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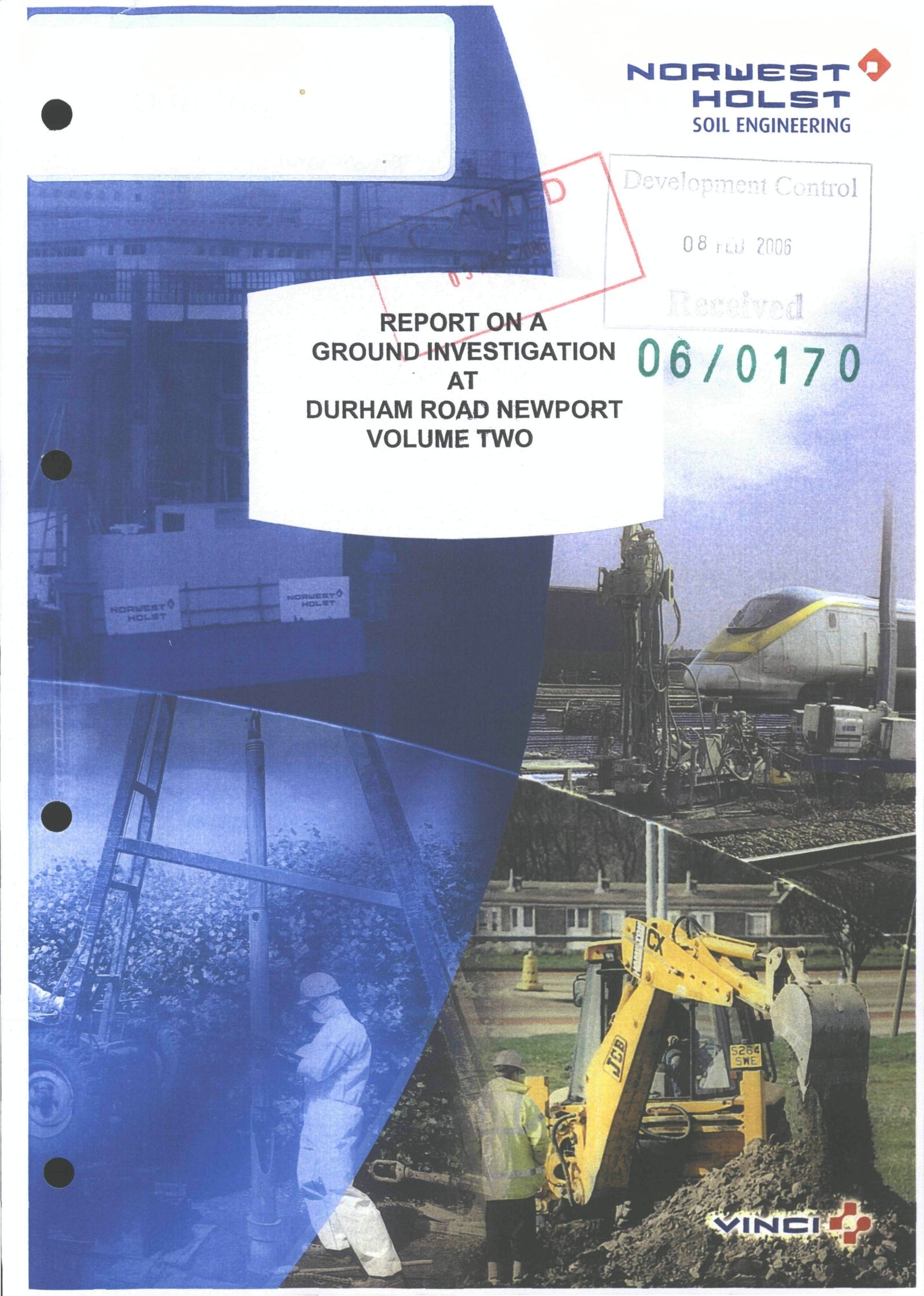
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**REPORT ON A
GROUND INVESTIGATION
AT
DURHAM ROAD NEWPORT
VOLUME TWO**

GRANTED
15 FEB 2006

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HOLST





**REPORT ON A
GROUND INVESTIGATION
AT
DURHAM ROAD NEWPORT
VOLUME TWO**

Client	Vinci Investments Ltd
Engineer	White Young Green Environmental
F No	F13041
Date	28/10/2003

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AGS ASSOCIATION OF
G EOTECHNICAL
SPECIALISTS

**BRITIS DRILLING
ASSOCIATION LTD**



1285



0618



0983

REPORT QUALITY ASSURANCE SHEET

Document Reference JH/ND/F13041

Title

**REPORT ON A
GROUND INVESTIGATION
AT
DURHAM ROAD, NEWPORT

VOLUME TWO**

Report Version	Author/Reviewer	Status to be signed off	Signatures	Date
Final	J Hilling	Factual Report Preparation	<i>J Hilling</i>	28/10/2003
	N R Dewell	Full Report Review	<i>N R Dewell</i>	28/10/2003
	M J Baldwin	Final Approval	<i>M J Baldwin</i>	28/10/2003

Distribution White Young Green Environmental

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Opinions and interpretations expressed in the report are outside the scope of UKAS accreditation

GROUND INVESTIGATION DURHAM ROAD, NEWPORT

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SUPPORTING FACTUAL DATA

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LABORATORY TESTING

CONTAMINATION TEST RESULTS

Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 07/10/03

ANALYTICAL REPORT No R68128

Location Durham Rd Newport
Your Project No F13041

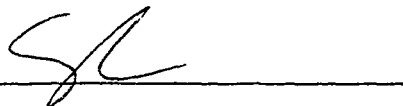
The attached analytical results relate to samples received on 17 Sep 2003

The report is only valid if it contains the total number of pages indicated at the bottom of this page

Checked by



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If you have any queries regarding this report please contact Steve Chapman or Steve Knight

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Norwest Holst Soil Engineering Ltd
R68128 Durham Rd Newport

	11/09/03	11/09/03	11/09/03	11/09/03	11/09/03	R68128
D t S mpl d	11/09/03	11/09/03	11/09/03	11/09/03	11/09/03	R68128
L b R f N	178827	178838	178839	178849	178857	AQC
C t m R f N	9	9	10	12	3	L b Std
S mpl Typ	ES	ES	B	ES	ES	
T l P t / B hol No	TP670	TP673	TP673	TP691	TP693	
D pth (m)	2.40	1.40		2.75	0.10	
H dst d g t Surf c (Y/N)						
pH	V i e	7.6	7.9	7.7	8.2	7.6
/ Loss lg rton	%					
/ M o t	%					
/ S t s	%					
Asbest s	/	0.001	0.001	10-20	0.001	0.001
PHENOLICS						
Butyl Ph ls	mg/kg					
Cat hol	mg/kg	0.5	0.5	0.5	0.5	
C e ol (m)	mg/kg	0.5	0.5	0.5	0.5	
Naphthols	mg/kg	0.5	0.5	0.5	0.5	
Ph ol	mg/kg	0.5	0.5	0.5	0.5	
R rc ol	mg/kg	0.5	0.5	0.5	0.5	
T methylph ol	mg/kg	0.5	0.5	0.5	0.5	
Xyl l & Ethylphe ls	mg/kg	0.5	0.5	0.5	0.5	
T t l Ph l	mg/kg	0.5	0.5	0.5	0.5	0.242
US EPA PRIORITY PAH'						
Ac aphthe e	mg/kg	1.4	0.6	0.8	0.5	
Ac aphthyl	mg/kg	0.9	0.5	0.5	0.5	
Anthrace	mg/kg	0.5	0.8	3.0	<0.5	
Be ()A thra e e	mg/kg	1.7	0.5	1.4	0.5	
B ol)py ne	mg/kg	2.4	0.9	1.5	0.5	
B (b)l ra the e	mg/kg					
B (k)l ora the e	mg/kg	3.2	1.1	1.2	0.5	
B nz (g h)p ryle	mg/kg	1.8	0.9	1.8	0.5	
Chry e	mg/kg	3.6	0.8	1.4	0.5	
D b (a h) a tha e ⁻²	mg/kg					
Ind (1 2 3-cd)pyre ⁻²	mg/kg	0.5	0.6	0.6	0.5	
Fl o th e	mg/kg	3.6	1.3	2.1	<0.5	
Fl ene	mg/kg	1.3	0.5	0.8	<0.5	
Naphth l	mg/kg	7.3	5.6	4.9	0.5	
Ph th e	mg/kg	3.6	1.7	3.3	<0.5	
Py e	mg/kg	3.0	0.5	2.7	0.5	
T tal US EPA 16 PAH	mg/kg	33.8	14.3	25.5	0.5	4688.6
OTHER PAH						
A lha the e	mg/kg					
B nz (e)pyre e	mg/kg					
Cycl p l a(cd)py e	mg/kg					
GENERAL INORGANICS						
Comple Cy de	mg/kg					
Easily L be atabl Cyan de (f e)	mg/kg					
Tho y te	mg/kg					
Total Cy d	mg/kg	1	1	1	1	2.0
S lph de	mg/kg	2	2	2	5.8	0.8
Sulph (fre)	mg/kg	150	220	1850	80	560
T tal S lphat	mg/kg	1200	1500	3000	400	6700
Wat Sol ble Sulphate	mg/kg			704		792
Wate Solubl Chl de	mg/kg					
Phosphat	mg/kg					
E ch ng able Ammo m	mg/kg	11.5	23.1	13.5	6.4	160.0
Nitrate	mg/kg					
Nint	mg/kg					

Norwest Holst Soil Engineering Ltd
P68128 Durham Rd Newport

D t S mpl d	11/09/03	11/09/0	11/09/03	11/09/03	11/09/03	R68128
Lab R f N	178827	178838	178839	178849	178857	AQC
C t m R f N	9	9	10	12	3	L b Std
S mpl Typ	ES	ES	B	ES	ES	
T l Pit / Bor h l No	TP670	TP673	TP673	TP691	TP693	
Depth (m)	2.40	1.40		2.75	0.10	
H d ta d g at S rf (Y/N)						

HEAVY METALS/METALLOIDS

Element	Unit	11/09/03	11/09/0	11/09/03	11/09/03	11/09/03
Al m n m	mg/kg					
A t m y	mg/kg					
Arse c	mg/kg	66.3	61.6		55.6	19.5
Ba n m	mg/kg					
B r y l m	mg/kg					
B o (Wate Sol ble)	mg/kg	1.6	0.5		2.1	0.5
Cadm m	mg/kg	2.2	1.7		0.9	0.7
Ch m m (Total)	mg/kg	54	188		52	22
Chrom m (Hex al nt)	mg/kg	2	2		2	
C balt	mg/kg					
Copp	mg/kg	795	4654		403	156
G r m m	mg/kg					
Le d	mg/kg	618	1168		1793	327
M rc ry	mg/kg	47.1	4.9		0.8	0.6
Molybd m	mg/kg					
N ckel	mg/kg	126	575		116	28
Sele m	mg/kg	3.2	3.1		4.1	1.2
Va ad m	mg/kg					
Zinc	mg/kg	2108	862		894	261

ESSENTIAL ELEMENTS

Element	Unit
C i m	mg/kg
I	mg/kg
Magnes m	mg/kg
M ga ese	mg/kg
P i ss m	mg/kg
Sod m	mg/kg

MONOAROMATICS

Element	Unit
B	mg/kg
T i e	mg/kg
Ethylbenz e	mg/kg
M t & P Xyl	mg/kg
Orth Xyle	mg/kg

Total Xyl s mg/kg

MTBE mg/kg

1,2,4-T m thylbe ze e mg/kg

1,3,5-Trm thylb e mg/kg

TOTAL HYDROCARBONS

Element	Unit	11/09/03	11/09/0	11/09/03	11/09/03
Petr l m Ra ge Org cs (C ₆ -C ₁₀)	mg/kg		<5	5	5
D sei Ra g Orga cs (C ₆ -C ₂₆)	mg/kg	199		8	<5
Hyd o rbo S (GC-FID)	mg/kg	199		8	<5

VOC

Element	Unit	Value
1,1,1-T chl oetha e	mg/kg	0.05
1,1,2,2-T trachlo th	mg/kg	0.05
1,1,2-T hl o-1,2,2 trfluo o thane	mg/kg	0.05
1,1,2-T chl o th	mg/kg	0.05
1,1-Dchlo o tha e	mg/kg	0.05
1,1-Dchlo oetha e	mg/kg	0.05
1,2,3-T chloropropane	mg/kg	0.05
1,2,3-T methylbenzene	mg/kg	0.05
1,2,4-T chlorobe zene	mg/kg	0.05
1,2,4-T m thylb nze e	mg/kg	0.05
1,2-Dibromo-3-Chlo opropane	mg/kg	0.05
1,2-Dichlo obenzene	mg/kg	0.05
1,2-Dichloroethane	mg/kg	0.05
1,2-Dichl ropopa	mg/kg	0.05
1,2-Dchlo oprope e	mg/kg	0.05
1,3,5-T m thylbe ze	mg/kg	0.05
1,3-D chlo obenze e	mg/kg	0.05

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D t Sampl d	11/09/03	11/09/03	11/09/03	11/09/03	11/09/03	R68128
Lab R f N	178827	178838	178839	178849	178857	AQC
C t m R f N	9	9	10	12	3	L b Stg
S mple Typ	ES	ES	B	ES	ES	
T l Pit / B hol No	TP670	TP673	TP673	TP691	TP693	
Depth (m)	2.40	1.40		2.75	0.10	
H d ta d g at S rf (Y/N)						

1,3-Dihl op pan	mg/kg	0.05
1,4-Dichl robe zen	mg/kg	0.05
1-Chlorot l ene	mg/kg	0.05
1-Methylp opylb ze e	mg/kg	0.05
2,2-D hl op pa e	mg/kg	0.05
2-Chlorot l e	mg/kg	0.05
Be ze	mg/kg	0.05
B robe n	mg/kg	0.05
B omochl m than	mg/kg	0.05
B omod chl ometha e	mg/kg	0.05
B omoform	mg/kg	0.05
Carbo Tetr chlo de (PCM)	mg/kg	0.05
Chl obe ze (s m)	mg/kg	0.05
Chlo od b mometh e	mg/kg	0.05
Chloro tha	mg/kg	0.05
Chlorof m	mg/kg	0.05
c 1,2-Dchl oethyle e	mg/kg	0.05
is 1,3-Dchloroprop e	mg/kg	0.05
Dibromochl ometh e	mg/kg	0.05
Db mo th	mg/kg	0.05
Dbromometha e	mg/kg	0.05
Dchlorob ze e	mg/kg	0.05
Dchlorom th e	mg/kg	0.05
Ethylbenze	mg/kg	0.05
He hl ob tad e e	mg/kg	0.05
m ta & para Xyl e	mg/kg	0.05
Methyl is p opylbe e	mg/kg	0.05
Mo chl robe nze	mg/kg	0.05
Mo ochlorophe l (s m)	mg/kg	0.05
n B tylbe e	mg/kg	0.05
Propylb e	mg/kg	0.05
nho Xyle e	mg/kg	0.05
Sty e	mg/kg	0.05
t ri Butylbe e e	mg/kg	0.05
T trachl obe ne	mg/kg	0.05
T tr chlo oeth e (PCE)	mg/kg	0.05
T trahyd ofu an	mg/kg	0.05
T l e	mg/kg	0.05
tra s 1,2-Dchloroeth e	mg/kg	0.05
tra s 1,3-d'chlo op pe e	mg/kg	0.05
T chlo oeth e (TCE)	mg/kg	0.05
T chlrofl orometha	mg/kg	0.05
T chlorometha e	mg/kg	0.05
V yl Chlo de	mg/kg	0.05

SVOC s		
1,2,4-T chlo ob e	mg/kg	
1,4-Dchl rob nze e	mg/kg	
2,3,4,6-Tetrachl oph ol (m)	mg/kg	
2,4,5-T hio ophe l	mg/kg	
2,4,6-T chlorophe ol	mg/kg	
2,4-Dchlo ph ol (s m)	mg/kg	
2,4-D methylphe l	mg/kg	
2,4-Di trolol e e	mg/kg	
2,6-D m thylph ol	mg/kg	
2,6-D trolol en	mg/kg	
2-Chloro phthale e	mg/kg	
2-Chlorophenol (s m)	mg/kg	
2-Methylphe l	mg/kg	
2-N trophe ol	mg/kg	
4-Chl ro-3-methylphenol	mg/kg	
4-chl robe nzyphenylethe	mg/kg	
4-Methylphe ol	mg/kg	
4-N trophe ol	mg/kg	
Azobe ne	mg/kg	
bs(2-chloroethyl)ethe	mg/kg	

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	11/09/03	11/09/03	11/09/03	11/09/03	11/09/03	R68128
D t S mpl d	178827	178838	178839	178849	178857	AQC
L b R f No	9	9	10	12	3	Lab Std
C t m R f No	ES	ES	B	ES	ES	
S mpl Type	TP670	TP673	TP673	TP691	TP693	
T I P t / B hole No	2 40	1 40		2 75	0 10	
D pth (m)						
H dst d g t S rf (Y/N)						

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5-T	mg/kg
2 4 D	mg/kg
Chl o-t yl y tr cd	mg/kg
D c mba	mg/kg
D chl rop p	mg/kg
Me op op	mg/kg
S i	mg/kg

TRIAZINES

Altrzi	mg/kg
S ma	mg/kg

PCB

PCB C ge e 28	mg/kg
PCB Co ge 52	mg/kg
PCB Co ge e 101	mg/kg
PCB Co ge e 118	mg/kg
PCB C ng e 138	mg/kg
PCB Co ge 153	mg/kg
PCB Co gen 180	mg/kg

T t I PCB s	mg/kg	0 005
-------------	-------	-------

ALCOHOLS

B ta ol	mg/kg
Eth ol	mg/kg
Ethyl e Gly l	mg/kg
Meth ol	mg/kg
P p n-1-ol	mg/kg
P op 2-ol	mg/kg

MISCELLANEOUS

Cal nfi Val e	Cal/g
S i	mg/kg
T	mg/kg

1,2 D hl propa e	mg/kg
1 3-D chl prope e	mg/kg
2 4 D it ph ol	mg/kg
Ac t e	mg/kg
C rbazole	mg/kg
Carbo ds lph d	mg/kg
C te (TPH by GCFID)	mg/kg
Cy l hexa	mg/kg
Cycl hexa	mg/kg
He achl ocy clope tad e e	mg/kg
Hydroq one	mg/kg
N-Nitrosod phenylam ne	mg/kg
p-Chlo o l e	mg/kg
P em th n/Cyperm th n	mg/kg
Pynd ne	mg/kg
Styren	mg/kg
S iphola	mg/kg
Toj e e Extractable Matte (H stonc)	mg/kg
Toxaph e	mg/kg
Tnbetyl Tn	mg/kg
Trnchloromethane	mg/kg
V yl Acetate	mg/kg

CONCRETE

Chlo de BS1377 P rt 3 clud g prepa atio	mg/kg
HAC (R pd determ tion of H gh Al m a Cerr	mg/kg
Mix P oporto s-Cement/Agg gate Ratio-BS188	mg/kg

Org c Matt	%	7 4	8 4
------------	---	-----	-----

Notes

Benzo(b)fluora the e & Be zo(k)fl ora the e co-elute (reported as s m)
^{a2} Di-benzo(a h) a th ace e & l d o(1,2,3-cd)pyre e co-elute (reported as s m)

Norwest Holst Soil Engineering Ltd
R68128 Durham Rd Newport

Dat Sampl d	11/09/03	N t	R68128
L b Ref No	178842	Rece ed	AQC
C stom Ref No	18	19	Lab Std
Sampl Typ	WS	WS	
Trn l P t / Bo eh ol No	TP673	TP673	

pH	Valu	7.7	7.9
TOC	mg/l		
S spe ded Sol ds	mg/l		
Electncal Cond (µS/cm)	µS/cm		

PHENOLICS

Butyl Phe ols	ug/l		
Cate hol	ug/l	<0.5	
C esols (s m)	g/l	0.5	
Naphthols	ug/l	0.5	
Phe ol	g/l	0.5	
Reso c nol	ug/l	<0.5	
Trimethylphe ol	ug/l	0.5	
Xyl nols & Ethylphenols	g/l	0.5	
Total Phe ol	g/l	<0.5	291

US EPA PRIORITY PAH s

Ace aphthene	g/l		
Ace aphthylene	g/l		
Anthrace e	ug/l		
Benzo(a)Anth cene	ug/l		
Be o(a)pyrene	g/l		
Benzo(b)fl o a the e	ug/l		
Benzo(k)fl o a there	g/l		
Be zo(g h)perylene	ug/l		
Chrys e	g/l		
D b zo(a h)anth a ene	ug/l		
I de o(1 2 3-cd)pyrene *2	ug/l		
Fluora the e	ug/l		
Fluorene	ug/l		
Naphthale e	ug/l		
Phe anth e e	ug/l		
Pyrene	g/l		
Total US EPA 16 PAH	ug/l		

