATE OF MONITORING : 21/09/94

**ROYAL ORDNANCE  
ENVIRONMENTAL SERVICES GROUP**  
Tel No. 01296 652123

REMARKS: All samples comprised 4 no. 1 litre amber glass jars.  
Samples not filtered.  
All samples stored in cool box at 8°C.

**RO BISHOPTON - SUMMARY OF GROUNDWATER DATA**

EXPLORATORY POINT NUMBER	BOREHOLE DETAILS			GROUNDWATER DURING DRILLING			GROUNDWATER LEVELS			
	GROUND LEVEL (m Above Local Datum)	TOP OF RESPONSE ZONE (m Above Local Datum)	BASE OF RESPONSE ZONE (m Above Local Datum)	GROUNDWATER STRIKE (m Above Local Datum)	STANDING GROUNDWATER LEVEL (m Above Local Datum)	GROUNDWATER SEALED OUT (m Above Local Datum)	21/09/94 (m Above Local Datum)	22/03/95 (m Above Local Datum)		
BH 1	98.14	96.64	86.14	96.14	96.14	95.54	96.69	97.00		
BH 1	98.14	96.64	86.14	92.84	95.04					
BH 2	97.32	93.32	88.26	94.62	94.62		97.17	96.85		
BH 3	97.37	96.87	93.37	96.67	96.67		97.09	97.15		
BH 4	101.11	100.61	96.61	96.51	98.21	92.11	100.46	100.55		
BH 5	99.65	96.15	91.15	98.55	98.55	91.65	98.40	98.46		
BH 6	98.98	98.38	89.78	None	None		97.65	98.45		
BH 7	98.25	97.75	94.25	None	None		97.55	97.67		
BH 8	97.39	96.39	85.39	95.39	95.39		95.24	95.73		
BH 9	96.81	95.31	84.81	94.81	95.21	88.31	95.92	96.19		
BH 10	96.58	95.08	84.58	94.38	94.38		95.47			
BH A	100.29	91.79	90.29	97.74			97.19	97.65		
BH B	99.61	91.11	89.61	97.11			96.74	97.28		
BH C	97.50	90.50	87.50	96.80			97.20	97.52		
BH D	100.40	91.90	90.40	95.30			99.33	99.08		

**ROYAL ORDNANCE  
ENVIRONMENTAL SERVICES GROUP**  
Tel No. 01296 652123

## RO BISHOPTON - SUMMARY OF WATER CHEMICAL TESTING RESULTS

SAMPLE IDENTIFICATION		TOTAL METALS									ACID		OTHER												
		Arsenic	Cadmium	Copper	Chromium	Lead	Mercury	Nickel	Selenium	Zinc	pH	Total Sulphate	Chloride	Boron	Sulphide	Total Cyanide	Toluene Extract	PAH	Mineral Oils	Phenol	Thiocyanate	Amn. Nitrogen	Magnesium	BOD	COD
EXPLOR. POINT	SAMPLE TYPE	mg/l									units	g/l	mg/l												
BH 1	W	0.026	<0.005	<0.02	<0.02	<0.02	0.0003	<0.02	<0.001	<0.02	7.5	0.03	359	1.08	<0.05	0.07	627	0.03	0.1	<0.05	<0.2	19.8	13	26	53060
BH 2	W	<0.001	<0.005	<0.02	<0.02	<0.02	<0.0002	<0.02	<0.001	<0.02	7	0.01	117	0.3	<0.05	0.01	72	<0.01	0.3	<0.05	<0.2	1.8	23	6	387
BH 3	W	<0.001	<0.005	<0.02	<0.02	<0.02	<0.0002	<0.02	<0.001	0.03	6.6	0.53	24	<0.05	<0.05	0.02	91	<0.01	<0.1	<0.05	<0.2	6	20	4	684
BH 4	W	<0.001	<0.005	0.03	<0.02	<0.02	<0.0002	0.04	<0.001	<0.02	12.4	<0.01	21	<0.05	<0.05	0.01	48	<0.01	0.3	<0.05	<0.2	5.5	<1	70	102
BH 5	W	0.002	<0.005	<0.02	<0.02	<0.02	<0.0002	<0.02	<0.001	<0.02	7.8	<0.01	23	0.43	<0.05	0.02	63	<0.01	0.6	<0.05	<0.2	5.1	28	2	133
BH 6	W	<0.001	0.012	0.02	<0.02	0.08	0.0003	0.03	<0.001	0.02	7.5	0.07	26	0.05	<0.05	0.01	59	<0.01	0.6	<0.05	<0.2	0.07	12	4	26
BH 7	W	<0.001	<0.005	<0.02	<0.02	<0.02	0.0014	<0.02	<0.001	<0.02	7.3	0.09	27	0.12	<0.05	0.02	18	<0.01	0.4	<0.05	<0.2	0.33	18	2	714
BH 8	W	<0.001	0.008	0.02	<0.02	0.02	0.0005	0.02	<0.001	0.09	7.6	0.02	6810	IS	IS	0.03	710	0.04	0.3	<0.05	<0.2	IS	20	18	97960
BH 9	W	<0.001	<0.005	<0.02	<0.02	<0.02	<0.0002	<0.02	<0.001	<0.02	7.5	0.04	31	0.46	<0.05	<0.01	55	<0.01	0.2	<0.05	<0.2	2.5	24	<2	41
BH 10	W	0.002	0.006	0.03	<0.02	<0.02	<0.0002	<0.02	<0.001	0.03	8.6	0.03	12550	0.34	IS	0.15	610	0.05	0.5	<0.05	<0.2	3.3	10	12	18360
BH A	W	<0.001	<0.005	0.02	<0.02	0.02	<0.0002	<0.02	<0.001	<0.02	8.9	0.72	90	0.9	<0.05	<0.01	20	<0.01	0.8	<0.05	<0.2	29	76	<2	46
BH B	W	<0.001	0.008	0.1	<0.02	<0.02	0.0004	0.22	<0.001	4.77	5.7	1.68	12	0.5	<0.05	<0.01	28	<0.01	0.2	<0.05	<0.2	104	49	<2	14
BH C	W	<0.001	<0.005	0.03	<0.02	0.02	<0.0002	<0.02	<0.001	<0.02	8.3	0.18	245	0.99	<0.05	<0.01	66	<0.01	0.4	<0.05	<0.2	<0.05	18	<2	39
BH D	W	<0.001	<0.005	<0.02	<0.02	<0.02	<0.0002	<0.02	<0.001	0.02	8.1	0.06	20	0.37	<0.05	>0.01	59	<0.01	0.6	<0.05	<0.2	0.17	21	<2	29