OTHER PAH s

Anthanthrene	ug/l		
Benzo(e)pyrene	ug/l		
Cyclopenta(cd)pyre e	ug/l		

GENERAL INORGANICS

Comple Cya de	ug/l		
Eas ly L beratabl Cyan de (f ee)	g/l		
Th ocya ate	ug/l		
Total Cya de	g/l	5	1970
Sulph de	ug/l	100	753
S lph (f ee)	ug/l		
Sulphate	ug/l	158931	101385
Chlonde	ug/l		
Phosphate	ug/l		
Exchangeable Ammon m	ug/l		
Ntrate	g/l		
Nitrite	ug/l		

Date Sampled	11/09/03	Not	R68128
Lab Ref No	178842	Received	AQC
Container Ref N	18	19	Lab Std
Sample Type	WS	WS	
Trial Pit / Borehole No	TP673	TP673	

HEAVY METALS/METALLOIDS

Aluminium	g/l		
Antimony	ug/l		
Arsenic	g/l	10	57
Barium	g/l		
Beryllium	ug/l		
Boron	g/l	385	149
Cadmium	ug/l	1	11
Chromium (Dissolved)	g/l	20	53
Chromium (Hexavalent)	g/l		
Cobalt	ug/l		
Copper	ug/l	5	138
Germanium	g/l		
Lead	ug/l	20	34
Mercury	ug/l	0.1	6.3
Molybdenum	ug/l		
Nickel	g/l	<20	50
Selenium	g/l	10	39
Vanadium	g/l		
Zinc	ug/l	50	389

ESSENTIAL ELEMENTS

Calcium	g/l
Iron	ug/l
Magnesium	ug/l
Manganese	g/l
Potassium	g/l
Sodium	ug/l

MONOAROMATICS

Benzene	g/l
Toluene	ug/l
Ethylbenzene	g/l
Meta & Para Xylene	g/l
Ortho Xylene	ug/l

Total Xylenes ug/l

MTBE	ug/l
1,2,4-Trimethylbenzene	ug/l
1,3,5-Trimethylbenzene	ug/l

TOTAL HYDROCARBONS

Petroleum Range Organics (C ₆ -C ₁₀)	ug/l
Diesel Range Organics (C ₁₀ -C ₂₈)	ug/l
Hydrocarbon Screen (GC FID)	ug/l

VOCs

1,1,1-Trichloroethane	ug/l
1,1,2,2-Tetrachloroethane	ug/l
1,1,2,2-Tetrachloro-1,1,2,2-trifluoroethane	ug/l
1,1,2-Trichloroethane	ug/l
1,1-Dichloroethane	ug/l
1,1-Dichloroethene	ug/l
1,2,3-Trichloropropane	ug/l
1,2,3-Trimethylbenzene	g/l
1,2,4-Trichlorobenzene	ug/l
1,2,4-Trimethylbenzene	ug/l
1,2-Dibromo-3-Chloropropane	ug/l
1,2-Dichlorobenzene	ug/l
1,2-Dichloroethane	ug/l
1,2-Dichloropropane	g/l
1,2-Dichloropropene	g/l
1,3,5-Trimethylbenzene	ug/l
1,3-Dichlorobenzene	g/l
1,3-Dichloropropane	g/l
1,4-Dichlorobenzene	ug/l
1-Chlorotoluene	ug/l
1-Methylpropylbenzene	ug/l

Norwest Holst Soil Engineering Ltd
R68128 Durham Rd Newport

Dat S mpl d	11/09/03	Not	R68128
Lab Ref No	178842	Rece ed	AQC
C stom r Ref No	18	19	Lab Std
Sample Type	WS	WS	
Trnal P t / Bo ehole No	TP673	TP673	

2 2 Dichlo opropane	g/l
2 Chlo otoluene	g/l
Benzene	ug/l
B omobenzene	g/l
B omochloromethane	ug/l
B omodchloromethan	ug/l
B omoforn	ug/l
Carbon Tet achlonde (PCM)	ug/l
Chlorobenzene (sum)	ug/l
Chlorod bromometha e	ug/l
Chloroethane	g/l
Chlo of rm	ug/l
cis 1 2 Dichloroethyle e	ug/l
c s 1 3 D chlorop opene	ug/l
Dibrom chlo omethane	g/l
D b omoetha	g/l
Dibromometha e	g/l
D chlorobenze e	ug/l
Dichloromethane	ug/l
Ethylbenze e	g/l
He achlorobutad ene	ug/l
meta & para Xylene	ug/l
Methyl isopropylbenzene	g/l
Monochlorobenzene	ug/l
Monochlorophenols (sum)	ug/l
n Butylbenzene	ug/l
Propylbenzene	ug/l
ortho Xyle e	ug/l
Styrene	g/l
tert Butylbenzene	ug/l
Tetrachl robe e e	ug/l
Tetrachl roethene (PCE)	ug/l
Tetrahyd ofuran	ug/l
Tolue e	ug/l
trans 1 2 D chloroethene	ug/l
t ans 1 3-d chloropope e	g/l
T chloroethene (TCE)	g/l
Tnchlorofluorometha e	ug/l
Tnchloromethane	ug/l
Vnyl Chlornde	ug/l

SVOC s

1 2 4-Tnchlorobenzene	ug/l
1 4-D chlorobenzene	g/l
2 3 4 6-Tet achlo ophenol (sum)	ug/l
2 4 5-Tnchloroph nol	ug/l
2 4 6 Tnchlorophe ol	g/l
2 4 Dichlorophe ol (sum)	ug/l
2 4-D methylph nol	ug/l
2 4-D itrotoluene	ug/l
2 6-D methylphenol	ug/l
2 6 D itrotoluene	ug/l
2-Chloronaphthalene	ug/l
2-Chlorophenol (sum)	ug/l
2 Methylphe ol	ug/l
2 Nitrophenol	ug/l
4-Chloro-3-methylphenol	ug/l
4-chlorobenzylphenylether	ug/l
4-Methylphenol	ug/l
4-Nitrophenol	ug/l
Azobenzene	g/l
bis(2-chlo oethyl)ethe	ug/l
bs(2-chloroethyo y)methane	ug/l
bis(chloroisopropyl)ether	ug/l
Bromophenylph ylethe	ug/l
Hexachloro-1 3-butad ene	ug/l
Hexachlorobenzene	ug/l
Hexachloroethane	g/l
Isophorone	ug/l
Nitrobenzene	ug/l

Date Sampled	11/09/03	Not	R68128
Lab Ref No	178842	Received	AQC
Customer Ref No	18	19	Lab Std
Sample Type	WS	WS	
Trial Pit / Borehole No	TP673	TP673	

-nitrosodipropylamine	ug/l
Pentachlorobenzene	ug/l
Pentachlorophenol	ug/l

Bis(2-ethylhexyl)phthalate	ug/l
Butylbenzylphthalate	ug/l
Diethylphthalate	ug/l
Dimethylphthalate	ug/l
Dipropylphthalate	ug/l
D-n-octylphthalate	ug/l

Total Phthalates	ug/l
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ORGANO CHLORINE PESTICIDES

Aldrin	ug/l
Beta HCH (Beta BHC)	g/l
Chlordane	ug/l
DDD	ug/l
Deln	g/l
Dnns (total)	ug/l
Endosulfan I	ug/l
Endosulfan II	ug/l
Endosulfan Sulphate	g/l
Endrin	ug/l
Endrin Aldehyde	ug/l
Gamma HCH (Lindane)	ug/l
Heptachlor	g/l
Heptachlor epoxide	ug/l
Heptachlorobenzene	ug/l
Methoxychlor	ug/l
pp DDE	ug/l
pp DDT	ug/l
pp TDE	ug/l

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	ug/l
Demeton-methyl	ug/l
Diazinon	ug/l
Dichlorvos	ug/l
Disulfoton	ug/l
EPN Ethion	ug/l
Malathion	ug/l
Methyl Parathion	ug/l
Parathion	ug/l
Terbufos	ug/l

CARBAMATE (Pesticide)

Carbaryl	ug/l
Carbofuran	g/l
Mebex	ug/l

Date Sampled	11/09/03	Not	R68128
Lab Ref No	178842	Received	AQC
Contaminant Ref No	18	19	Lab Std
Sample Type	WS	WS	
Target Pit / Borehole No	TP673	TP673	

PHENOL UREA HERBICIDES

Chlorotolone	ug/l
Dro	ug/l
Isoproturo	g/l
Lur	ug/l

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	ug/l
2,4-D	ug/l
Chloro-o-tolylolacetic acid	ug/l
Diamba	ug/l
Dichloroprop	ug/l
Mecoprop	g/l
Silex	ug/l

TRIAZINES

Altrazine	ug/l
Simazine	g/l

PCBs

PCB Congener 28	g/l
PCB Congener 52	ug/l
PCB Congener 101	g/l
PCB Congener 118	ug/l
PCB Congener 138	ug/l
PCB Congener 153	g/l
PCB Congener 180	ug/l

Total PCBs	g/l
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ALCOHOLS

Butanol	ug/l
Ethanol	ug/l
Ethylene Glycol	g/l
Methanol	ug/l
Propanol 1	ug/l
Propanol 2	ug/l

MISCELLANEOUS

Silver	ug/l
Tin	ug/l

1,2-Dichloropropane	ug/l
1,3-Dichloropropane	ug/l
2,4-Dinitrophenol	ug/l
Acetone	ug/l
Carbazole	ug/l
Carbonyl sulphide	ug/l
Creosol (TPH by GC/FID)	ug/l
Cyclohexane	ug/l
Cyclohexanone	ug/l
Heptachlorocyclopentadiene	ug/l
Hydroquinone	ug/l
N-Nitrosodiphenylamine	ug/l
p-Chloroaniline	ug/l
Premethrin/Cypermethrin	ug/l
Pyridine	g/l
Styrene	ug/l
Sulpholane	ug/l
Toluene Extractable Matter (Historic)	ug/l
Toxaphene	ug/l
Tertiary Butyl Thiocarbonyl	ug/l
Tert-butyl methyl ether	g/l
Vinyl Acetate	ug/l
Vinyl Chloride	ug/l

Notes

Benzo(a)fluoranthene & Benzo(k)fluoranthene co-elute (reported as sum)
²Di-benzo(a,h)anthracene & Indeno(1,2,3-cd)pyrene co-elute (reported as sum)
 Insufficient sample

ENVIRONMENTAL ANALYSIS LABORATORIES

15 Burgess Road Ivyhouse Lane Industrial Estate Hastings East Sussex TN35 4NR

Tel 01424 444433 Fax 01424 442299 info@environmentalanalysis.com

ANALYTICAL REPORT No R68128

Location Durham Rd Newport

Your Project No F13041

Reporting Date 07/10/03

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
Leeds LS11 5SX

Soil

Date Sampled 11/09/03
Lab Ref No 178827
Customer Ref No 9
Sample Type ES
Trial Pit / Borehole No TP670
Depth (m) 2.40

Aromatic

C ₅ C ₇	(mg/kg) N	<5
>C ₇ C ₈	(mg/kg) N	<5
>C ₈ C ₁₀	(mg/kg) N	<5
>C ₁₀ C ₁₂	(mg/kg) N	<5
>C ₁₂ C ₁₆	(mg/kg) N	<5
>C ₁₆ C ₂₁	(mg/kg) N	<5
>C ₂₁ C ₂₅	(mg/kg) N	<5

Aliphatic

C ₅ C ₆	(mg/kg) N	<5
>C ₆ C ₈	(mg/kg) N	<5
>C ₈ C ₁₀	(mg/kg) N	<5
>C ₁₀ C ₁₂	(mg/kg) N	<5
>C ₁₂ C ₁₆	(mg/kg) N	<5
>C ₁₆ C ₂₁	(mg/kg) N	<5
>C ₂₁ C ₂	(mg/kg) N	<5

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

NT not tested

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ENVIRONMENTAL ANALYSIS LABORATORIES

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Tel 01424 444433 Fax 01424 442299 info@environmentalanalysis.com

ANALYTICAL REPORT No R68128

Location Durham Rd Newport

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
Leeds LS11 5SX

Your Project No F13041

Reporting Date 07/10/03

Asbestos Identification

Date Sampled	11/09/03
Lab Ref No	178839
Customer Ref No	10
Sample Type	B
Trial Pit / Borehole No	TP673
Description of Sample Matrix	Asbestos Tile
Overall Percentage of Asbestos Identified	10.20 %
Type of Asbestos Identified	Chrysotile (white)

Descriptions of methods available on request (V8)
Asbestos identification = UKAS accredited method
Quantification of asbestos and tentative identification
of non asbestos materials is not covered by
UKAS accreditation

MJB
www.environmentalanalysis.com

Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 11/10/03

ANALYTICAL REPORT No R68146

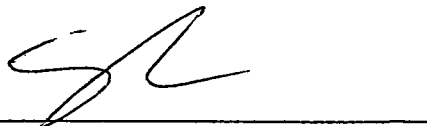
Location Durham Rd Newport

Your Project No F13041

The attached analytical results relate to samples received on 15 Sep 2003

The report is only valid if it contains the total number of pages indicated at the bottom of this page

Checked by



Authonsed by



If you have any queries regarding this report please contact Steve Chapman or Steve Knight

■ ENVIRONMENTAL ANALYSIS LABORATORIES
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A Division of Norwest Holst Soil Engineering Ltd
Registered in England No 980795
Registered Office Parkside Lane Dewsbury Road Leeds LS11 5SX

Date Sampled	11/09/03	11/09/03	11/09/03	11/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03
Lab Ref N	178984	178985	178986	178987	178989	178990	178 91	178992	178993
Contaminant Ref N	4	7	10	13	3	6	9	13	3
Sample Type	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tri Pit / Bench / N	TP669	TP669	TP669	TP669	TP649	TP649	TP649	TP649	TP650
Depth (m)	0.46	1.50	2.50	2.60	0.32	1.40	2.40	2.60	0.20
Head to Date Reference (Y/N)									
pH						8.0			
% Loss									
% Moist									
% Sol									
Abso							0.001		
PHENOLICS									
Butyl Phenol									
Catechol						0.5			
Cresol (m)						0.5			
Naphthol						<0.5			
Phenol						0.5			
Resorcinol						0.5			
Trimethylphenol						0.5			
Xylenol & Ethylphenols						0.5			
Total Phenol						0.5			
US EPA PRIORITY PAH									
Acenaphthene						1.1			
Acenaphthylene						3.1			
Anthracene						5.0			
Benzo(a)Anthracene						29.8			
Benzo(a)Pyrene						38.6			
Benzo(b)Fluoranthene									
Benzo(k)Fluoranthene						37.0			
Benzo(g,h,i)perylene						35.3			
Chrysene						33.1			
Dibenz(a,h)anthracene									
Indeno(1,2,3-cd)pyrene						22.1			
Fluoranthene						49.1			
Fluorene						1.7			
Naphthalene						4.8			
Phenanthrene						18.0			
Pyrene						45.7			
Total US EPA 16 PAH						324.6			
OTHER PAH									
Anthracene									
Benzo(a)pyrene									
Cycl penta(cd)pyrene									
GENERAL INORGANICS									
Complex Cyanide									
Easily Liberatable Cyanide (free)									
Thiocyanate									
Total Cyanide						1			
Sulphide						2			
Sulphur (free)						390			
Total Sulphate						200			
Water Soluble Sulphate									
Water Soluble Chloride									
Phosphate									
Exchangeable Ammonium						19.3			
Nitrate									
Nitrite									

Norwest Holst Soil Engineering Ltd
R68146 Durham Rd Newport

D t S mpl d	11/09/03	11/09/03	11/09/03	11/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03
Lab R f N	178984	178985	178986	178987	178989	178990	178991	178992	178993
Cust m Ref N	4	7	10	13	3	6	9	13	3
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES
T i Pit / B h l N	TP669	TP669	TP669	TP669	TP649	TP649	TP649	TP649	TP650
D pth (m)	0.46	1.50	2.50	2.60	0.32	1.40	2.40	2.60	0.20
H dst d g t S r f ce (Y/N)									

HEAVY METALS/METALLOIDS

Al m m	mg/kg	
A tm y	mg/kg	
Ars	mg/kg	31.5
B m	mg/kg	
Beryll m	mg/kg	
Boro (W t S l bl)	mg/kg	1.3
Cadm m	mg/kg	1.3
Ch m m (Tot l)	mg/kg	25
Ch om m (H l i t)	mg/kg	
Cobalt	mg/kg	
C ppe	mg/kg	517
G ma m	mg/kg	
L d	mg/kg	660
M rc ry	mg/kg	3.8
M lybd num	mg/kg	
N k l	mg/kg	45
S i m	mg/kg	2.4
V nad m	mg/kg	
Z	mg/kg	803

ESSENTIAL ELEMENTS

C lci m	mg/kg
i	mg/kg
M g es um	mg/kg
M g es	mg/kg
P t m	mg/kg
S d m	mg/kg

MONOAROMATICS

Benzene	mg/kg
T lue	mg/kg
Ethylb nzene	mg/kg
M ia & P ra Xyl ne	mg/kg
Orth Xyl ne	mg/kg
T t l Xyl ne	mg/kg
MTBE	mg/kg
1,2,4-T m thylbenze	mg/kg
1,3,5-T m thylbenz	mg/kg

TOTAL HYDROCARBONS

P trol m R ng Org ics (C ₆ -C ₁₀)	mg/kg	
D el Rang Org (C ₆ -C ₂₆)	mg/kg	163
Hydrocarbon Scree (GC-FID)	mg/kg	272

VOC

1,1,1-T chl roethane	mg/kg	<0.05	0.05	**	**	0.05	0.05	0.05	0.05
1,1,2,2-T trachloroetha	mg/kg	0.05	<0.05	**	**	0.05	0.05	0.05	0.05
1,1,2-T chloro-1,2,2,1 fl oethane	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
1,1,2-T chl roethane	mg/kg	<0.05	0.05	**	**	0.05	0.05	<0.05	0.05
1,1-Di hloroethane	mg/kg	0.05	<0.05	**	**	<0.05	0.05	0.05	0.05
1,1-Dichloroethene	mg/kg	0.05	0.05	**	**	0.05	<0.05	0.05	0.05
1,2,3-T chloropropane	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
1,2,3-Tmethylbenzene	mg/kg	<0.05	0.05	**	**	0.05	0.05	<0.05	0.05
1,2,4-T chlorobenze	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
1,2,4-T methylbenzene	mg/kg	0.05	<0.05	**	**	0.05	0.05	0.05	0.05
1,2-D b mo-3-Chl roporane	mg/kg	<0.05	0.05	**	**	0.05	0.05	0.05	0.05
1,2-D hlorobenzene	mg/kg	0.05	0.05	**	**	<0.05	<0.05	0.05	0.05
1,2-D chloroethane	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
1,2-D chl roporane	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
1,2-Dichloropropene	mg/kg	0.05	0.05	**	**	<0.05	0.05	0.05	0.05
1,3,5-T methylbenzene	mg/kg	0.05	<0.05	**	**	<0.05	0.05	0.05	0.05
1,3-Dichlorobenzene	mg/kg	<0.05	<0.05	**	**	0.05	0.05	0.05	<0.05

Norwest Holst Soil Engineering Ltd
R68146 Durham Rd, Newport

D t S mpl d	11/09/03	11/09/03	11/09/03	11/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03
Lab R f N	178984	178985	178986	178987	178989	178990	178991	178992	178993
C t m R f N	4	7	10	13	3	6	9	13	3
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES
T l P r / B h l N	TP669	TP669	TP669	TP669	TP649	TP649	TP649	TP649	TP650
D pth (m)	0.46	1.50	2.50	2.60	0.32	1.40	2.40	2.60	0.20
H dst d g at S r f (Y/N)									

1,3-Dichloropropane	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
1,4-Dichlorobenzene	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
1-Chloroethane	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
1-Methylpropylbenzene	mg/kg	0.05	0.05	**	**	0.05	0.05	<0.05	0.05
2,2-Dichloropropane	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
2-Chloroethane	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Benzene	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Bromobenzene	mg/kg	0.05	0.05	**	**	0.05	0.05	<0.05	0.05
Bromochloromethane	mg/kg	0.05	<0.05	**	**	0.05	0.05	0.05	0.05
Bromodichloromethane	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Bromofluoromethane	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Carbonyl sulfide (PCM)	mg/kg	0.05	0.05	**	**	0.05	<0.05	0.05	0.05
Chlorobenzene (m)	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Chlorobromomethane	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Chloroethane	mg/kg	0.05	0.05	**	**	0.05	<0.05	0.05	<0.05
Chloroform	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
1,1,2-Dichloroethane	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
1,3-Dichloropropane	mg/kg	0.05	<0.05	**	**	0.05	0.05	0.05	0.05
Dibromochloromethane	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Dibromoethane	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Dibromomethane	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Dichlorobenzene	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Dichloromethane	mg/kg	<0.05	0.05	**	**	0.05	0.05	0.05	0.05
Ethylbenzene	mg/kg	0.05	<0.05	**	**	0.05	0.05	0.05	0.05
Hexachlorocyclopentadiene	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Hexachlorocyclopentadiene	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Methyl chlorobenzene	mg/kg	0.05	0.05	**	**	<0.05	<0.05	0.05	0.05
Methyl chlorobenzene	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Methyl chlorobenzene (m)	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	<0.05
Butylbenzene	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Propylbenzene	mg/kg	<0.05	0.05	**	**	<0.05	0.05	0.05	0.05
o-Xylene	mg/kg	0.05	0.05	**	**	<0.05	0.05	0.05	0.05
Styrene	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
tert-Butylbenzene	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Tetrahalobenzene	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Tetrahaloethene (PCE)	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Tetrahydrofuran	mg/kg	0.05	0.05	**	**	<0.05	<0.05	0.05	0.05
Toluene	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
trans-1,2-Dichloroethene	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
trans-1,3-Dichloropropane	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	<0.05
Toluene (TCE)	mg/kg	0.05	0.05	**	**	0.05	0.05	<0.05	0.05
Toluene (m)	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Toluene (m)	mg/kg	0.05	0.05	**	**	0.05	0.05	0.05	0.05
Vinyl Chloride	mg/kg	0.05	0.05	**	**	<0.05	0.05	0.05	0.05

SVOC

1,2,4-Trichlorobenzene	mg/kg								
1,4-Dichlorobenzene	mg/kg								
2,3,4,6-Tetrahydrophenol (m)	mg/kg								
2,4,5-Trichlorophenol	mg/kg								
2,4,6-Trichlorophenol	mg/kg								
2,4-Dichlorophenol (m)	mg/kg								
2,4-Dimethylphenol	mg/kg								
2,4-Dinitrotoluene	mg/kg								
2,6-Dimethylphenol	mg/kg								
2,6-Dinitrotoluene	mg/kg								
2-Chlorophthalene	mg/kg								
2-Chlorophenol (m)	mg/kg								
2-Methylphenol	mg/kg								
2-Nitrophenol	mg/kg								
4-Chloro-3-methylphenol	mg/kg								
4-Chlorobenzylphenylether	mg/kg								
4-Methylphenol	mg/kg								
4-Nitrophenol	mg/kg								
Azobenzene	mg/kg								
bis(2-chloroethyl)ether	mg/kg								

D t S mpl d Lab R f N	11/08/03	11/09/03	11/09/03	11/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03
C st m R f N	178984	178985	178986	178987	178989	178990	178991	178992	178993
S mpl Typ	4	7	10	13	3	6	9	13	3
T l P t / Bo h l N	ES	ES	ES	ES	ES	ES	ES	ES	ES
D pth (m)	TP669	TP669	TP669	TP669	TP649	TP648	TP649	TP649	TP650
H d t d i g t Surf (Y/N)	0 46	1 50	2 50	2 60	0 32	1 40	2 40	2 60	0 20

b (2 hl thy y)m th	mg/kg
b (hl propyl)eth	mg/kg
B m ph yph yl th	mg/kg
H hl o-1 3-but d	mg/kg
H hl benz	mg/kg
H hl oethane	mg/kg
i ph	mg/kg
Nit benz ne	mg/kg
-nitro od-n-propyl 1-p panam ne	mg/kg
P t hl benzene	mg/kg
P t hl phe l	mg/kg

B (2-ethyl xyl)phth l t	mg/kg
Butylbenzylphthal t	mg/kg
D thylphth l t	mg/kg
D methylphthal t	mg/kg
D b typhth lat	mg/kg
D n-octyl phthal t	mg/kg

T t l Phth l t	mg/kg
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ORGANO CHLORINE PESTICIDES

Ald	mg/kg
B ta-HCH (Bet BHC)	mg/kg
Chl rd ne	mg/kg
DDD	mg/kg
D: ld	mg/kg
D (tot l)	mg/kg
E dos # l	mg/kg
E d lf ll	mg/kg
E dos lf S lphat	mg/kg
E d	mg/kg
E d End Aldehyde	mg/kg
G mm HCH (Li d ne)	mg/kg
Hept hl	mg/kg
H pt hl po id	mg/kg
H pt hl robenzene	mg/kg
M tho ychl	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azu ph methyl	mg/kg
D m l n- -m thyl	mg/kg
Diazino	mg/kg
D: hl rv	mg/kg
D xath	mg/kg
D lfot	mg/kg
EPN Eth	mg/kg
Mal th on	mg/kg
M thyl P rath	mg/kg
P rath	mg/kg
T rbufos	mg/kg

CARBAMATE (P sticid)

Carbaryl	mg/kg
Carbof ra	mg/kg
M neb	mg/kg

PHENOL UREA HERBICIDES

Chlorotol	mg/kg
D: ro	mg/kg
Isoprot ro	mg/kg
L ro	mg/kg

	11/09/03	11/09/03	11/09/03	11/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03
D t S mpl d	11/09/03	11/09/03	11/09/03	11/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03
Lab R f N	178984	178985	178986	178987	178989	178990	178991	178992	178993
C st m R f N	4	7	10	13	3	6	9	13	3
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES
T i P t /Bo h l N	TP669	TP669	TP669	TP669	TP649	TP649	TP649	TP649	TP650
D pth (m)	0.46	1.50	2.50	2.60	0.32	1.40	2.40	2.60	0.20
H dst d g t S rf (Y/N)									

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5-T	mg/kg
2 4-D	mg/kg
Chl o-c-l yl xya t d	mg/kg
D mb	mg/kg
D hl op p	mg/kg
M p p	mg/kg
SI	mg/kg

TRIAZINES

Alt ne	mg/kg
S m z	mg/kg

PCB

PCB Co ge 28	mg/kg
PCB Cong 52	mg/kg
PCB Co g 101	mg/kg
PCB Co g 118	mg/kg
PCB Co gene 138	mg/kg
PCB Co g 153	mg/kg
PCB Co ge 180	mg/kg

Total PCB	mg/kg
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ALCOHOLS

But nol	mg/kg
Ethanol	mg/kg
Ethylen Glycol	mg/kg
M tha l	mg/kg
P p n-1-ol	mg/kg
Prop n-2-ol	mg/kg

MISCELLANEOUS

Cal f V lue	C /g
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SI	mg/kg
T	mg/kg

1 2 Di hl roprop	mg/kg
1 3-D chl rop pe	mg/kg
2 4-D itr phe l	mg/kg
Acet ne	mg/kg
Carb l	mg/kg
Ca bo d lphd	mg/kg
Creo t (TPH by GCFID)	mg/kg
Cycl he ne	mg/kg
Cy l he no	mg/kg
Hex chl rocycl pe tad e	mg/kg
Hyd oq inone	mg/kg
N-Nitrosod phe yl m	mg/kg
p-Chloroani ne	mg/kg
Prem th n/Cyperm th	mg/kg
Pynd ne	mg/kg
Styrene	mg/kg
S lph l ne	mg/kg
Tolue Extract bl M tter (Hi t ic)	mg/kg
T xaphene	mg/kg
Tributyl T	mg/kg
Trnchl meth	mg/kg
V yl Ac tate	mg/kg

CONCRETE

Chlonde BS1377 Part 3 nclud ng pr parat	mg/kg
HAC (R pid d t rminat f H gh Al m na Cem	mg/kg
M Proport ns-Cement/Aggreg t Ratio-BS1881	mg/kg

Org Matter	(%)
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T tal Chlon ated Solv nt (AOX)	mg/kg
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Notes
 Benzo(b)fluorathene & Benzo(k)fluorathene co-elute (reported as um)
 *2 Di-benzo(a,h) nthracene & Indeno(1,2,3-cd)pyrene co-elute (reported as um)
 Insufficient sample for analysis
 ** Analysis held incorrectly & subsequently cancelled

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	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03
D t S mpl d	178994	178995	178996	178997	178999	179000	179001	179002	179003
L b R f N	6	9	13	16	3	6	9	13	16
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP650	TP650	TP650	TP650	TP651	TP651	TP651	TP651	TP651
T l P t / B h l N	0.30	1.30	2.30	2.80	0.30	0.40	1.40	2.40	2.60
Depth (m)									
H d t d i g t S r f (Y/N)									
pH				7.6			8.1		
/ L i g i t									
/ M i s t r e									
/ S t									
Asb t				0.001			Tra		
PHENOLICS									
Butyl Ph ol									
C t h l				0.5					
C l (m)				0.5					
N phth l				0.5					
Ph nol				0.5					
R l				0.5					
T m thylph l				0.5					
Xyl l & Ethylph l				0.5					
T t l Ph l				0.5					
US EPA PRIORITY PAH									
A phth ne				0.5		0.5			
Ace phthyl				0.5		0.5			
A thrace				0.5		0			
Benzo()A thrace				0.5		0.5			
B nz ()py ne				0.5		0.5			
B nzo(b)fl ra th ne									
Benzo(k)fluo nthene				0.5		0.5			
B nzo(g h)p ryl				0.5		0.5			
Chrys				0.5		0.5			
D benz (h)nthracene ²									
l d (1 2 3-cd)pyr ²				0.5		0.5			
Fl th ne				0.5		0.5			
Fl				0.5		0.5			
N phth i ne				0.5		0.5			
Ph th ne				0.5		0.5			
Py ne				0.5		0.5			
T tal US EPA 16 PAH				0.5		0.5			
OTHER PAH									
A th th									
Be ()py									
Cy l p nta(d)pyr									
GENERAL INORGANICS									
Compl Cya d									
E ily Liberat bl Cya d (fr)									
Th y at									
T t l Cya d				1		1			
S lph d				5.5		2			
Sulphu (f ee)				2300		260			
Total S lphate				200		4100			
W t S l ble S lphat						156			
W t S l ble Chl d									
Ph phat									
Exch ng bl Amm o m				7.1		24.2			
N trat									
N t t									

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	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03
D t S mpl d	178994	178995	178996	178997	178999	179000	179001	179002	179003
Lab R f N	6	9	13	16	3	6	9	13	16
C st m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Type	TP650	TP650	TP650	TP650	TP651	TP651	TP651	TP651	TP651
T lPt / B h l N	0 30	1 30	2 30	2 80	0 30	0 40	1 40	2 40	2 80
D pth (m)									
H dst d gat S rf ce (Y/N)									

HEAVY METALS/METALLOIDS

Al m m	mg/kg								
Antim y	mg/kg								
Ars	mg/kg				17 7		90 0		
B m	mg/kg								
Beryll m	mg/kg								
B ro (W l Sol bl)	mg/kg				10 5		0 5		
Cadm m	mg/kg				0 5		47 2		
Chromi m (T tal)	mg/kg				44		491		
Ch m m (H xa l l t)	mg/kg				2				
C b lt	mg/kg								
Coppe	mg/kg				25		9290		
G rm m	mg/kg								
Lead	mg/kg				64		912		
M rc ry	mg/kg				0 5		27 7		
M lybd m	mg/kg								
N k l	mg/kg						850		
S l m	mg/kg				<0 5		2 8		
V nad m	mg/kg								
Zi	mg/kg				123		2593		

ESSENTIAL ELEMENTS

Calci m	mg/kg								
i	mg/kg								
M g es m	mg/kg								
M ga ese	mg/kg								
Potass m	mg/kg								
Sod m	mg/kg								

MONOAROMATICS

Benzene	mg/kg								
T luene	mg/kg								
Ethylbenz ne	mg/kg								
Meta & Para Xyl e	mg/kg								
Ortho Xyl ne	mg/kg								

Total Xyl nes mg/kg

MTBE mg/kg

1 2 4-T methylbenz ne mg/kg

1 3 5-T methylbenz ne mg/kg

TOTAL HYDROCARBONS

P trol m R ge Orga cs (C ₆ -C ₁)	mg/kg				5		5		
Dnes l R ge Orga cs (C ₉ -C ₂₆)	mg/kg				5		145		
Hydrocarbo S reen (GC-FID)	mg/kg				<5		145		

VOC

1 1 1 T hl roetha	mg/kg	0 05	0 05	0 05	**	**	**	**	**	**
1 1 2 2 T tra hl roethane	mg/kg	0 05	0 05	<0 05	**	**	**	**	**	**
1 1 2 T hl oro-1 2,2 trifluo oeth ne	mg/kg	0 05	0 05	<0 05	**	**	**	**	**	**
1 1 2 T hl roeth ne	mg/kg	0 05	0 05	0 05	**	**	**	**	**	**
1 1 Dichl roethane	mg/kg	0 05	0 05	0 05	**	**	**	**	**	**
1 1 Dchl oethene	mg/kg	0 05	0 05	0 05	**	**	**	**	**	**
1,2 3-T hlo oprop ne	mg/kg	<0 05	0 05	0 05	**	**	**	**	**	**
1,2 3-T m thylbenze	mg/kg	0 05	0 05	0 05	**	**	**	**	**	**
1,2 4-Trichlorobenze	mg/kg	0 05	0 05	0 05	**	**	**	**	**	**
1 2 4-T methylbenzene	mg/kg	0 05	0 05	0 05	**	**	**	**	**	**
1 2 Dibromo-3-Chl ropropan	mg/kg	0 05	0 05	0 05	**	**	**	**	**	**
1 2 Di hl orobenze	mg/kg	0 05	0 05	<0 05	**	**	**	**	**	**
1 2 Di hl roethane	mg/kg	0 05	0 05	0 05	**	**	**	**	**	**
1 2 Dichloroprop ne	mg/kg	0 05	0 05	<0 05	**	**	**	**	**	**
1 2 D hl oropropene	mg/kg	<0 05	0 05	0 05	**	**	**	**	**	**
1 3 5-T m thylbenzene	mg/kg	0 05	0 05	0 05	**	**	**	**	**	**
1 3-Di hl robenzene	mg/kg	<0 05	0 05	0 05	**	**	**	**	**	**

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D t S mpl d	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03
Lab R f N	178994	178995	178996	178997	178999	179000	179001	179002	179003	
C st m Ref N	6	9	13	16	3	6	9	13	16	
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	
T i l Pit / B h l N	TP650	TP650	TP650	TP650	TP651	TP651	TP651	TP651	TP651	
D pth (m)	0.30	1.30	2.30	2.80	0.30	0.40	1.40	2.40	2.60	
H rd sta d l g t S rf ce (Y/N)										
1,3-Dichloropropane	mg/kg	0.05	0.05	0.05						
1,4-Dichlorobenzene	mg/kg	0.05	0.05	<0.05	**	**	**	**	**	
1-Chlorotoluene	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
1-Methylpropylbenzene	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
2,2-Dichloropropane	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
2-Chlorotoluene	mg/kg	<0.05	0.05	0.05	**	**	**	**	**	
Benzene	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Bromobenzene	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Bromochloromethane	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Bromodichloromethane	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Bromofluoromethane	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Carbontetrachloride (PCM)	mg/kg	<0.05	0.05	0.05	**	**	**	**	**	
Chlorobenzene (m)	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Chlorodibromomethane	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Chloroethane	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Chloroform	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
1,2-Dichloroethane	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
1,3-Dichloropropene	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Dibromochloromethane	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Dibromoethane	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Dibromomethane	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Dichlorobenzene	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Dichloromethane	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Ethylbenzene	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Heptachlorobutadiene	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
meta & para Xylene	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Methylisopropylbenzene	mg/kg	0.05	0.05	<0.05	**	**	**	**	**	
Monochlorobenzene	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Monochlorobiphenyl (m)	mg/kg	<0.05	0.05	0.05	**	**	**	**	**	
Butylbenzene	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Propylbenzene	mg/kg	<0.05	0.05	0.05	**	**	**	**	**	
ortho Xylene	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Styrene	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
tert-Butylbenzene	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Tetrachlorobenzene	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Tetrachloroethane (PCE)	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Tetrahydrofuran	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Toluene	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
trans-1,2-Dichloroethane	mg/kg	0.05	<0.05	0.05	**	**	**	**	**	
trans-1,3-dichloropropene	mg/kg	0.05	<0.05	0.05	**	**	**	**	**	
Trichloroethene (TCE)	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
Trichlorofluoromethane	mg/kg	<0.05	0.05	0.05	**	**	**	**	**	
Trichloromethane	mg/kg	<0.05	0.05	0.05	**	**	**	**	**	
Vinyl Chloride	mg/kg	0.05	0.05	0.05	**	**	**	**	**	
SVOC										
1,2,4-Trichlorobenzene	mg/kg									
1,4-Dichlorobenzene	mg/kg									
2,3,4,6-Tetrachlorophenol (sum)	mg/kg									
2,4,5-Trichlorophenol	mg/kg									
2,4,6-Trichlorophenol	mg/kg									
2,4-Dichlorophenol (m)	mg/kg									
2,4-Dimethylphenol	mg/kg									
2,4-Dinitrotoluene	mg/kg									
2,6-Dimethylphenol	mg/kg									
2,6-Dinitrotoluene	mg/kg									
2-Chloronaphthalene	mg/kg									
2-Chlorophenol (sum)	mg/kg									
2-Methylphenol	mg/kg									
2-Nitrophenol	mg/kg									
4-Chloro-3-methylphenol	mg/kg									
4-chlorobenzylphenylether	mg/kg									
4-Methylphenol	mg/kg									
4-Nitrophenol	mg/kg									
Azobenzene	mg/kg									
bis(2-chloroethyl)ether	mg/kg									

	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03
D t S mpl d	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03
Lab R f N	178994	178995	178996	178997	178999	179000	179001	179002	179003
C t m R f N	6	9	13	16	3	6	9	13	16
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES
T / P H / B o r h l l N	TP650	TP650	TP650	TP650	TP651	TP651	TP651	TP651	TP651
D pth (m)	0.30	1.30	2.30	2.80	0.30	0.40	1.40	2.40	2.60
H d t a d g at S r f c (Y/N)									

b (2 hlo oethyl xy)m tha	mg/kg
b (chl propyl) th r	mg/kg
B m phe ylph yl th	mg/kg
H hl ro-1.3 butadie	mg/kg
H chl robe zene	mg/kg
H hl roeth ne	mg/kg
l ph	mg/kg
Nitrob nz ne	mg/kg
n- itro od n-propyl 1 prop m	mg/kg
P tachi benzene	mg/kg
P t hloroph nol	mg/kg
B (2-ethyl xy)phthal t	mg/kg
Butylbenzylphthalat	mg/kg
D thylphthal t	mg/kg
D m thylphthal t	mg/kg
D n-butylphthal t	mg/kg
D -octyl phthal t	mg/kg

T t l Phth i tes	mg/kg
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ORGANO CHLORINE PESTICIDES

Ald	mg/kg
Bet HCH (Beta BHC)	mg/kg
Chl d	mg/kg
DDD	mg/kg
D id	mg/kg
Dnns (tot l)	mg/kg
E d ulfa I	mg/kg
End ifa II	mg/kg
E d ifa S lphat	mg/kg
End	mg/kg
End End Ald hyd	mg/kg
G mm HCH (Lindane)	mg/kg
H pla hl	mg/kg
H pt hl po de	mg/kg
H ptachlorobenzene	mg/kg
M th xychl	mg/kg
pp-DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azi phos methyl	mg/kg
Demeton-s-m thyl	mg/kg
D azinon	mg/kg
D hl rvos	mg/kg
D xathio	mg/kg
Di lf ton	mg/kg
EPN Eth on	mg/kg
M leth on	mg/kg
M thyl P rathu	mg/kg
P th	mg/kg
T rbutos	mg/kg

CARBAMATE (Pesti id)

Carbaryl	mg/kg
C rbofuran	mg/kg
Maneb	mg/kg

PHENOL UREA HERBICIDES

Chlorotol ro	mg/kg
Diuron	mg/kg
Isoproturon	mg/kg
Li ro	mg/kg

	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03
D t S mpl d	178994	178995	178996	178997	178999	179000	179001	179002	179003
L b R f N	6	9	13	16	3	6	9	13	16
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Type	TP650	TP650	TP650	TP650	TP651	TP651	TP651	TP651	TP651
T i l P l t / B o h i N	0.30	1.30	2.30	2.80	0.30	0.40	1.40	2.40	2.60
D p t h (m)									
H d s t a d i g t S r f (Y/N)									

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chl o-o l l y l x y a e t h a d	mg/kg
D c a m b	mg/kg
D h l r o p p	mg/kg
M c o p p	mg/kg
S i	mg/kg

TRIAZINES

Al t r i z i	mg/kg
S m a z i n e	mg/kg

PCB

PCB C o n g e 28	mg/kg
PCB C o g 52	mg/kg
PCB C o g 101	mg/kg
PCB C o g n e 118	mg/kg
PCB C o g 138	mg/kg
PCB C o g 153	mg/kg
PCB C o g e 180	mg/kg