\* Amn. Nitrogen = Ammoniacal Nitrogen  
IS = Insufficient Sample

Concentration in Excess of Guideline Threshold Trigger Level

**ROYAL ORDNANCE**  
**ENVIRONMENTAL SERVICES GROUP**  
Tel No. 01296 652123

## RO BISHOPTON - SUMMARY OF WATER CHEMICAL TESTING RESULTS




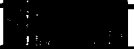
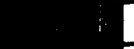




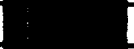

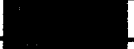
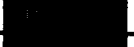
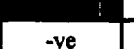
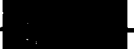
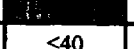


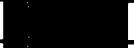

SAMPLE IDENTIFICATION		CHLORINATED HYDROCARBONS								
		Halon 113	Dichloroethane	Chloroform	1,1,1 Trichloroethane	Carbon Tetrachloride	Trichloroethylene	Tetrachloroethylene	1,1,2,2 Tetrachloroethane	Trichlorobenzene
EXPLOR. POINT NO.	SAMPLE TYPE	mg/l								
BH 1	W	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BH 2	W	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BH 3	W	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BH 4	W	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BH 5	W	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BH 6	W	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BH 7	W	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0191
BH 8	W	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0731
BH 9	W	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0077
BH 10	W	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0011
BH A	W	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BH B	W	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BH C	W	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BH D	W	<0.001	<0.005	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

**ROYAL ORDNANCE  
ENVIRONMENTAL SERVICES GROUP**  
Tel No. 01296 652123



Concentration in Excess of Guideline Threshold Trigger Level

## RO BISHOPTON - SUMMARY OF EXPLOSIVES ANALYSIS RESULTS

SAMPLE REF.	COLOUR 1	COLOUR 2	NITRO-CELLULOSE	HMX	RDX	EGDN	TETRYL	NITRO-GLYCERINE	TNT	PETN	HNS	PICRITE	PICRIC ACID	REMARKS
	+ve = positive -ve = negative			mg/kg										
B1		-ve		<15	<20	<25	<20		<25	<60	<45	<40	<60	
B2		-ve		<15	<20	<25	<20	<40	<25	<60	<45		<60	
B3				<15	<20	<25	<20	<40	<25	<60	<45		<60	NC masked by Picrite
B4		-ve		<15	<20	<25	<20	<40	<25	<60	<45	<40	<60	
B5				<15	<20	<25	<20	<40	<25	<60	<45		<60	NC masked by Picrite
B6				<15	<20	<25	<20	<40	<25	<60	<45		<60	NC masked by Picrite
B7		-ve		<15	<20	<25	<20	<40	<25	<60	<45	<40	<60	
B8		-ve		<15	<20	<25	<20	<40	<25	<60	<45		<60	
B9		-ve		<15	<20	<25	<20	<40	<25	<60	<45		<60	Small Peak for Picrite
B10				<15	<20	<25	<20	<40	<25	<60	<45		<60	NC masked by Picrite
B11		-ve		<15	<20	<25	<20	<40	<25	<60	<45		<60	
B12				<15	<20	<25	<20	<40	<25	<60	<45		<60	NC masked by Picrite
B13		-ve		<15	<20	<25	<20	<40	<25	<60	<45		<60	
B14		-ve		<15	<20	<25	<20	<40	<25	<60	<45	<40	<60	
B15		-ve		<15	<20	<25	<20	<40	<25	<60	<45	<40	<60	
B16		-ve		<15	<20	<25	<20	<40	<25	<60	<45	<40	<60	
B17		-ve		<15	<20	<25	<20	<40	<25	<60	<45		<60	Small Peak for Picrite
B18				<15	<20	<25	<20	<40	<25	<60	<45		<60	NC masked by Picrite
B19		-ve		<15	<20	<25	<20	<40	<25	<60	<45		<60	
B20		-ve		<15	<20	<25	<20	<40	<25	<60	<45	<40	<60	
B21		-ve		<15	<20	<25	<20	<40	<25	<60	<45	<40	<60	
B22		-ve		<15	<20	<25	<20	<40	<25	<60	<45	<40	<60	

ROYAL ORDNANCE  
 ENVIRONMENTAL SERVICES GROUP  
 Tel No. 01296 652123

 Explosive Detected