T o t l P C B	mg/kg
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ALCOHOLS

B u t l	mg/kg
E t h l	mg/kg
E t h y l e n e G l y c o l	mg/kg
M e t h l	mg/kg
P r o p a n - 1 - o l	mg/kg
P r o p a n - 2 - o l	mg/kg

MISCELLANEOUS

C l i n f V l u e	Cal/g
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S i	mg/kg
T	mg/kg

1,2-D i h l r o p r o p a	mg/kg
1,3-D i h l r o p e n e	mg/kg
2,4-D i t r o p h l	mg/kg
A e t n e	mg/kg
C a r b a l	mg/kg
C a r b o n d i p h d	mg/kg
C r e o s t (TPH by GCFID)	mg/kg
C y l i n e	mg/kg
C y c l o h n o	mg/kg
H c h l o c y l p e n t a d n e	mg/kg
H y d r o q u i n o n e	mg/kg
N-N t r o d p h e n y l m	mg/kg
p-C h l r o l	mg/kg
P r e m t h n / C y p e r m e t h	mg/kg
P y n d n e	mg/kg
S t y r e n e	mg/kg
S l p h o l	mg/kg
T i E x t r a t b l e M a t t (H t)	mg/kg
T x a p h e n e	mg/kg
T b u t y l T	mg/kg
T r a c h l o m e t h	mg/kg
V y l A c e t a t	mg/kg

CONCRETE

C h i d B S 1 3 7 7 P r t 3 n c l d i n g p r e p a r a t	mg/kg
H A C (Rapid d t r m i n a t i o f H g h A l m i n e C e m)	mg/kg
M i P o p o r t - C e m e t / A g g r e g a t R a t i o - B S 1 8 8 1	mg/kg

Organic Matter	(%)
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Total Chlorinated Solvents (AOX)	mg/kg
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Notes

- Benzo(b)fluor
- D-benzo(a)h
- Insufficient sa
- An lys he

Norwest Holst Soil Engineering Ltd
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	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03
D t S mpl d	179004	179005	179006	179007	179008	179009	179010	179011	179012
Lab R f N	3	6	10	11	14	3	6	9	12
C tome R f No	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Type	TP652	TP652	TP652	TP652	TP652	TP653	TP653	TP653	TP653
Tri l P t / B h l N	0.25	1.30	2.30	2.55	2.60	0.10	0.20	1.30	1.40
D pth (m)									
H dsta d g t S r f (Y/N)									
pH									7.8
/ L l g t									
/ M st e									
% St es									
Asbe t									0.001
PHENOLICS									
Butyl Ph l									
Cat h l									0.5
C es l (m)									0.5
N phth l									0.5
Phe l									0.5
Res rc nol									0.5
T m thyph nol									0.5
Xyl l & Ethyph e l									0.5
T t l Ph l									0.5
US EPA PRIORITY PAH									
Ac phl he									0.5
A phl thyl									0.5
A th ce									0.5
Benz () A thra									0.5
B nz () pyre									<0.5
B nzo(b)fl th									0.5
B nzo(k)fl ra th									0.5
Benzo(g h) peryl									0.5
Chrys									0.5
D benzo(h) thra ne									0.5
l d (1 2 3-cd)py									0.5
Flu o									0.5
N phth l ne									0.5
Ph na th ne									0.5
Pyr									0.5
Tot l US EPA 16 PAH									0.5
OTHER PAH									
Anth a th									
Benzo() pyr ne									
Cycl pe l (cd)pyr									
GENERAL INORGANICS									
Complex Cy id									
Ea lly Lib rat bl Cya de (f ee)									
Thocy nat									
T tal Cy d									1
S lph d									<2
S lph (free)									110
Total S lphate									300
W t Sol ble S lph t									
Wat S l bl Chl rid									
Pho phat									
Excha ge bl Ammon um									5.1
Nitrat									
Nitrit									

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D t S m pl d	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03
Lab R f No	179004	179005	179006	179007	179008	179009	179010	179011	179012
C t m R f N	3	6	10	11	14	3	6	9	12
S m pl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES
T l Pit / B hol N	TP652	TP652	TP652	TP652	TP652	TP653	TP653	TP653	TP653
D pth (m)	0.25	1.30	2.30	2.55	2.60	0.10	0.20	1.30	1.40
H dst d g at S rfa (Y/N)									

HEAVY METALS/METALLOIDS

Al m um	mg/kg								
Ant m y	mg/kg								
Ars	mg/kg								56.2
Ba m	mg/kg								
B ryl m	mg/kg								
B (W t S l bl)	mg/kg								1.2
Cadm m	mg/kg								2.9
Chrom m(T tal)	mg/kg								54
Chrom m(Hexa al nt)	mg/kg								2
Cobalt	mg/kg								
Coppe	mg/kg								255
Germ m	mg/kg								
Lead	mg/kg								351
M ry	mg/kg								11
M lybde m	mg/kg								
N k l	mg/kg								130
S len m	mg/kg								3.6
V nad m	mg/kg								
Z nc	mg/kg								589

ESSENTIAL ELEMENTS

C l m	mg/kg								
Iro	mg/kg								
M g es m	mg/kg								
M g es	mg/kg								
Pol a m	mg/kg								
Sod m	mg/kg								

MONOAROMATICS

B nzene	mg/kg								
Toluene	mg/kg								
Ethylbenzene	mg/kg								
M t & P ra Xyl	mg/kg								
Orth Xyl ne	mg/kg								
T tal Xyl	mg/kg								

MTBE

1,2,4-T m thylbenz ne	mg/kg								
1,3,5-T m thylbenzene	mg/kg								

TOTAL HYDROCARBONS

P tr l m Ra g Org nics (C ₆ -C ₁₀)	mg/kg								<5
Des l Ra ge O ga cs (C ₉ -C ₂₈)	mg/kg								7
Hyd ocarbo S ee (GC-FID)	mg/kg								7

VOC

1,1,1 T chloroethane	mg/kg	0.05	0.05	0.05	0.05					
1,1,2,2 Tetrachloroethane	mg/kg	0.05	0.05	0.05	0.05					
1,1,2 T hi ro-1,2,2 trichloroethane	mg/kg	0.05	0.05	0.05	0.05					
1,1,2 T hloroethane	mg/kg	0.05	<0.05	<0.05	<0.05					
1,1-D hloroethane	mg/kg	0.05	0.05	0.05	0.05					
1,1 Di hloroethane	mg/kg	0.05	0.05	0.05	<0.05					
1,2,3-T chlor p pane	mg/kg	0.05	0.05	<0.05	0.05					
1,2,3-Tmmethylbenzene	mg/kg	0.05	<0.05	0.05	<0.05					
1,2,4-Tnchlorobenzene	mg/kg	0.05	<0.05	0.05	0.05					
1,2,4-T m thylbenz ne	mg/kg	0.05	<0.05	<0.05	0.05					
1,2 D bromo-3-Chl ropropa	mg/kg	<0.05	0.05	0.05	0.05					
1,2 Dichlorobenzene	mg/kg	0.05	0.05	<0.05	0.05					
1,2 Dichloroethane	mg/kg	<0.05	0.05	0.05	0.05					
1,2 D chloropropene	mg/kg	0.05	0.05	0.05	0.05					
1,2-Dichl ropropene	mg/kg	0.05	<0.05	<0.05	<0.05					
1,3,5-Tmmethylbenzene	mg/kg	0.05	0.05	0.05	<0.05					
1,3-D hlorobenzene	mg/kg	0.05	0.05	0.05	0.05					

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	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03
D t S mpl d										
L b R f N	179004	179005	179006	179007	179008	179009	179010	179011	179012	
C t m R f N	3	6	10	11	14	3	6	9	12	
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	
T I PR / B h l N	TP652	TP652	TP652	TP652	TP652	TP653	TP653	TP653	TP653	
D pth (m)	0.25	1.30	2.30	2.55	2.60	0.10	0.20	1.30	1.40	
H dst d g t S rf ce (Y/N)										

1,3-D hlo p pa	mg/kg	0.05	0.05	0.05	0.05					
1,4-D hl benz	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
1-Chl t l	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
1-M thylpropylb nz	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
2,2-D chlo prop	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
2-Chl rot i	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
B nz n	mg/kg	0.05	0.05	<0.05	0.05	**	**	**	**	**
Bromobenze	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
Brom hl m th	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
Brom d hl m thane	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
Brom f rm	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
C rbo T trachl d (PCM)	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
Chl b nze (m)	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
Chl rod brom m th	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
Chl oethane	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
Chl rof rm	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
1,2-D hl oethyl n	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
is 1,3-D chlor prope	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
D b mochl rom th ne	mg/kg	0.05	0.05	0.05	<0.05	**	**	**	**	**
D lb moetha	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
Dibrom m th ne	mg/kg	0.05	0.05	0.05	<0.05	**	**	**	**	**
D hl benz ne	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
D hl rom th	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
Ethylb ne	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
H hl butad	mg/kg	0.05	<0.05	0.05	0.05	**	**	**	**	**
m ta & para Xyl ne	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
M thyl- p pylbenze	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
M ochl obenzene	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
M chloroph ois (m)	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
Butylb nz	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
P pylbenzene	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
rth Xyl	mg/kg	0.05	0.05	<0.05	0.05	**	**	**	**	**
Sty	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
tert Butylbenzene	mg/kg	<0.05	0.05	0.05	0.05	**	**	**	**	**
T t hlorobenze	mg/kg	0.05	0.05	0.05	<0.05	**	**	**	**	**
T trachloroeth (PCE)	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
T t hydrof ra	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
T i	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
tra 1,2-Dichl roeth	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
t 1,3-d hlo p pene	mg/kg	0.05	0.05	<0.05	0.05	**	**	**	**	**
T chlor thene (TCE)	mg/kg	<0.05	0.05	0.05	0.05	**	**	**	**	**
T hl fluorom th	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
T hl m th ne	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**
V yl Chl d	mg/kg	0.05	0.05	0.05	0.05	**	**	**	**	**

SVOC

1,2,4-Trichlorobenzene	mg/kg
1,4-D hl benz	mg/kg
2,3,4,6-Tetra hl phenol (m)	mg/kg
2,4,5-T hl roph nol	mg/kg
2,4,6-T chl roph nol	mg/kg
2,4-D hl rophenol (m)	mg/kg
2,4-Dimethylphe ol	mg/kg
2,4-Dinitrot luene	mg/kg
2,6-Dim thylphenol	mg/kg
2,6-Di itrotol ne	mg/kg
2-Chl onaphthal	mg/kg
2-Chl roph ol (m)	mg/kg
2-Methylph l	mg/kg
2-Nitrophenol	mg/kg
4-Chloro-3-methylphenol	mg/kg
4-chl robenzylphe yiethe	mg/kg
4-Methylph nol	mg/kg
4-Nitrophenol	mg/kg
Az benzene	mg/kg
bis(2-chloroethyl)etne	mg/kg

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	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03
D t S mpl d	179004	179005	179006	179007	179008	179009	179010	179011	179012
L b R f N	3	6	10	11	14	3	6	9	12
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP652	TP652	TP652	TP652	TP652	TP653	TP653	TP653	TP653
T I P t / B o h i N	0.25	1.30	2.30	2.55	2.60	0.10	0.20	1.30	1.40
D pth (m)									
H dst d g t S rfa (Y/N)									

b (2-chl oethy y)m th	mg/kg
b (hl propyl) th	mg/kg
Brom ph ylph yl th	mg/kg
H hl o-13-butad ne	mg/kg
H hl be	mg/kg
H chl oeth	mg/kg
I ph ro	mg/kg
N t benz	mg/kg
it od propyl i p p m ne	mg/kg
P nt chl robenz	mg/kg
P nt chl rophenol	mg/kg

B (2-ethylxyl)phthal t	mg/kg
Butylbenzylphth i t	mg/kg
D thyphth i t	mg/kg
D m thyphth i t	mg/kg
D butylphthal t	mg/kg
D n-octyl phth i t	mg/kg

T t i Phth i t	mg/kg
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ORGANO CHLORINE PESTICIDES

Ald	mg/kg
B ta HCH (Beta BHC)	mg/kg
Chl d	mg/kg
DDD	mg/kg
D id	mg/kg
D ns (t i l)	mg/kg
E dosulf i	mg/kg
End ulf ll	mg/kg
E d ulf S lph t	mg/kg
E d	mg/kg
E d End Ald hyd	mg/kg
G mm HCH (Lnd ne)	mg/kg
H pla hl	mg/kg
H pt hl po d	mg/kg
H pt hl robenz ne	mg/kg
M th xychl	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azi ph m thyl	mg/kg
Dem to m thyl	mg/kg
D azn	mg/kg
Dichl rv	mg/kg
Dio thi	mg/kg
Di ulf t	mg/kg
EPN Eth	mg/kg
M i th	mg/kg
Methyl P th	mg/kg
P ath	mg/kg
T rbufcs	mg/kg

CARBAMATE (Pesti id)

Carb ryl	mg/kg
Carbof ra	mg/kg
M b	mg/kg

PHENOL UREA HERBICIDES

Chl rotol ro	mg/kg
Di ro	mg/kg
Isop ot ro	mg/kg
Li ron	mg/kg

	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03
D t S mpl d										
L b R f N	179004	179005	179006	179007	179008	179009	179010	179011	179012	
C t m R f N	3	6	10	11	14	3	6	9	12	
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	
T J P t / B h i N	TP652	TP652	TP652	TP652	TP652	TP653	TP653	TP653	TP653	
D pth (m)	0.25	1.30	2.30	2.55	2.60	0.10	0.20	1.30	1.40	
H d ta d g at S rf (Y/N)										

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5-T	mg/kg
2 4-D	mg/kg
Chl o-o-t lyl yacetl d	mg/kg
Dcamba	mg/kg
Dchl p p	mg/kg
M p p	mg/kg
Sll	mg/kg

TRIAZINES

Altrazine	mg/kg
Smazine	mg/kg

PCB

PCB C ng er 28	mg/kg
PCB Co g 52	mg/kg
PCB Co g he 101	mg/kg
PCB C nge 118	mg/kg
PCB Cong er 138	mg/kg
PCB Congene 153	mg/kg
PCB Co g 180	mg/kg

Total PCB	mg/kg
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ALCOHOLS

Buta l	mg/kg
Etha l	mg/kg
Ethyl Gly ol	mg/kg
M th l	mg/kg
P p 1-ol	mg/kg
Prop 2-ol	mg/kg

MISCELLANEOUS

Cal f V l	Cal/g
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Sll er	mg/kg
T	mg/kg

1 2 D hl pr p	mg/kg
1 3-D hl p pene	mg/kg
2 4-D troph ol	mg/kg
Acetone	mg/kg
C rbaz l	mg/kg
Carbo d lph de	mg/kg
C eo t (TPH by GCFID)	mg/kg
Cycloh ne	mg/kg
Cycl he none	mg/kg
H hl Ocycl pentad ne	mg/kg
Hyd oq	mg/kg
N N trosod phe yl m	mg/kg
p-Chlo oa li ne	mg/kg
P meth n/Cypermethnn	mg/kg
Pynd ne	mg/kg
Styre	mg/kg
S lphol ne	mg/kg
T luene Extr ct ble Matt (Histon)	mg/kg
T phene	mg/kg
Tributyl T	mg/kg
T hl methane	mg/kg
V nyl A tat	mg/kg

CONCRETE

Chl nd BS1377 P rt 3 nclud ng prparation	mg/kg
HAC (Rapid determ atio of H gh Al m na Ceme	mg/kg
Mix Proport ns-Cement/Aggregat Ratio-BS1881	mg/kg

Organl Matte	(%)
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Total Chl rinated Solv ts (AOX)	mg/kg
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Not
Benzo(b)fluor
-2 Di-be zo(h)
Insuff cient sai
** Analys scher

Norwest Holst Soil Engineering Ltd
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	12/09/03	12/09/03	12/09/03	12/09/03	R68046
D t S mpl d	179013	179014	179015	179017	AQC
Lab Ref N	3	6	9	10	Lab Std
C t m R f N	ES	ES	ES	B	
S mpl Typ	TP636A	TP636A	TP636A	TP651	
Tri l PIt/ B h l No	0.30	0.90	1.70	1.60	
D pth (m)					
H dsta d g t S rfa (Y/N)					
pH			8.7		7.6
/ L l g t n	/				
/ M i t	/				
/ S l	/				
Asbe t			0.001	10.20	
PHENOLICS					
Butyl Phenol					
C techol			0.5		
Cr l (m)			0.5		
N phth l			0.5		
Ph l			0.5		
R rc nol			0.5		
Trimethylph l			0.5		
Xyl l & Ethylph nol			0.5		
Total Ph ol			<0.5		0.291
US EPA PRIORITY PAH					
Ace phth			0.5		
Ace phthyl ne			0.5		
A thra ne			0.5		
Benzo()A thra			0.5		
Benzo()pyr			0.5		
Benzo(b)fluora th					
Benzo(k)fluora th			0.5		
Benzo(g h)peryl			0.5		
Chrys ne			<0.5		
D benzo(h) nithrace					
l d (1,2,3-cd)pyre			0.5		
Fl ranthene			0.5		
Fl or			0.5		
Naphth l			0.5		
Ph e threne			0.5		
Py ne			0.5		
Total US EPA 16 PAH			0.5		4338.2
OTHER PAH					
Anthanthrene					
Benzo()pyr n					
Cycl penta(cd)pyrene					
GENERAL INORGANICS					
Compl Cy d					
Easily Liberatable Cy d (free)					
Thiocya at					
T tal Cya d			1		2.0
S lph de			39.7		0.8
S lph (free)			3940		510
Total S lphat			100		6000
Wat S l ble S lphate					
W t Sol bl Chl d					
Phosphat					
Ex h geable Amm m			22.5		160.0
Nitrate					
Nitrit					

D t S mpl d	12/09/03	12/09/03	12/09/03	12/09/03	R68046
Lab R f N	179013	179014	179015	179017	AQC
C t m Ref N	3	6	9	10	Lab Std
S mpl Type	ES	ES	ES	B	
T I Pit / B h i N	TP636A	TP636A	TP636A	TP651	
D pth (m)	0.30	0.90	1.70	1.60	
H dst d g at S rf ce (Y/N)					

HEAVY METALS/METALLOIDS

Alum m	mg/kg				
Antim y	mg/kg				
Ars	mg/kg		22.1		21.2
B m	mg/kg				
Beryl m	mg/kg				
B (W t S lubl)	mg/kg		1.7		2.4
Cadm m	mg/kg		0.7		1.8
Chrom m (Total)	mg/kg		44		231
Chrom m (Hex lent)	mg/kg		2		10
Cob lt	mg/kg				
Coppe	mg/kg		130		70
Germ m	mg/kg				
L d	mg/kg		157		153
M ry	mg/kg		13.7		1.7
M lybd m	mg/kg				
N k l	mg/kg		119		34
S l m	mg/kg		1.1		1.8
V d um	mg/kg				
Zi	mg/kg		394		122

ESSENTIAL ELEMENTS

Calci m	mg/kg				
Iro	mg/kg				
M g esi m	mg/kg				
M g	mg/kg				
P t m	mg/kg				
Sod m	mg/kg				

MONOAROMATICS

Benz ne	mg/kg		2.1		
T lue	mg/kg		0.2		
Ethylbenzene	mg/kg		<0.2		
M ta & P ra Xyl	mg/kg		0.2		
Orth Xyl	mg/kg		0.2		
Tot l Xyl	mg/kg		<0.2		

MTBE

1,2,4-T methylbenzene	mg/kg				
1,3,5-T m thylbenzene	mg/kg				

TOTAL HYDROCARBONS

P t ol um Ra ge Org cs (C ₆ -C ₁)	mg/kg				
D I R ge O ganics (C ₈ -C ₂₆)	mg/kg				
Hyd ocarbon S ree (GC-FID)	mg/kg				

VOC

1,1,1-T hi roethane	mg/kg	**	**	**	**
1,1,2,2-T trachl roetha	mg/kg	**	**	**	**
1,1,2-T hi ro-1,2,2 t fluoroethane	mg/kg	**	**	**	**
1,1,2-T hi roethane	mg/kg	**	**	**	**
1,1-D hi roethane	mg/kg	**	**	**	**
1,1-D chi roeth ne	mg/kg	**	**	**	**
1,2,3-T hlor p op ne	mg/kg	**	**	**	**
1,2,3-T methylbenzene	mg/kg	**	**	**	**
1,2,4-T chlo benzene	mg/kg	**	**	**	**
1,2,4-T methylbenzene	mg/kg	**	**	**	**
1,2-D bromo-3-Chl ropropans	mg/kg	**	**	**	**
1,2-Dichl robenze	mg/kg	**	**	**	**
1,2-Di hi oethane	mg/kg	**	**	**	**
1,2-Dichloropr pane	mg/kg	**	**	**	**
1,2-D chloropropene	mg/kg	**	**	**	**
1,3,5-T m thylbenz ne	mg/kg	**	**	**	**
1,3-D chi robenz ne	mg/kg	**	**	**	**

Norwest Holst Soil Engineering Ltd
R68146. Durham Rd, Newport

D t S mpl d	12/09/03	12/09/03	12/09/03	12/09/03	R68046
Lab R f N	179013	179014	179015	179017	AQC
C t m Ref N	3	6	9	10	Lab Std
S mpl Typ	ES	ES	ES	B	
Tri l Pit / B h l N	TP636A	TP636A	TP636A	TP651	
D pth (m)	0.30	0.90	1.70	1.60	
H d t d i g at S rf (Y/N)					

1,3-Dihl p p	mg/kg	**	**	**	**
1,4-Dihlorobnz ne	mg/kg	**	**	**	**
1-Chl tl	mg/kg	**	**	**	**
1-M thyl p ylbz	mg/kg	**	**	**	**
2,2-Dchl ropropane	mg/kg	**	**	**	**
2-Chl rot l	mg/kg	**	**	**	**
Bnz ne	mg/kg	**	**	**	**
B m benze	mg/kg	**	**	**	**
Bromochl rom tha	mg/kg	**	**	**	**
B mod hl m th	mg/kg	**	**	**	**
Brom f m	mg/kg	**	**	**	**
C rb T tra hl d (PCM)	mg/kg	**	**	**	**
Chl robenz (m)	mg/kg	**	**	**	**
Chl rod brom metha	mg/kg	**	**	**	**
Chl oethane	mg/kg	**	**	**	**
Chlor f m	mg/kg	**	**	**	**
1,2-D hl roethyl	mg/kg	**	**	**	**
s-1,3-D hl p ope	mg/kg	**	**	**	**
D br mochl m th	mg/kg	**	**	**	**
D b moeth	mg/kg	**	**	**	**
D brom m th	mg/kg	**	**	**	**
D hl benz	mg/kg	**	**	**	**
D hl m th ne	mg/kg	**	**	**	**
Ethylbenz	mg/kg	**	**	**	**
H xchl robutad	mg/kg	**	**	**	**
m t & pa Xyl	mg/kg	**	**	**	**
M thyl propylbenze	mg/kg	**	**	**	**
M ochl benz	mg/kg	**	**	**	**
M nochl ph l (sum)	mg/kg	**	**	**	**
Butylbenz ne	mg/kg	**	**	**	**
Propylbenz	mg/kg	**	**	**	**
orth Xyl ne	mg/kg	**	**	**	**
Sty	mg/kg	**	**	**	**
1,4-D hl benz	mg/kg	**	**	**	**
T tra hlorobenz ne	mg/kg	**	**	**	**
T t hl oeth (PCE)	mg/kg	**	**	**	**
Tetrahyd fura	mg/kg	**	**	**	**
T luene	mg/kg	**	**	**	**
trans-1,2-D hl oeth	mg/kg	**	**	**	**
tra-1,3-d hl roprope	mg/kg	**	**	**	**
T hl roeth (TCE)	mg/kg	**	**	**	**
T hl fluorom tha	mg/kg	**	**	**	**
T hl rom th	mg/kg	**	**	**	**
V yl Chl d	mg/kg	**	**	**	**

SVOC

1,2,4-Tri hl robenzene	mg/kg	**	**	**	**
1,4-D hl robenzene	mg/kg	**	**	**	**
2,3,4,6-T trachlo ph l (m)	mg/kg	**	**	**	**
2,4,5-T chl rophenol	mg/kg	**	**	**	**
2,4,6-Tri hl roph nol	mg/kg	**	**	**	**
2,4-Di hl rophenol (m)	mg/kg	**	**	**	**
2,4-D methylphenol	mg/kg	**	**	**	**
2,4-Di itratolue	mg/kg	**	**	**	**
2,6-D methylph nol	mg/kg	**	**	**	**
2,6-Di itratol	mg/kg	**	**	**	**
2-Chl naphthal	mg/kg	**	**	**	**
2-Chlorophenol (um)	mg/kg	**	**	**	**
2-M thylphen l	mg/kg	**	**	**	**
2-Nitr phen l	mg/kg	**	**	**	**
4-Chloro-3-methylphenol	mg/kg	**	**	**	**
4-chl robenzylph ylethe	mg/kg	**	**	**	**
4-Methylphenol	mg/kg	**	**	**	**
4-Nitrophenol	mg/kg	**	**	**	**
Azobenzene	mg/kg	**	**	**	**
b (2-chl roethyl) ther	mg/kg	**	**	**	**

Dat S mpl d	12/09/03	12/09/03	12/09/03	12/09/03	R68046
Lab R f N	179013	179014	179015	179017	AQC
C st m R f N	3	6	9	10	Lab Std
S mpl Type	ES	ES	ES	B	
Tri P t / B h l N	TP636A	TP636A	TP636A	TP651	
D pth (m)	0.30	0.90	1.70	1.60	
H d t d g t S r f (Y/N)					

b (2-chl thy y)m tha	mg/kg
b (hl propyl) th	mg/kg
Brom ph ylphe yleth	mg/kg
H hl ro-1 3 but d ne	mg/kg
H hl benz ne	mg/kg
H hl roeth ne	mg/kg
I ph ro	mg/kg
Nitrobenze	mg/kg
n-nitro odi n-p pyl 1 p pa m.ne	mg/kg
P ta hl rob ne	mg/kg
P nta hl ph l	mg/kg

B (2-ethyl xyl)phthal t	mg/kg
Butylbenzylphth l te	mg/kg
D thylphth l te	mg/kg
D m thylphth lat	mg/kg
D n-butylphth lat	mg/kg
D n-octyl phth l t	mg/kg

T t l Phth l les	mg/kg
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ORGANO CHLORINE PESTICIDES

Ald	mg/kg
B t HCH (Beta BHC)	mg/kg
Chlorda	mg/kg
DDD	mg/kg
D ld	mg/kg
D (t t l)	mg/kg
E d lfa l	mg/kg
End lf ll	mg/kg
E d lf S lph t	mg/kg
Endri	mg/kg
End E d Ald hyd	mg/kg
Gamm HCH (L d)	mg/kg
H pt hl	mg/kg
H pt chlo p d	mg/kg
H plachi benz ne	mg/kg
M th y hl	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Az phos m thyl	mg/kg
Dem t n- m thyl	mg/kg
D azi on	mg/kg
D hl rv	mg/kg
D xath	mg/kg
D ulf t	mg/kg
EPN Eth	mg/kg
M l th	mg/kg
M thyl P rath o	mg/kg
P rathi	mg/kg
T rbufos	mg/kg

CARBAMATE (P sticid)

Carbaryl	mg/kg
Carb f ra	mg/kg
M neb	mg/kg

PHENOL UREA HERBICIDES

Chi tol	mg/kg
D ro	mg/kg
I oproturon	mg/kg
Lu uro	mg/kg

	12/09/03	12/09/03	12/09/03	12/09/03	R68046
D t S mpl d	179013	179014	179015	179017	AQC
Lab R f N	3	6	9	10	L b Std
C st m R f N	ES	ES	ES	B	
S mpl Type	TP636A	TP636A	TP636A	TP651	
T l Pit / B h l N	0.30	0.90	1.70	1.60	
D pth (m)					
H d t d g t S rf (Y/N)					

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5-T	mg/kg			
2 4-D	mg/kg			
Chl o-o-l lyl xy t d	mg/kg			
D mb	mg/kg			
D hl p p	mg/kg			
Mecop op	mg/kg			
S l	mg/kg			

TRIAZINES

Altrzi e	mg/kg			
S mazi	mg/kg			

PCB

PCB Co g ne 28	mg/kg			
PCB C g ne 52	mg/kg			
PCB C g ne 101	mg/kg			
PCB C ngen 118	mg/kg			
PCB C g 138	mg/kg			
PCB C g er 153	mg/kg			
PCB Co ge 180	mg/kg			

Total PCB	mg/kg	29.6	1.4	
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ALCOHOLS

Butanol	mg/kg			
Eth l	mg/kg			
Ethyl Gly cl	mg/kg			
M th nol	mg/kg			
P p n-1-ol	mg/kg			
P pa 2-ol	mg/kg			

MISCELLANEOUS

Calorf V lue	Cal/g			
S l	mg/kg			
Ti	mg/kg			

1 2 Dichl rop p	mg/kg			
1 3-D hl rop p ne	mg/kg			
2 4-D itrophenol	mg/kg			
Acet ne	mg/kg			
Carbaz l	mg/kg			
C rb dis lphid	mg/kg			
C eo t (TPH by GCFID)	mg/kg			
Cycl h ne	mg/kg			
Cycl h	mg/kg			
H hlorocy l pe tad ne	mg/kg			
Hydroq Inone	mg/kg			
N Nitro od ph yl mine	mg/kg			
p-Chl roa l ne	mg/kg			
P emeth n/Cyperm thnn	mg/kg			
Pyrid ne	mg/kg			
Styr ne	mg/kg			
S lphol ne	mg/kg			
T lue Extractabl M tt (H l)	mg/kg			
Toxaphene	mg/kg			
T butyl T	mg/kg			
Trnchl ometh ne	mg/kg			
V nyl Acetat	mg/kg			

CONCRETE

Chloride BS1377 Part 3 l iud ng p pa tion	mg/kg			
HAC (Rap d d term ti of H gh Al m Ceme	mg/kg			
Mix P port ons Cem l/Aggregat Ratio-BS1881	mg/kg			

Orga i Matt	(%)	9.9	8.4	
T tal Chlorinated Solvents (AOX)	mg/kg	0.1	76.9	

Notes
 Benzo(b)fluo
 -2 D-benzo(h)
 Insuff cient sa
 ** An lysis cher

Norwest Holst Soil Engineering Ltd
R68146 - Durham Rd - Newport

D t S mpled	12/09/03	B oken	12/09/03	R68146
Lab Ref No	178998	n t ans t	179016	AQC
C t me Ref No	18	14	10	Lab Std
S mple Type	WS	WS	WS	
Tral P t / Borehole No	TP650	TP669	TP636A	
pH	Val e	7.3	7.1	7.9
TOC	mg/l			
Suspended Solids	mg/l			
Elect cal Co d (µS/cm)	µS/cm			
PHENOLICS				
Butyl Phenols	g/l			
Catechol	g/l			
Cresols (s m)	g/l			
Naphthols	ug/l			
Phenol	ug/l			
Resorcinol	ug/l			
T methylphenol	ug/l			
Xylenols & Ethylphenols	ug/l			
Total Phenols	g/l			
US EPA PRIORITY PAH s				
Acenaphthene	ug/l			
Acenaphthylene	g/l			
Anthracene	ug/l			
Benzo(a)Anthracene	ug/l			
Benzo(a)pyrene	g/l			
Benzo(b)fluoranthene	g/l			
Benzo(k)fluoranthene	ug/l			
Benzo(g,h,i)perylene	ug/l			
Chrysene	g/l			
Dibenz(a,h)anthracene	ug/l			
Indeno(1,2,3-cd)pyrene ²	ug/l			
Fluoranthene	ug/l			
Fluorene	ug/l			
Naphthalene	ug/l			
Phenanthrene	ug/l			
Pyrene	ug/l			
Total US EPA 16 PAH	g/l			
OTHER PAH s				
Anthracene	ug/l			
Benzo(e)pyrene	g/l			
Cyclopenta(cd)pyrene	g/l			
GENERAL INORGANICS				
Complex Cyanide	g/l			
Easily Leachable Cyanide (free)	g/l			
Thiocyanate	g/l			
Total Cyanide	g/l	7	9	1975
Sulphide	ug/l	100	<100	753
Sulphur (free)	ug/l			
Sulphate	g/l			
Alkalinity	mg/l			
Chloride	g/l			
Phosphate	g/l			
Exchangeable Ammonium	ug/l			
Nitrate	ug/l			
Nitrite	g/l			

Norwest Holst Soil Engineering Ltd
R68146 Durham Rd Newport

Date Sampled	12/09/03	Borehole	12/09/03	R68146
Lab Ref No	178998	Location	179016	AQC
Customer Ref No	18		10	Lab Std
Sample Type	WS		WS	
Trial Pit / Borehole No	TP650		TP669	TP636A

HEAVY METALS/METALLOIDS

Aluminium	g/l
Antimony	g/l
Arsenic	ug/l
Barium	g/l
Beryllium	ug/l
Boron	g/l
Cadmium	g/l
Chromium (Dissolved)	ug/l
Chromium (Hexavalent)	ug/l
Cobalt	g/l
Copper	g/l
Germanium	ug/l
Lead	g/l
Mercury	ug/l
Molybdenum	ug/l
Nickel	ug/l
Selenium	ug/l
Vanadium	ug/l
Zinc	ug/l

ESSENTIAL ELEMENTS

Calcium	ug/l
Iron	g/l
Magnesium	g/l
Manganese	ug/l
Potassium	g/l
Sodium	g/l

MONOAROMATICS

Benzene	g/l
Toluene	g/l
Ethylbenzene	g/l
Meta & Para Xylenes	ug/l
Ortho Xylene	g/l

Total Xylenes

Total Xylenes	ug/l
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MTBE

MTBE	ug/l
1,2,4-Trimethylbenzene	ug/l
1,3,5-Trimethylbenzene	g/l

TOTAL HYDROCARBONS

Petroleum Range Organics (C ₆ -C ₁₀)	g/l		
Diesel Range Organics (C ₉ -C ₂₆)	ug/l	100	448204
Hydrocarbon Screen (GC FID)	ug/l	100	479575

VOCs

1,1,1-Trichloroethane	ug/l	**	**
1,1,2,2-Tetrachloroethane	ug/l	**	**
1,1,2-Trichloro-1,2,2-trifluoroethane	g/l	**	**
1,1,2-Trichloroethane	ug/l	**	**
1,1-Dichloroethane	g/l	**	**
1,1-Dichloroethene	ug/l	**	**
1,2,3-Trichloropropane	g/l	**	**
1,2,3-Trimethylbenzene	g/l	**	**
1,2,4-Trichlorobenzene	ug/l	**	**
1,2,4-Trimethylbenzene	ug/l	**	**
1,2-Dibromo-3-Chloropropane	ug/l	**	**
1,2-Dichlorobenzene	ug/l	**	**
1,2-Dichloroethane	ug/l	**	**
1,2-Dichloropropane	ug/l	**	**
1,2-Dichloroethene	ug/l	**	**
1,3,5-Trimethylbenzene	g/l	**	**
1,3-Dichlorobenzene	ug/l	**	**
1,3-Dichloropropane	ug/l	**	**
1,4-Dichlorobenzene	ug/l	**	**
1-Chloroethene	ug/l	**	**
1-Methylpropylbenzene	ug/l	**	**
2,2-Dichloropropane	ug/l	**	**
2-Chloroethene	ug/l	**	**
Benzene	g/l	**	**

Norwest Holst Soil Engineering Ltd
R68146 Durham Rd Newport

Date Sampled	12/09/03	Boken	12/09/03	R68146
Lab Ref No	178998	tra st	179016	AQC
Customer Ref No	18	14	10	Lab Std
Sample Type	WS	WS	WS	
Trial Pit / Borehole No	TP650	TP669	TP636A	

Bromobenzene	ug/l			
Bromochloromethane	ug/l	**		
Bromodichloromethane	ug/l	**	**	
Bromoform	ug/l			
Carbon Tetrachloride (PCM)	ug/l	**	**	
Chlorobenzene (sum)	ug/l	**	**	
Chlorodibromomethane	ug/l	**	**	
Chloroethane	g/l	**	**	
Chloroform	g/l	**	**	
cis 1,2-Dichloroethane	g/l	**		
cis 1,3-Dichloropropene	ug/l	**		
Dibromochloromethane	g/l	**		
Dibromoethane	ug/l		**	
Dibromomethane	g/l			
Dichlorobenzene	g/l			
Dichloromethane	ug/l			
Ethylbenzene	ug/l	**	**	
Hexachlorobutadiene	g/l	**		
meta & para Xylene	g/l		**	
Methyl-isopropylbenzene	ug/l	**		
Monochlorobenzene	ug/l		**	
Monochlorophenols (sum)	ug/l	**	**	
n-Butylbenzene	ug/l	**		
Propylbenzene	ug/l	**	**	
ortho Xylene	ug/l	**	**	
Styrene	ug/l	**	**	
tert-Butylbenzene	g/l	**		
Tetrachlorobenzene	ug/l		**	
Tetrachloroethene (PCE)	ug/l	**	**	
Tetrahydrofuran	ug/l	**		
Toluene	ug/l	**		
trans 1,2-Dichloroethene	g/l		**	
trans 1,3-dichloropropene	ug/l	**		
Trichloroethene (TCE)	ug/l	**		
Trichlorofluoromethane	ug/l	**	**	
Trichloromethane	ug/l	**	**	
Vinyl Chloride	ug/l	**	**	

SVOC

1,2,4-Trichlorobenzene	g/l
1,4-Dichlorobenzene	g/l
2,3,4,6-Tetrachlorophenol (sum)	g/l
2,4,5-Trichlorophenol	g/l
2,4,6-Trichlorophenol	ug/l
2,4-Dichlorophenol (sum)	ug/l
2,4-Dimethylphenol	ug/l
2,4-Dinitrotoluene	ug/l
2,6-Dimethylphenol	ug/l
2,6-Dinitrotoluene	g/l
2-Chloronaphthalene	g/l
2-Chlorophenol (sum)	ug/l
2-Methylphenol	ug/l
2-Nitrophenol	ug/l
4-Chloro-3-methylphenol	ug/l
4-chlorobenzylphenylether	ug/l
4-Methylphenol	g/l
4-Nitrophenol	ug/l
Azobenzene	ug/l
bis(2-chloroethyl)ether	ug/l
bis(2-chloroethoxy)methane	ug/l
bis(chloroisopropyl)ether	g/l
Bromophenylphenylether	ug/l
Hexachloro-1,3-butadiene	ug/l
Hexachlorobenzene	ug/l
Hexachloroethane	g/l
Isophthalene	ug/l
Nitrobenzene	ug/l
n-nitrosod-n-propyl-1-propanamine	g/l
Pentachlorobenzene	ug/l
Pentachlorophenol	ug/l
Bis(2-ethylhexyl)phthalate	ug/l
Butylbenzylphthalate	ug/l

Date Sampled	12/09/03	Boken	12/09/03	R68146
Lab Ref No	178998	in transit	179016	AQC
Container Ref No	18	14	10	Lab Std
Sample Type	WS	WS	WS	
Tray Pit / Borehole No	TP650	TP669	TP636A	

Dethylphthalate	ug/l
Dmethylphthalate	ug/l
D-n butylphthalate	ug/l
D-n-octyl phthalate	ug/l

Total Phthalates ug/l

ORGANO CHLORINE PESTICIDES

Aldrin	ug/l
Beta HCH (Beta BHC)	ug/l
Chlordane	ug/l
DDD	ug/l
Dieldrin	ug/l
Dioxins (total)	ug/l
Endosulfan I	ug/l
Endosulfan II	ug/l
Endosulfan Siphate	ug/l
Endrin	ug/l
Endrin Aldehyde	ug/l
Gamma HCH (Lindane)	ug/l
Heptachlor	ug/l
Heptachlor epoxide	ug/l
Heptachlorobenzene	ug/l
Methoxychlor	ug/l
pp DDE	ug/l
pp DDT	ug/l
pp TDE	ug/l

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	ug/l
Demeton methyl	ug/l
Diazinon	ug/l
Dichlorvos	ug/l
Doxathion	ug/l
Disulfoto	ug/l
EPN Ethion	ug/l
Malathion	ug/l
Methyl Parathion	ug/l
Parathion	ug/l
Terbufos	ug/l

CARBAMATE (Pesticide)

Carbaryl	ug/l
Carbofura	ug/l
Maneb	ug/l

Date Sampled	12/09/03	Broken	12/09/03	R68146
Lab Ref No	178998	n trans t	179016	AQC
Client Ref No	18	14	10	Lab Std
Sample Type	WS	WS	WS	
Trial Pit / Bor hole No	TP650	TP669	TP636A	

PHENOL UREA HERBICIDES

Chlorotoluro	ug/l
D ro	ug/l
Isop ot on	ug/l
Linu on	ug/l

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5-T	ug/l
2 4 D	ug/l
Chloro-o-tolxyoxyacetic acid	g/l
D camba	ug/l
D chloroprop	ug/l
Mecoprop	ug/l
Sil ex	ug/l

TRIAZINES

Aitrazie	ug/l
S mazine	ug/l

PCB s

PCB Co gene 28	ug/l
PCB Co gener 52	g/l
PCB Co ge e 101	g/l
PCB Conge er 118	ug/l
PCB Conge er 138	ug/l
PCB Conge e 153	ug/l
PCB Conge e 180	ug/l

Total PCB s	ug/l
-------------	------

ALCOHOLS

Buta ol	ug/l
Etha ol	ug/l
Ethylene Glycol	ug/l
Metha ol	ug/l
P opan 1-ol	ug/l
Pr pan 2-ol	g/l

MISCELLANEOUS

S i er	g/l
Tin	g/l

1 2 D chlo op opane	ug/l
1 3-D chlo op opene	ug/l
2 4 D n trophe ol	ug/l
Acetone	ug/l
Carbazole	ug/l
Carbo d sulph de	ug/l
C eosote (TPH by GCFID)	ug/l
Cyclohexa e	ug/l
Cyclohexanone	ug/l
He achlo ocyclope tad ene	g/l
Hydroq none	ug/l
N Nitrosod phenylam e	ug/l
p Chloroa ine	ug/l
Premethnn/Cypermethnn	ug/l
Pyrid ne	ug/l
Styrene	ug/l
Sulpholane	g/l
Tol ene Extractable Matter (Historic)	ug/l
To aphe e	g/l
Tnbutyl Tin	ug/l
Trichlorometha e	ug/l
Vinyl Acetate	ug/l
Vinyl Acetate	ug/l

Total Chlorinated Sol ents (AOX)	ug/l
----------------------------------	------

Notes

- Benzo(b)fluoranthene & Benzo(k)fluoranthene co-elute (reported as sum)
- ↪ Di-benzo(a,h)anthracene & Indeno(1,2,3-cd)pyrene co-elute (reported as sum)
- Insufficient sample for analysis
- ** Analysis scheduled incorrectly & subsequently cancelled

ENVIRONMENTAL ANALYSIS LABORATORIES

15 Burgess Road Ivyhouse Lane Industrial Estate Hastings East Sussex TN35 4NR

Tel 01424 444433 Fax 01424 442299 info@environmentalanalysis.com

ANALYTICAL REPORT No R68146

Location Durham Rd Newport

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
Leeds LS11 5SX

Your Project No F13041

Reporting Date 11/10/03

Asbestos Identification

Date Sampled	12/09/03
Lab Ref No	179000
Customer Ref No	6
Sample Type	ES
Trial Pit / Borehole No	TP651
Depth (m)	0.40
Description of Sample Matrix	Soil
Overall Percentage of Asbestos Identified	Trace
Type of Asbestos identified	Amosite (brown)
Comments	
Trace of amosite fibres found within sample	

Date Sampled	12/09/03
Lab Ref No	179017
Customer Ref No	10
Sample Type	B
Trial Pit / Borehole No	TP651
Depth (m)	1.60
Description of Sample Matrix	Asbestos Tile
Overall Percentage of Asbestos Identified	10.20 /
Type of Asbestos identified	Chrysotile (white)

Descriptions of methods available on request (V8)
Asbestos identification - UKAS accredited method
Quantification of asbestos and tentative identification
of non asbestos materials is not covered by
UKAS accreditation

MJB

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ENVIRONMENTAL ANALYSIS LABORATORIES

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ANALYTICAL REPORT No R68146

Location Durham Rd Newport

Your Project No F13041

Reporting Date 11/10/03

CLIENT **Norwest Holst Soil Engineering Ltd**
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Soils

Date Sampled 12/09/03
Lab Ref No 179015
Customer Ref No 9
Sample Type ES
Trial Pit / Borehole No TP636A
Depth (m) 1.70

Aromatic

C ₅ C ₇	(mg/kg) N	<5
>C ₇ C ₈	(mg/kg) N	<5
>C ₈ C ₁₀	(mg/kg) N	<5
>C ₁₀ C ₁₂	(mg/kg) N	<5
>C ₁₂ C ₁₆	(mg/kg) N	80
>C ₁₆ C ₂₁	(mg/kg) N	390
>C ₂₁ C ₃₅	(mg/kg) N	271

Aliphatic

C ₅ C ₈	(mg/kg) N	<5
>C ₆ C ₈	(mg/kg) N	<5
>C ₈ C ₁₀	(mg/kg) N	<5
>C ₁₀ C ₁₂	(mg/kg) N	<5
>C ₁₂ C ₁₆	(mg/kg) N	85
>C ₁₆ C ₂₁	(mg/kg) N	401
>C ₂₁ C ₃₄	(mg/kg) N	259

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t not tested

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ANALYTICAL REPORT No R68146

Location Durham Rd Newport

Your Project No F13041

Reporting Date 11/10/03

CLIENT **Norwest Holst Soil Engineering Ltd**

Parkside Lane Dewsbury Road
Leeds LS11 5SX

Water

Date Sampled	12/09/03
Lab Ref No	179016
Customer Ref No	10
Sample Type	WS
Trial Pit / Borehole No	TP636A

Aromatic

C ₅ C ₇	(µg/l)	N
>C ₇ C ₈	(µg/l)	N
>C ₈ C ₁₀	(µg/l)	N
>C ₁₀ C ₁₂	(µg/l)	N
>C ₁₂ C ₁₈	(µg/l)	N
>C ₁₈ C ₂₁	(µg/l)	N
>C ₂₁ C ₃₅	(µg/l)	N

Aliphatic

C ₅ C ₆	(µg/l)	N
>C ₆ C ₈	(µg/l)	N
>C ₈ C ₁₀	(µg/l)	N
>C ₁₀ C ₁₂	(µg/l)	N
>C ₁₂ C ₁₈	(µg/l)	N
>C ₁₈ C ₂₁	(µg/l)	N
>C ₂₁ C ₃₄	(µg/l)	N

Insufficient sample for analysis TPH screen analysis carried out

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t not tested

MJB

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Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 06/10/03

ANALYTICAL REPORT No R68321

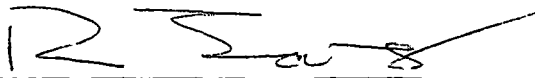
Location Durham Rd Newport

Your Project No F13041

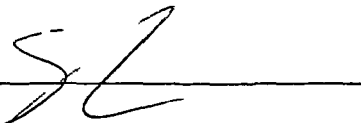
The attached analytical results relate to samples received on 17 Sep 2003

The report is only valid if it contains the total number of pages indicated at the bottom of this page

Checked by



Authorised by



If you have any queries regarding this report please contact Steve Chapman or Steve Knight

■ ENVIRONMENTAL ANALYSIS LABORATORIES
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A Division of Norwest Holst Soil Engineering Ltd
Registered in England No 980795
Registered Office Parkside Lane Dewsbury Road Leeds LS11 5SX

Page 1 of 20

Norwest Holst Soil Engineering Ltd
R68321 Durham Rd, Newport

	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03
Date Sampled	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03
Lab Ref No	180433	180434	180435	180436	180437	180438	180439
Customer Ref No	3	6	9	13	3	7	10
Sample Type	ES	ES	ES	ES	ES	ES	ES
Trial Pit / Borehole No	TP609	TP609	TP609	TP609	TP627	TP627	TP627
Depth (m)	0.40	1.40	2.40	2.70	0.20	1.20	2.20
Hardstanding at Surface (Y/N)							
pH	Value	7.7				7.9	
/ Loss on Ignition	/						
/ Moisture	/						
/ Stones	/						
Asbestos	/	<0.001				<0.001	
PHENOLICS							
Butyl Phenols	mg/kg						
Catechol	mg/kg	<0.5				<0.5	
Cresols (sum)	mg/kg	<0.5				<0.5	
Naphthols	mg/kg	<0.5				<0.5	
Phenol	mg/kg	<0.5				<0.5	
Resorcinol	mg/kg	<0.5				<0.5	
Tnrmethylphenol	mg/kg	<0.5				<0.5	
Xylenols & Ethylphenols	mg/kg	<0.5				<0.5	
Total Phenols	mg/kg	0.5				<0.5	
US EPA PRIORITY PAH s							
Acenaphthene	mg/kg	<0.5				<0.5	
Acenaphthylene	mg/kg	<0.5				<0.5	
Anthracene	mg/kg	<0.5				0.6	
Benzo(a)Anthracene	mg/kg	<0.5				3.6	
Benzo(a)pyrene	mg/kg	<0.5				<0.5	
Benzo(b)fluoranthene	mg/kg						
Benzo(k)fluoranthene	mg/kg	0.5				3.6	
Benzo(g,h,i)perylene	mg/kg	<0.5				<0.5	
Chrysene	mg/kg	<0.5				3.9	
Di benzo(a,h)anthracene ²	mg/kg						
Indeno(1,2,3-cd)pyrene	mg/kg	<0.5				<0.5	
Fluoranthene	mg/kg	<0.5				4.7	
Fluorene	mg/kg	<0.5				0.5	
Naphthalene	mg/kg	<0.5				1.0	
Phenanthrene	mg/kg	<0.5				3.0	
Pyrene	mg/kg	0.5				3.5	
Total US EPA 16 PAH	mg/kg	<0.5				24.4	
OTHER PAH s							
Anthanthrene	mg/kg						
Benzo(e)pyrene	mg/kg						
Cyclopenta(cd)pyrene	mg/kg						
GENERAL INORGANICS							
Complex Cyanide	mg/kg						
Easily Liberatable Cyanide (free)	mg/kg						
Thiocyanate	mg/kg						
Total Cyanide	mg/kg	<1				<1	
Sulphide	mg/kg	<2				<2	
Sulphur (free)	mg/kg	130				230	
Total Sulphate	mg/kg	3200				500	
Water Soluble Sulphate	mg/kg	690					
Water Soluble Chloride	mg/kg						
Phosphate	mg/kg						
Exchangeable Ammonium	mg/kg	7.1				35.9	
Nitrate	mg/kg						
Nitrite	mg/kg						

Norwest Holst Soil Engineering Ltd
R68321 Durham Rd Newport

	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03
Date Sampled	180433	180434	180435	180436	180437	180438	180439
Lab Ref No	3	6	9	13	3	7	10
Customer Ref No	ES	ES	ES	ES	ES	ES	ES
Sample Type	TP609	TP609	TP609	TP609	TP627	TP627	TP627
Trial Pit / Borehole No	0 40	1 40	2 40	2 70	0 20	1 20	2 20
Depth (m)							
Hardstanding at Surface (Y/N)							

HEAVY METALS/METALLOIDS

Aluminium	mg/kg						
Antimony	mg/kg						
Arsenic	mg/kg	146.8				148.5	
Barium	mg/kg						
Beryllium	mg/kg						
Boron (Water Soluble)	mg/kg	0.9				0.9	
Cadmium	mg/kg	3.4				3.6	
Chromium (Total)	mg/kg	43				43	
Chromium (Hexavalent)	mg/kg	<2				<2	
Cobalt	mg/kg						
Copper	mg/kg	256				476	
Germanium	mg/kg						
Lead	mg/kg	2155				593	
Mercury	mg/kg	1.5				0.8	
Molybdenum	mg/kg						
Nickel	mg/kg	104				114	
Selenium	mg/kg	4.2				4.3	
Vanadium	mg/kg						
Zinc	mg/kg	939				870	

ESSENTIAL ELEMENTS

Calcium	mg/kg						
Iron	mg/kg						
Magnesium	mg/kg						
Manganese	mg/kg						
Potassium	mg/kg						
Sodium	mg/kg						

MONOAROMATICS

Benzene	mg/kg						
Toluene	mg/kg						
Ethylbenzene	mg/kg						
Meta & Para Xylene	mg/kg						
Ortho Xylene	mg/kg						

Total Xylenes mg/kg

MTBE	mg/kg						
1,2,4-Tmethylbenzene	mg/kg						
1,3,5-Tmethylbenzene	mg/kg						

TOTAL HYDROCARBONS

Petroleum Range Organics (C ₆ - C ₁₀)	mg/kg	<5				<5	
Diesel Range Organics (C ₆ - C ₂₆)	mg/kg	18				15	
Hydrocarbon Screen (GC FID)	mg/kg	56				48	

VOCs

1,1,1-Trichloroethane	mg/kg						
1,1,2,2-Tetrachloroethane	mg/kg						
1,1,2-Trichloro-1,1,2,2-tetrafluoroethane	mg/kg						
1,1,2-Trichloroethane	mg/kg						
1,1-Dichloroethane	mg/kg						
1,1-Dichloroethene	mg/kg						
1,2,3-Trichloropropane	mg/kg						
1,2,3-Tmethylbenzene	mg/kg						
1,2,4-Trichlorobenzene	mg/kg						
1,2,4-Tmethylbenzene	mg/kg						
1,2-Dibromo-3-Chloropropane	mg/kg						
1,2-Dichlorobenzene	mg/kg						

Norwest Holst Soil Engineering Ltd
R68321 Durham Rd Newport

	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03
Date Sampled	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03
Lab Ref No	180433	180434	180435	180436	180437	180438	180439
Customer Ref No	3	6	9	13	3	7	10
Sample Type	ES	ES	ES	ES	ES	ES	ES
Trial Pit / Borehole No	TP609	TP609	TP609	TP609	TP627	TP627	TP627
Depth (m)	0.40	1.40	2.40	2.70	0.20	1.20	2.20

Hardstanding at Surface (Y/N)

1,2-Dichloroethane	mg/kg
1,2-Dichloropropane	mg/kg
1,2-Dichloropropene	mg/kg
1,3,5-Trimethylbenzene	mg/kg
1,3-Dichlorobenzene	mg/kg
1,3-Dichloropropane	mg/kg
1,4-Dichlorobenzene	mg/kg
1-Chlorotoluene	mg/kg
1-Methylpropylbenzene	mg/kg
2,2-Dichloropropane	mg/kg
2-Chlorotoluene	mg/kg
Benzene	mg/kg
Bromobenzene	mg/kg
Bromochloromethane	mg/kg
Bromodichloromethane	mg/kg
Bromoform	mg/kg
Carbon Tetrachloride (PCM)	mg/kg
Chlorobenzene (sum)	mg/kg
Chlorodibromomethane	mg/kg
Chloroethane	mg/kg
Chloroform	mg/kg
cis-1,2-Dichloroethylene	mg/kg
cis-1,3-Dichloropropene	mg/kg
Dibromochloromethane	mg/kg
Dibromoethane	mg/kg
Dibromomethane	mg/kg
Dichlorobenzene	mg/kg
Dichloromethane	mg/kg
Ethylbenzene	mg/kg
Hexachlorobutadiene	mg/kg
meta & para-Xylene	mg/kg
Methyl isopropylbenzene	mg/kg
Monochlorobenzene	mg/kg
Monochlorophenols (sum)	mg/kg
n-Butylbenzene	mg/kg
n-Propylbenzene	mg/kg
ortho-Xylene	mg/kg
Styrene	mg/kg
tert-Butylbenzene	mg/kg
Tetrachlorobenzene	mg/kg
Tetrachloroethene (PCE)	mg/kg
Tetrahydrofuran	mg/kg
Toluene	mg/kg
trans-1,2-Dichloroethene	mg/kg
trans-1,3-dichloropropene	mg/kg
Trichloroethene (TCE)	mg/kg
Trichlorofluoromethane	mg/kg
Trichloromethane	mg/kg
Vinyl Chloride	mg/kg

SVOCs

1,2,4-Trichlorobenzene	mg/kg
1,4-Dichlorobenzene	mg/kg
2,3,4,6-Tetrachlorophenol (sum)	mg/kg
2,4,5-Trichlorophenol	mg/kg
2,4,6-Trichlorophenol	mg/kg
2,4-Dichlorophenol (sum)	mg/kg
2,4-Dimethylphenol	mg/kg
2,4-Dinitrotoluene	mg/kg
2,6-Dimethylphenol	mg/kg
2,6-Dinitrotoluene	mg/kg

Norwest Holst Soil Engineering Ltd
R68321 Durham Rd Newport

Date Sampled	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03
Lab Ref No	180433	180434	180435	180436	180437	180438	180439
Customer Ref No	3	6	9	13	3	7	10
Sample Type	ES	ES	ES	ES	ES	ES	ES
Trial Pit / Borehole No	TP609	TP609	TP609	TP609	TP627	TP627	TP627
Depth (m)	0.40	1.40	2.40	2.70	0.20	1.20	2.20
Hardstanding at Surface (Y/N)							

2 Chloronaphthalene	mg/kg
2 Chlorophenol (sum)	mg/kg
2 Methylphenol	mg/kg
2 Nitrophenol	mg/kg
4 Chloro 3 methylphenol	mg/kg
4-chlorobenzylphenylether	mg/kg
4 Methylphenol	mg/kg
4 Nitrophenol	mg/kg
Azobenzene	mg/kg
bis(2-chloroethyl)ether	mg/kg
bis(2 chloroethoxy)methane	mg/kg
bis(chloroisopropyl)ether	mg/kg
Bromophenylphenylether	mg/kg
Hexachloro-1 3-butadiene	mg/kg
Hexachlorobenzene	mg/kg
Hexachloroethane	mg/kg
Isophorone	mg/kg
Nitrobenzene	mg/kg
n-nitrosodi n propyl 1 propanamine	mg/kg
Pentachlorobenzene	mg/kg
Pentachlorophenol	mg/kg

Bis(2-ethylhexyl)phthalate	mg/kg
Butylbenzylphthalate	mg/kg
Diethylphthalate	mg/kg
Dimethylphthalate	mg/kg
Di-n-butylphthalate	mg/kg
Di n-octyl phthalate	mg/kg

Total Phthalates mg/kg

ORGANO CHLORINE PESTICIDES

Aldnn	mg/kg
Beta HCH (Beta BHC)	mg/kg
Chlordane	mg/kg
DDD	mg/kg
Dieldrn	mg/kg
Dnns (total)	mg/kg
Endosulfan I	mg/kg
Endosulfan II	mg/kg
Endosulfan Sulphate	mg/kg
Endnn	mg/kg
Endnn Endnn Aldehyde	mg/kg
Gamma HCH (Lindane)	mg/kg
Heptachlor	mg/kg
Heptachlor epoxide	mg/kg
Heptachlorobenzene	mg/kg
Methoxychlor	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	mg/kg
Demeton-s-methyl	mg/kg
Diazinon	mg/kg
Dichlorvos	mg/kg
Dioxathion	mg/kg
Disulfoton	mg/kg
EPN Ethion	mg/kg
Malathion	mg/kg

Norwest Holst Soil Engineering Ltd
R68321 Durham Rd Newport

	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03
Date Sampled	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03
Lab Ref No	180433	180434	180435	180436	180437	180438	180439
Customer Ref No	3	6	9	13	3	7	10
Sample Type	ES	ES	ES	ES	ES	ES	ES
Trial Pit / Borehole No	TP609	TP609	TP609	TP609	TP627	TP627	TP627
Depth (m)	0.40	1.40	2.40	2.70	0.20	1.20	2.20
Hardstanding at Surface (Y/N)							

Methyl Parathion mg/kg
Parathion mg/kg
Terbufos mg/kg

CARBAMATE (Pesticide)

Carbaryl mg/kg
Carbofuran mg/kg
Maneb mg/kg

PHENOL UREA HERBICIDES

Chlorotoluron mg/kg
Diuron mg/kg
Isoproturon mg/kg
Linuron mg/kg

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T mg/kg
2,4-D mg/kg
Chloro-o tolyloxyacetic acid mg/kg
Dicamba mg/kg
Dichloroprop mg/kg
Mecoprop mg/kg
Silvex mg/kg

TRIAZINES

Alfazine mg/kg
Simazine mg/kg

PCB s

PCB Congener 28 mg/kg
PCB Congener 52 mg/kg
PCB Congener 101 mg/kg
PCB Congener 118 mg/kg
PCB Congener 138 mg/kg
PCB Congener 153 mg/kg
PCB Congener 180 mg/kg

Total PCB s mg/kg

ALCOHOLS

Butanol mg/kg
Ethanol mg/kg
Ethylene Glycol mg/kg
Methanol mg/kg
Propan-1-ol mg/kg
Propan-2-ol mg/kg

MISCELLANEOUS

Calorific Value Cal/g

Silver mg/kg
Tin mg/kg

1,2-Dichloropropane mg/kg
1,3-Dichloropropene mg/kg
2,4-Dinitrophenol mg/kg
Acetone mg/kg
Carbazole mg/kg
Carbon disulphide mg/kg
Creosote (TPH by GCFID) mg/kg
Cyclohexane mg/kg

Norwest Holst Soil Engineering Ltd
R68321 Durham Rd Newport

	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03
Date Sampled	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03
Lab Ref No	180433	180434	180435	180436	180437	180438	180439
Customer Ref No	3	6	9	13	3	7	10
Sample Type	ES	ES	ES	ES	ES	ES	ES
Trial Pit / Borehole No	TP609	TP609	TP609	TP609	TP627	TP627	TP627
Depth (m)	0.40	1.40	2.40	2.70	0.20	1.20	2.20
Hardstanding at Surface (Y/N)							

Cyclohexanone	mg/kg
Hexachlorocyclopentadiene	mg/kg
Hydroquinone	mg/kg
N Nitrosodiphenylamine	mg/kg
p-Chloroaniline	mg/kg
Premethrin/Cypermethrin	mg/kg
Pyridine	mg/kg
Styrene	mg/kg
Sulpholane	mg/kg
Toluene Extractable Matter (Historic)	mg/kg
Toxaphene	mg/kg
Tributyl Tin	mg/kg
Trichloromethane	mg/kg
Vinyl Acetate	mg/kg

CONCRETE

Chlonde BS1377 Part 3 including preparation	mg/kg
HAC (Rapid determination of High Alumina Cem	mg/kg
Mix Proportions Cement/Aggregate Ratio BS188	mg/kg

Organic Matter /

PID	ppm	<1	<1	<1	<1	<1	1	<1
-----	-----	----	----	----	----	----	---	----

Notes

Benzo(b)fluoranthene & Benzo(k)fluoranthene co-elute (reported as sum)

*2 Di benzo(a,h)anthracene & Indeno(1,2,3-cd)pyrene co elute (reported as sum)

Norwest Holst Soil Engineering Ltd
R68321 Durham Rd Newport

	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03
Date Sampled	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03
Lab Ref No	180440	180441	180442	180443	180444	180445	180446
Customer Ref No	13	3	6	9	13	3	6
Sample Type	ES	ES	ES	ES	ES	ES	ES
Trial Pit / Borehole No	TP627	TP628	TP628	TP628	TP628	TP647	TP647
Depth (m)	2.60	0.20	1.20	2.20	2.60	0.10	1.10
Hardstanding at Surface (Y/N)							
pH	Value			7.9			8.1
/ Loss on Ignition	/						
/ Moisture	/						
/ Stones	/						
Asbestos	/			<0.001			<0.001
PHENOLICS							
Butyl Phenols	mg/kg						
Catechol	mg/kg			<0.5			<0.5
Cresols (sum)	mg/kg			<0.5			0.5
Naphthols	mg/kg			<0.5			<0.5
Phenol	mg/kg			<0.5			<0.5
Resorcinol	mg/kg			<0.5			<0.5
Trimethylphenol	mg/kg			<0.5			<0.5
Xylenols & Ethylphenols	mg/kg			<0.5			<0.5
Total Phenols	mg/kg			<0.5			<0.5
US EPA PRIORITY PAH s							
Acenaphthene	mg/kg			1.6			<0.5
Acenaphthylene	mg/kg			0.8			0.5
Anthracene	mg/kg			3.6			1.1
Benzo(a)Anthracene	mg/kg			17.1			4.7
Benzo(a)pyrene	mg/kg			<0.5			<0.5
Benzo(b)fluoranthene	mg/kg						
Benzo(k)fluoranthene	mg/kg			14.2			4.7
Benzo(g,h,i)perylene	mg/kg			16.6			<0.5
Chrysene	mg/kg			19.1			5.5
Di benzo(a,h)anthracene *2	mg/kg						
Indeno(1,2,3-cd)pyrene *2	mg/kg			7.9			<0.5
Fluoranthene	mg/kg			28.5			5.9
Fluorene	mg/kg			1.4			0.8
Naphthalene	mg/kg			1.6			1.4
Phenanthrene	mg/kg			18.5			4.3
Pyrene	mg/kg			23.5			5.0
Total US EPA 16 PAH	mg/kg			154.4			33.9
OTHER PAH s							
Anthranthrene	mg/kg						
Benzo(e)pyrene	mg/kg						
Cyclopenta(cd)pyrene	mg/kg						
GENERAL INORGANICS							
Complex Cyanide	mg/kg						
Easily Liberatable Cyanide (free)	mg/kg						
Thiocyanate	mg/kg						
Total Cyanide	mg/kg			<1			<1
Sulphide	mg/kg			<2			<2
Sulphur (free)	mg/kg			200			120
Total Sulphate	mg/kg			1600			700
Water Soluble Sulphate	mg/kg						
Water Soluble Chloride	mg/kg						
Phosphate	mg/kg						
Exchangeable Ammonium	mg/kg			20.5			14.1
Nitrate	mg/kg						
Nitrite	mg/kg						

Norwest Holst Soil Engineering Ltd
R68321 Durham Rd, Newport

Date Sampled	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03
Lab Ref No	180440	180441	180442	180443	180444	180445	180446
Customer Ref No	13	3	6	9	13	3	6
Sample Type	ES	ES	ES	ES	ES	ES	ES
Trial Pit / Borehole No	TP627	TP628	TP628	TP628	TP628	TP647	TP647
Depth (m)	2 60	0 20	1 20	2 20	2 60	0 10	1 10
Hardstanding at Surface (Y/N)							

HEAVY METALS/METALLOIDS

Aluminium	mg/kg						
Antimony	mg/kg						
Arsenic	mg/kg				95 8		101 5
Barium	mg/kg						
Beryllium	mg/kg						
Boron (Water Soluble)	mg/kg				2 5		1 2
Cadmium	mg/kg				3 2		3 8
Chromium (Total)	mg/kg				36		39
Chromium (Hexavalent)	mg/kg				<2		<2
Cobalt	mg/kg						
Copper	mg/kg				372		313
Germanium	mg/kg						
Lead	mg/kg				665		412
Mercury	mg/kg				5 8		1 1
Molybdenum	mg/kg						
Nickel	mg/kg				76		90
Selenium	mg/kg				2 7		6 5
Vanadium	mg/kg						
Zinc	mg/kg				1031		1023

ESSENTIAL ELEMENTS

Calcium	mg/kg
Iron	mg/kg
Magnesium	mg/kg
Manganese	mg/kg
Potassium	mg/kg
Sodium	mg/kg

MONOAROMATICS

Benzene	mg/kg	<0 2
Toluene	mg/kg	<0 2
Ethylbenzene	mg/kg	<0 2
Meta & Para Xylene	mg/kg	<0 2
Ortho Xylene	mg/kg	<0 2
Total Xylenes	mg/kg	<0 2

MTBE	mg/kg
1 2 4-Tmethylbenzene	mg/kg
1 3 5-Tmethylbenzene	mg/kg

TOTAL HYDROCARBONS

Petroleum Range Organics (C ₆ - C ₁₀)	mg/kg	<5	<5
Diesel Range Organics (C ₁₀ - C ₂₈)	mg/kg	233	<5
Hydrocarbon Screen (GC FID)	mg/kg	744	<5

VOC s

1 1 1-Trichloroethane	mg/kg
1 1 2-Tetrachloroethane	mg/kg
1 1 2-Trichloro-1 2 2-trifluoroethane	mg/kg
1 1 2-Trichloroethane	mg/kg
1 1-Dichloroethane	mg/kg
1 1-Dichloroethene	mg/kg
1 2 3-Trichloropropane	mg/kg
1 2 3-Tmethylbenzene	mg/kg
1 2 4-Trichlorobenzene	mg/kg
1 2 4-Tmethylbenzene	mg/kg
1 2-Dibromo-3-Chloropropane	mg/kg
1 2-Dichlorobenzene	mg/kg

Norwest Hoist Soil Engineering Ltd
R68321 Durham Rd Newport

	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03
Date Sampled	180440	180441	180442	180443	180444	180445	180446
Lab Ref No	13	3	6	9	13	3	6
Customer Ref No	ES	ES	ES	ES	ES	ES	ES
Sample Type	TP627	TP628	TP628	TP628	TP628	TP647	TP647
Trial Pit / Borehole No	2 60	0 20	1 20	2 20	2 60	0 10	1 10
Depth (m)							
Hardstanding at Surface (Y/N)							

1 2 Dichloroethane	mg/kg
1 2 Dichloropropane	mg/kg
1 2 Dichloropropene	mg/kg
1 3 5-Trimethylbenzene	mg/kg
1 3 Dichlorobenzene	mg/kg
1 3 Dichloropropane	mg/kg
1 4 Dichlorobenzene	mg/kg
1-Chlorotoluene	mg/kg
1 Methylpropylbenzene	mg/kg
2 2 Dichloropropane	mg/kg
2 Chlorotoluene	mg/kg
Benzene	mg/kg
Bromobenzene	mg/kg
Bromochloromethane	mg/kg
Bromodichloromethane	mg/kg
Bromoform	mg/kg
Carbon Tetrachloride (PCM)	mg/kg
Chlorobenzene (sum)	mg/kg
Chlorodibromomethane	mg/kg
Chloroethane	mg/kg
Chloroform	mg/kg
cis 1 2 Dichloroethylene	mg/kg
cis-1 3 Dichloropropene	mg/kg
Dibromochloromethane	mg/kg
Dibromoethane	mg/kg
Dibromomethane	mg/kg
Dichlorobenzene	mg/kg
Dichloromethane	mg/kg
Ethylbenzene	mg/kg
Hexachlorobutadiene	mg/kg
meta & para Xylene	mg/kg
Methyl isopropylbenzene	mg/kg
Monochlorobenzene	mg/kg
Monochlorophenols (sum)	mg/kg
n Butylbenzene	mg/kg
n Propylbenzene	mg/kg
ortho Xylene	mg/kg
Styrene	mg/kg
tert Butylbenzene	mg/kg
Tetrachlorobenzene	mg/kg
Tetrachloroethene (PCE)	mg/kg
Tetrahydrofuran	mg/kg
Toluene	mg/kg
trans 1 2 Dichloroethene	mg/kg
trans 1 3-dichloropropene	mg/kg
Trichloroethene (TCE)	mg/kg
Trichlorofluoromethane	mg/kg
Trichloromethane	mg/kg
Vinyl Chloride	mg/kg

SVOC s	mg/kg
1 2 4-Trichlorobenzene	mg/kg
1 4 Dichlorobenzene	mg/kg
2 3 4 6-Tetrachlorophenol (sum)	mg/kg
2 4 5 Trichlorophenol	mg/kg
2 4 6-Trichlorophenol	mg/kg
2 4-Dichlorophenol (sum)	mg/kg
2 4 Dimethylphenol	mg/kg
2 4-Dinitrotoluene	mg/kg
2 6-Dimethylphenol	mg/kg
2 6 Dinitrotoluene	mg/kg

Norwest Holst Soil Engineering Ltd
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Date Sampled	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03
Lab Ref No	180440	180441	180442	180443	180444	180445	180446
Customer Ref No	13	3	6	9	13	3	6
Sample Type	ES	ES	ES	ES	ES	ES	ES
Trial Pit / Borehole No	TP627	TP628	TP628	TP628	TP628	TP647	TP647
Depth (m)	2.60	0.20	1.20	2.20	2.60	0.10	1.10
Hardstanding at Surface (Y/N)							

2 Chloronaphthalene	mg/kg
2 Chlorophenol (sum)	mg/kg
2 Methylphenol	mg/kg
2 Nitrophenol	mg/kg
4 Chloro-3 methylphenol	mg/kg
4-chlorobenzylphenylether	mg/kg
4 Methylphenol	mg/kg
4 Nitrophenol	mg/kg
Azobenzene	mg/kg
bis(2-chloroethyl)ether	mg/kg
bis(2-chloroethoxy)methane	mg/kg
bis(chloroisopropyl)ether	mg/kg
Bromophenylphenylether	mg/kg
Hexachloro-1,3 butadiene	mg/kg
Hexachlorobenzene	mg/kg
Hexachloroethane	mg/kg
isophorone	mg/kg
Nitrobenzene	mg/kg
n nitrosodi n-propyl 1 propanamine	mg/kg
Pentachlorobenzene	mg/kg
Pentachlorophenol	mg/kg

Bis(2-ethylhexyl)phthalate	mg/kg
Butylbenzylphthalate	mg/kg
Diethylphthalate	mg/kg
Dimethylphthalate	mg/kg
Di n butylphthalate	mg/kg
Di n-octyl phthalate	mg/kg

Total Phthalates mg/kg

ORGANO CHLORINE PESTICIDES

Aldnn	mg/kg
Beta HCH (Beta BHC)	mg/kg
Chlordane	mg/kg
DDD	mg/kg
Dieldnn	mg/kg
Dnns (total)	mg/kg
Endosulfan I	mg/kg
Endosulfan II	mg/kg
Endosulfan Sulphate	mg/kg
Endnn	mg/kg
Endnn Endnn Aldehyde	mg/kg
Gamma HCH (Lindane)	mg/kg
Heptachlor	mg/kg
Heptachlor epoxide	mg/kg
Heptachlorobenzene	mg/kg
Methoxychlor	mg/kg
pp-DDE	mg/kg
pp-DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	mg/kg
Demeton s methyl	mg/kg
Diazinon	mg/kg
Dichlorvos	mg/kg
Dioxathion	mg/kg
Disulfoton	mg/kg
EPN Ethion	mg/kg
Malathion	mg/kg

Norwest Holst Soil Engineering Ltd
R68321 Durham Rd Newport

Date Sampled	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03
Lab Ref No	180440	180441	180442	180443	180444	180445	180446
Customer Ref No	13	3	6	9	13	3	0
Sample Type	ES	ES	ES	ES	ES	ES	ES
Trial Pit / Borehole No	TP627	TP628	TP628	TP628	TP628	TP647	TP647
Depth (m)	2.60	0.20	1.20	2.20	2.60	0.10	1.10
Hardstanding at Surface (Y/N)							

Methyl Parathion mg/kg
Parathion mg/kg
Terbufos mg/kg

CARBAMATE (Pesticide)

Carbaryl mg/kg
Carbofuran mg/kg
Maneb mg/kg

PHENOL UREA HERBICIDES

Chlorotoluron mg/kg
Diuron mg/kg
Isoproturon mg/kg
Linnuron mg/kg

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T mg/kg
2,4-D mg/kg
Chloro-o tolyloxyacetic acid mg/kg
Dicamba mg/kg
Dichloroprop mg/kg
Mecoprop mg/kg
Silvex mg/kg

TRIAZINES

Altrazine mg/kg
Simazine mg/kg

PCB s

PCB Congener 28 mg/kg
PCB Congener 52 mg/kg
PCB Congener 101 mg/kg
PCB Congener 118 mg/kg
PCB Congener 138 mg/kg
PCB Congener 153 mg/kg
PCB Congener 180 mg/kg

Total PCB s mg/kg

ALCOHOLS

Butanol mg/kg
Ethanol mg/kg
Ethylene Glycol mg/kg
Methanol mg/kg
Propan-1-ol mg/kg
Propan-2-ol mg/kg

MISCELLANEOUS

Calorific Value Cal/g

Silver mg/kg
Tin mg/kg

1,2-Dichloropropane mg/kg
1,3-Dichloropropene mg/kg
2,4-Dinitrophenol mg/kg
Acetone mg/kg
Carbazole mg/kg
Carbon disulphide mg/kg
Creosote (TPH by GCFID) mg/kg
Cyclohexane mg/kg

Norwest Hoist Soil Engineering Ltd
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Date Sampled	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03
Lab Ref No	180440	180441	180442	180443	180444	180445	180446
Customer Ref No	13	3	6	9	13	3	6
Sample Type	ES	ES	ES	ES	ES	ES	ES
Trial Pit / Borehole No	TP627	TP628	TP628	TP628	TP628	TP647	TP647
Depth (m)	2.60	0.20	1.20	2.20	2.60	0.10	1.10
Hardstanding at Surface (Y/N)							

Cyclohexanone	mg/kg
Hexachlorocyclopentadiene	mg/kg
Hydroquinone	mg/kg
N Nitrosodiphenylamine	mg/kg
p Chloroaniline	mg/kg
Premethrin/Cypermethrin	mg/kg
Pyridine	mg/kg
Styrene	mg/kg
Sulpholane	mg/kg
Toluene Extractable Matter (Historic)	mg/kg
Toxaphene	mg/kg
Tnbutyl Tin	mg/kg
Tnchloromethane	mg/kg
Vinyl Acetate	mg/kg

CONCRETE

Chloride BS1377 Part 3 including preparation	mg/kg
HAC (Rapid determination of High Alumina Cem	mg/kg
Mix Proportions Cement/Aggregate Ratio BS188	mg/kg

Organic Matter	/						8.4
PID	ppm	<1	1	<1	<1	<1	14.9
							12.6

Notes

Benzo(b)fluor
+2 Di benzo(a,h)

Norwest Holst Soil Engineering Ltd
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Date Sampled	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	R68321
Lab Ref No	180447	180448	180449	180450	180451	180452	AQC
Customer Ref No	10	13	3	6	3	6	Lab Std
Sample Type	ES	ES	ES	ES	ES	ES	
Trial Pit / Borehole No	TP647	TP647	TP712A	TP712A	TP634A	TP634A	
Depth (m)	2.10	2.50	1.30	2.20	0.30	1.30	
Hardstanding at Surface (Y/N)							
pH	Value						7.5
/ Loss on Ignition	/						
/ Moisture	/						
/ Stones	/						
Asbestos	/						
PHENOLICS							
Butyl Phenols	mg/kg						
Catechol	mg/kg						
Cresols (sum)	mg/kg						
Naphthols	mg/kg						
Phenol	mg/kg						
Resorcinol	mg/kg						
Trmethylphenol	mg/kg						
Xylenols & Ethylphenols	mg/kg						
Total Phenols	mg/kg						0.303
US EPA PRIORITY PAH s							
Acenaphthene	mg/kg						
Acenaphthylene	mg/kg						
Anthracene	mg/kg						
Benzo(a)Anthracene	mg/kg						
Benzo(a)pyrene	mg/kg						
Benzo(b)fluoranthene	mg/kg						
Benzo(k)fluoranthene	mg/kg						
Benzo(g,h,i)perylene	mg/kg						
Chrysene	mg/kg						
D benzo(a,h)anthracene **2	mg/kg						
Indeno(1,2,3-cd)pyrene **2	mg/kg						
Fluoranthene	mg/kg						
Fluorene	mg/kg						
Naphthalene	mg/kg						
Phenanthrene	mg/kg						
Pyrene	mg/kg						
Total US EPA 16 PAH	mg/kg						5389.5
OTHER PAH s							
Anthanthrene	mg/kg						
Benzo(e)pyrene	mg/kg						
Cyclopenta(cd)pyrene	mg/kg						
GENERAL INORGANICS							
Complex Cyanide	mg/kg						
Easily Liberatable Cyanide (free)	mg/kg						
Thiocyanate	mg/kg						
Total Cyanide	mg/kg						2.0
Sulphide	mg/kg						0.7
Sulphur (free)	mg/kg						630
Total Sulphate	mg/kg						5700
Water Soluble Sulphate	mg/kg						788
Water Soluble Chloride	mg/kg						
Phosphate	mg/kg						
Exchangeable Ammonium	mg/kg						148.5
Nitrate	mg/kg						
Nitrite	mg/kg						

Norwest Holst Soil Engineering Ltd
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Date Sampled	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	R68321
Lab Ref No	180447	180448	180449	180450	180451	180452		AQC
Customer Ref No	10	13	3	6	3	6		Lab Std
Sample Type	ES	ES	ES	ES	ES	ES		
Trial Pit / Borehole No	TP647	TP647	TP712A	TP712A	TP634A	TP634A		
Depth (m)	2.10	2.50	1.30	2.20	0.30	1.30		
Hardstanding at Surface (Y/N)								

HEAVY METALS/METALLOIDS

Aluminium	mg/kg	
Antimony	mg/kg	
Arsenic	mg/kg	20.9
Barium	mg/kg	
Beryllium	mg/kg	
Boron (Water Soluble)	mg/kg	1.9
Cadmium	mg/kg	2.5
Chromium (Total)	mg/kg	254
Chromium (Hexavalent)	mg/kg	10
Cobalt	mg/kg	
Copper	mg/kg	84
Germanium	mg/kg	
Lead	mg/kg	172
Mercury	mg/kg	1.5
Molybdenum	mg/kg	
Nickel	mg/kg	39
Selenium	mg/kg	1.6
Vanadium	mg/kg	
Zinc	mg/kg	144

ESSENTIAL ELEMENTS

Calcium	mg/kg
Iron	mg/kg
Magnesium	mg/kg
Manganese	mg/kg
Potassium	mg/kg
Sodium	mg/kg

MONOAROMATICS

Benzene	mg/kg
Toluene	mg/kg
Ethylbenzene	mg/kg
Meta & Para Xylene	mg/kg
Ortho Xylene	mg/kg

Total Xylenes mg/kg

MTBE	mg/kg
1,2,4-Tmethylbenzene	mg/kg
1,3,5-Tmethylbenzene	mg/kg

TOTAL HYDROCARBONS

Petroleum Range Organics (C ₆ -C ₁₀)	mg/kg
Diesel Range Organics (C ₈ -C ₂₈)	mg/kg
Hydrocarbon Screen (GC FID)	mg/kg

VOCs

1,1,1-Trichloroethane	mg/kg
1,1,2-Tetrachloroethane	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg
1,1,2-Trichloroethane	mg/kg
1,1-Dichloroethane	mg/kg
1,1-Dichloroethene	mg/kg
1,2,3-Trichloropropane	mg/kg
1,2,3-Tmethylbenzene	mg/kg
1,2,4-Trichlorobenzene	mg/kg
1,2,4-Tmethylbenzene	mg/kg
1,2-Dibromo-3-Chloropropane	mg/kg
1,2-Dichlorobenzene	mg/kg

Norwest Holst Soil Engineering Ltd
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Date Sampled	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	R68321
Lab Ref No	180447	180448	180449	180450	180451	180452	AQC
Customer Ref No	10	13	3	6	3	6	Lab Std
Sample Type	ES	ES	ES	ES	ES	ES	
Trial Pit / Borehole No	TP647	TP647	TP712A	TP712A	TP634A	TP634A	
Depth (m)	2.10	2.50	1.30	2.20	0.30	1.30	
Hardstanding at Surface (Y/N)							

1,2-Dichloroethane	mg/kg
1,2-Dichloropropane	mg/kg
1,2-Dichloropropene	mg/kg
1,3,5-Trimethylbenzene	mg/kg
1,3-Dichlorobenzene	mg/kg
1,3-Dichloropropane	mg/kg
1,4-Dichlorobenzene	mg/kg
1-Chlorotoluene	mg/kg
1-Methylpropylbenzene	mg/kg
2,2-Dichloropropane	mg/kg
2-Chlorotoluene	mg/kg
Benzene	mg/kg
Bromobenzene	mg/kg
Bromochloromethane	mg/kg
Bromodichloromethane	mg/kg
Bromoform	mg/kg
Carbon Tetrachloride (PCM)	mg/kg
Chlorobenzene (sum)	mg/kg
Chlorodibromomethane	mg/kg
Chloroethane	mg/kg
Chloroform	mg/kg
cis-1,2-Dichloroethylene	mg/kg
cis-1,3-Dichloropropene	mg/kg
Dibromochloromethane	mg/kg
Dibromoethane	mg/kg
Dibromomethane	mg/kg
Dichlorobenzene	mg/kg
Dichloromethane	mg/kg
Ethylbenzene	mg/kg
Hexachlorobutadiene	mg/kg
meta & para Xylene	mg/kg
Methyl isopropylbenzene	mg/kg
Monochlorobenzene	mg/kg
Monochlorophenols (sum)	mg/kg
n-Butylbenzene	mg/kg
n-Propylbenzene	mg/kg
ortho Xylene	mg/kg
Styrene	mg/kg
tert-Butylbenzene	mg/kg
Tetrachlorobenzene	mg/kg
Tetrachloroethene (PCE)	mg/kg
Tetrahydrofuran	mg/kg
Toluene	mg/kg
trans-1,2-Dichloroethene	mg/kg
trans-1,3-dichloropropene	mg/kg
Trichloroethene (TCE)	mg/kg
Trichlorofluoromethane	mg/kg
Trichloromethane	mg/kg
Vinyl Chloride	mg/kg

SVOC s

1,2,4-Trichlorobenzene	mg/kg
1,4-Dichlorobenzene	mg/kg
2,3,4,6-Tetrachlorophenol (sum)	mg/kg
2,4,5-Trichlorophenol	mg/kg
2,4,6-Trichlorophenol	mg/kg
2,4-Dichlorophenol (sum)	mg/kg
2,4-Dimethylphenol	mg/kg
2,4-Dinitrotoluene	mg/kg
2,6-Dimethylphenol	mg/kg
2,6-Dinitrotoluene	mg/kg

Norwest Holst Soil Engineering Ltd
R68321 - Durham Rd Newport

Date Sampled	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	R68321
Lab Ref No	180447	180448	180449	180450	180451	180452	AQC
Customer Ref No	10	13	3	6	3	6	Lab Std
Sample Type	ES	ES	ES	ES	ES	ES	
Trna1 Pit / Borehole No	TP647	TP647	TP712A	TP712A	TP634A	TP634A	
Depth (m)	2 10	2 50	1 30	2 20	0 30	1 30	
Hardstanding at Surface (Y/N)							

2 Chloronaphthalene	mg/kg
2 Chlorophenol (sum)	mg/kg
2 Methylphenol	mg/kg
2 Nitrophenol	mg/kg
4 Chloro 3 methylphenol	mg/kg
4-chlorobenzylphenylether	mg/kg
4 Methylphenol	mg/kg
4 Nitrophenol	mg/kg
Azobenzene	mg/kg
bis(2-chloroethyl)ether	mg/kg
bis(2-chloroethoxy)methane	mg/kg
bis(chloroisopropyl)ether	mg/kg
Bromophenylphenylether	mg/kg
Hexachloro 1 3 butadiene	mg/kg
Hexachlorobenzene	mg/kg
Hexachloroethane	mg/kg
Isophorone	mg/kg
Nitrobenzene	mg/kg
n nitrosodi-n-propyl 1 propanamine	mg/kg
Pentachlorobenzene	mg/kg
Pentachlorophenol	mg/kg

Bis(?-ethylhexyl)phthalate	mg/kg
Butylbenzylphthalate	mg/kg
D ethylphthalate	mg/kg
Dimethylphthalate	mg/kg
Di n-butylphthalate	mg/kg
Di n-octyl phthalate	mg/kg
Total Phthalates	mg/kg

ORGANO CHLORINE PESTICIDES

Aldnn	mg/kg
Beta HCH (Beta BHC)	mg/kg
Chlordane	mg/kg
DDD	mg/kg
Dieldnn	mg/kg
Dnns (total)	mg/kg
Endosulfan I	mg/kg
Endosulfan II	mg/kg
Endosulfan Sulphate	mg/kg
Endnn	mg/kg
Endnn Endnn Aldehyde	mg/kg
Gamma HCH (Lindane)	mg/kg
Heptachlor	mg/kg
Heptachlor epoxide	mg/kg
Heptachlorobenzene	mg/kg
Methoxychlor	mg/kg
pp -DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	mg/kg
Demeton-s methyl	mg/kg
Diazinon	mg/kg
Dichlorvos	mg/kg
Dioxathion	mg/kg
Disulfoton	mg/kg
EPN Ethion	mg/kg
Malathion	mg/kg

Norwest Holst Soil Engineering Ltd
R68321 Durham Rd Newport

Date Sampled	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	R68321
Lab Ref No	180447	180448	180449	180450	180451	180452	AQC
Customer Ref No	10	13	3	6	3	6	Lab Std
Sample Type	ES	ES	ES	ES	ES	ES	
Trial Pit / Borehole No	TP647	TP647	TP712A	TP712A	TP634A	TP634A	
Depth (m)	2.10	2.50	1.30	2.20	0.30	1.30	
Hardstanding at Surface (Y/N)							

Methyl Parathion mg/kg
Parathion mg/kg
Terbufos mg/kg

CARBAMATE (Pesticide)

Carbaryl mg/kg
Carbofuran mg/kg
Maneb mg/kg

PHENOL UREA HERBICIDES

Chlorotoluron mg/kg
Diuron mg/kg
Isoproturon mg/kg
Linuron mg/kg

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T mg/kg
2,4-D mg/kg
Chloro o tolyloxyacetic acid mg/kg
Dicamba mg/kg
Dichloroprop mg/kg
Mecoprop mg/kg
Silvex mg/kg

TRIAZINES

Atrazine mg/kg
Simazine mg/kg

PCB s

PCB Congener 28 mg/kg
PCB Congener 52 mg/kg
PCB Congener 101 mg/kg
PCB Congener 118 mg/kg
PCB Congener 138 mg/kg
PCB Congener 153 mg/kg
PCB Congener 180 mg/kg

Total PCB s mg/kg

ALCOHOLS

Butanol mg/kg
Ethanol mg/kg
Ethylene Glycol mg/kg
Methanol mg/kg
Propan-1-ol mg/kg
Propan-2-ol mg/kg

MISCELLANEOUS

Caloric Value Cal/g

Silver mg/kg
Tin mg/kg

1,2-Dichloropropane mg/kg
1,3-Dichloropropene mg/kg
2,4-Dinitrophenol mg/kg
Acetone mg/kg
Carbazole mg/kg
Carbon disulphide mg/kg
Creosote (TPH by GCFID) mg/kg
Cyclohexane mg/kg

Norwest Holst Soil Engineering Ltd
R68321 - Durham Rd - Newport

Date Sampled	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	24/09/03	R68321
Lab Ref No	180447	180448	180449	180450	180451	180452	AQC
Customer Ref No	10	13	3	6	3	6	Lab Std
Sample Type	ES	ES	ES	ES	ES	ES	
Trial Pit / Borehole No	TP647	TP647	TP712A	TP712A	TP634A	TP634A	
Depth (m)	2.10	2.50	1.30	2.20	0.30	1.30	
Hardstanding at Surface (Y/N)							

Cyclohexanone	mg/kg
Hexachlorocyclopentadiene	mg/kg
Hydroquinone	mg/kg
N Nitrosodiphenylamine	mg/kg
p Chloroaniline	mg/kg
Premethrin/Cypermethrin	mg/kg
Pyridine	mg/kg
Styrene	mg/kg
Sulpholane	mg/kg
Toluene Extractable Matter (Historic)	mg/kg
Toxaphene	mg/kg
Tributyl Tin	mg/kg
Trichloromethane	mg/kg
Vinyl Acetate	mg/kg

CONCRETE

Chlonde BS1377 Part 3 including preparation	mg/kg
HAC (Rapid determination of High Alumina Cem	mg/kg
Mix Proportions Cement/Aggregate Ratio-BS188	mg/kg

Organic Matter	/						8.5
PID	ppm	8.3	<1	<1	<1	<1	<1

Notes

Benzo(b)fluor
Di benzo(a,h)

ENVIRONMENTAL ANALYSIS LABORATORIES

15 Burgess Road Ivyhouse Lane Industrial Estate Hastings East Sussex TN35 4NR
Tel 01424 444433 Fax 01424 442299 info@environmentalanalysis.com

ANALYTICAL REPORT No R68321

Location Durham Rd Newport

Your Project No F13041

Reporting Date 06/10/03

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
Leeds LS11 5SX

Soil

Date Sampled 24/09/03
Lab Ref No 180446
Customer Ref No ES
Sample Type 6
Trial Pit / Borehole No TP647
Depth (m) 1.10

Aromatic

C ₅ C ₇	(mg/kg) N	<5
>C ₇ C ₈	(mg/kg) N	<5
>C ₈ C ₁₀	(mg/kg) N	<5
>C ₁₀ C ₁₂	(mg/kg) N	<5
>C ₁₂ C ₁₆	(mg/kg) N	<5
>C ₁₆ C ₂₁	(mg/kg) N	<5
>C ₂₁ C ₂₅	(mg/kg) N	<5

Aliphatic

C ₅ C ₆	(mg/kg) N	<5
>C ₆ C ₈	(mg/kg) N	<5
>C ₈ C ₁₀	(mg/kg) N	<5
>C ₁₀ C ₁₂	(mg/kg) N	<5
>C ₁₂ C ₁₆	(mg/kg) N	<5
>C ₁₆ C ₂₁	(mg/kg) N	<5
>C ₂₁ C ₂₅	(mg/kg) N	<5

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t not tested

•

www.environmentalanalysis.com

Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 13/10/03

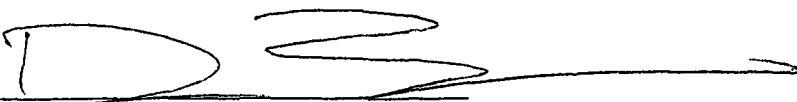
ANALYTICAL REPORT No R68192

Location Durham Rd Newport

Your Project No F13041

The attached analytical results relate to samples received on 17 Sep 2003

The report is only valid if it contains the total number of pages indicated at the bottom of this page

Checked by 

Authorised by 

If you have any queries regarding this report please contact Steve Chapman or Steve Knight

■ ENVIRONMENTAL ANALYSIS LABORATORIES
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A Division of Norwest Holst Soil Engineering Ltd
Registered in England No 980795
Registered Office Parkside Lane Dewsbury Road Leeds LS11 5SX

Norwest Holst Soil Engineering Ltd
R68192_Durham Rd, Newport

	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
D t S mpl d	179257	179258	179259	179260	179261	179262	179263	179264	179265
L b R f N	3	6	9	10	14	3	6	9	10
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP629	TP629	TP629	TP629	TP629	TP630	TP630	TP630	TP630
T i P it / B o h i N	0.20	1.20	1.50	2.20	2.50	0.05	0.20	1.20	1.50
D pth (m)									
H d t d g t S r f (Y/N)									
pH					7.3				7.7
/ L s i g n i t									
/ M t r e									
/ S t									
A b t o					0.001				0.001
PHENOLICS									
Butyl Ph i									
C t h i					<0.5				0.5
C i (m)					0.5				0.5
N p h t h i					0.5				0.5
Ph i					0.5				0.5
R i					0.5				0.5
T m t h y p h e i					0.5				0.5
Xyl i & E t h y l p h i s					0.5				0.5
Total Ph i					0.5				0.5
US EPA PRIORITY PAH									
A p h t h					0.5				0.5
A p h t h y l n e					0.5				0.5
A t h r a c e					0.5				0.5
B n z o (a) A n t h r a c e					0.5				0.5
B a (a) p y r					0.5				0.5
B (b) f l u o r a n t h r a c e					0.5				0.5
B (k) f l u o r a n t h r a c e					0.5				0.5
B a (a) h) p e r y l					0.5				0.5
Chrys					<0.5				0.5
D b (a) h a t h r a c e					0.5				0.5
I d (1,2,3-cd) p y r					0.5				0.5
F l u o r a n t h r a c e					0.5				0.5
F l u o r a n t h r a c e					0.5				0.5
N p h t h i					0.5				0.5
Ph t h					0.5				0.5
Pyr					0.5				0.5
Total US EPA 16 PAH					0.5				0.5
OTHER PAH									
A t h t h									
B z o (a) p y n e									
C y l i p t a (c d) p y r n e									
GENERAL INORGANICS									
C m p l e C y d									
E t h y l b i p h e n y l C y d (f)									
Th o c y a t									
T i l C y a d e					1				1
S l p h d					<2				
S l p h (f e e)					1270				4130
T a l S l p h t					200				100
W t e r S i b l S l p h a t									
W t S i b l C h i d									
Ph p h t e									
Ex h g b l A m m m					22.2				22.6
N t t									
N t t									

Norwest Holst Soil Engineering Ltd
R68192_Durham Rd, Newport

	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
D t S mpl d	179257	179258	179259	179260	179261	179262	179263	179264	179265
Lab R f N	3	6	9	10	14	3	6	9	10
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP629	TP629	TP629	TP629	TP629	TP630	TP630	TP630	TP630
T i l Pit / B hol N	0.20	1.20	1.50	2.20	2.50	0.05	0.20	1.20	1.50
D pth (m)									
H d ta di g t S r f ce (Y/N)									

HEAVY METALS/METALLOIDS

	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Al m m									
A t m y					9.4				17.4
Ars									
B m									
B r yll m									
B (W t S i b l)					6.0				1.7
C d m m					1.0				0.8
Ch m m (T tal)					43				32
Chrom m (H x a l t)					2				2
C b l t									
C p p e					46				143
G m m									
L d					49				446
M r y					0.5				5.2
M l y b d m									
N c k l					31				42
S l m					0.5				1.2
V a d m									
Z i					163				549

ESSENTIAL ELEMENTS

C l m	mg/kg
I r o	mg/kg
M a g n e m	mg/kg
M g e s	mg/kg
P t s m	mg/kg
S o d m	mg/kg

MONOAROMATICS

B e z h e	mg/kg
T i	mg/kg
E t h y l b e n z	mg/kg
M i & P r a X y l	mg/kg
O r t h X y l	mg/kg

T t l X y l	mg/kg
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MTBE	mg/kg
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1,2,4-T m thylb ne	mg/kg
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1,3,5-T m thylbenz	mg/kg
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TOTAL HYDROCARBONS

P t r o l m R g O r g c s (C - C)	mg/kg	5
D e l R n g O r g c s (C C ₂₆)	mg/kg	5
H y d r o c a r b S c r e e (GC FID)	mg/kg	5

VOC

1,1,1-T chl tha	mg/kg	**	**	**	**	**	**	<0.05	<0.05	**
1,1,2,2-T trachl oeth	mg/kg	**	**	**	**	**	**	0.05	0.05	**
1,1,2-T chl ro-1,2,2 trifi oeth	mg/kg	**	**	**	**	**	**	<0.05	0.05	**
1,1,2-T chl ro th	mg/kg	**	**	**	**	**	**	0.05	0.05	**
1,1-D chloroetha	mg/kg	**	**	**	**	**	**	<0.05	0.05	**
1,1-D chl oeth	mg/kg	**	**	**	**	**	**	0.05	0.05	**
1,2,3-T chl ropropa	mg/kg	**	**	**	**	**	**	0.05	0.05	**
1,2,3-Trmethylbenzene	mg/kg	**	**	**	**	**	**	<0.05	<0.05	**
1,2,4-T chlorob nzene	mg/kg	**	**	**	**	**	**	0.05	0.05	**
1,2,4-Trmethylbenze	mg/kg	**	**	**	**	**	**	0.05	0.05	**
1,2-Dibromo-3-Chlorop opa	mg/kg	**	**	**	**	**	**	0.05	0.05	**
1,2-D chlorobenze	mg/kg	**	**	**	**	**	**	<0.05	0.05	**
1,2-D chl roeth	mg/kg	**	**	**	**	**	**	0.05	0.05	**
1,2-D chl ropropa	mg/kg	**	**	**	**	**	**	0.05	0.05	**
1,2-D chl ropropene	mg/kg	**	**	**	**	**	**	0.05	0.05	**
1,3,5-T m thylbenze	mg/kg	**	**	**	**	**	**	0.05	0.05	**
1,3-D chlorobenzen	mg/kg	**	**	**	**	**	**	0.05	0.05	**

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		15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
D t S mpl d		179257	179258	179259	179260	179261	179262	179263	179264	179265
L b R f N		3	6	9	10	14	3	6	9	10
C t m R f N		ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ		TP629	TP629	TP629	TP629	TP629	TP630	TP630	TP630	TP630
l Prt / B hol N		0.20	1.20	1.50	2.20	2.50	0.05	0.20	1.20	1.50
D pth (m)										
H dt d g t s rf (Y/N)										
13-D hl p p	mg/kg	**	**	**	**	**	0.05	0.05	**	**
14 D hl rob nz	mg/kg	**	**	**	**	**	0.05	0.05	**	**
1 Chl tolu	mg/kg	**	**	**	**	**	0.05	0.05	**	**
1 M thylp pylbe	mg/kg	**	**	**	**	**	0.05	0.05	**	**
22 D hl rop opa	mg/kg	**	**	**	**	**	0.05	0.05	**	**
2 Chl t lue	mg/kg	**	**	**	**	**	0.05	0.05	**	**
B	mg/kg	**	**	**	**	**	0.05	0.05	**	**
Brom b nze	mg/kg	**	**	**	**	**	0.05	0.05	**	**
Brom hl rom th n	mg/kg	**	**	**	**	**	0.05	0.05	**	**
Brom d hlo m th	mg/kg	**	**	**	**	**	0.05	0.05	**	**
Brom f rm	mg/kg	**	**	**	**	**	0.05	0.05	**	**
C rb T tra hl d (PCM)	mg/kg	**	**	**	**	**	0.05	0.05	**	**
Chl b nz (m)	mg/kg	**	**	**	**	**	0.05	0.05	**	**
Chl odb m m th	mg/kg	**	**	**	**	**	0.05	0.05	**	**
Chl roeth	mg/kg	**	**	**	**	**	0.05	0.05	**	**
Chlorof rm	mg/kg	**	**	**	**	**	0.05	0.05	**	**
12 Dchl oethyl	mg/kg	**	**	**	**	**	0.05	0.05	**	**
13-D hl oprop e	mg/kg	**	**	**	**	**	0.05	0.05	**	**
Db mo hlo m th	mg/kg	**	**	**	**	**	0.05	0.05	**	**
Dbrom th	mg/kg	**	**	**	**	**	0.05	0.05	**	**
Dbrom meth	mg/kg	**	**	**	**	**	0.05	0.05	**	**
Dchl robenze	mg/kg	**	**	**	**	**	0.05	0.05	**	**
Dchl rom th	mg/kg	**	**	**	**	**	0.05	0.05	**	**
Ethylb nz n	mg/kg	**	**	**	**	**	0.05	0.05	**	**
H xachl b tad	mg/kg	**	**	**	**	**	0.05	0.05	**	**
m ta & p ra Xyl	mg/kg	**	**	**	**	**	0.05	0.05	**	**
M thyl p pylb nz	mg/kg	**	**	**	**	**	0.05	0.05	**	**
M hl benz	mg/kg	**	**	**	**	**	0.05	0.05	**	**
M hl roph l (m)	mg/kg	**	**	**	**	**	0.05	0.05	**	**
B tylb nz	mg/kg	**	**	**	**	**	0.05	0.05	**	**
Propylb nze	mg/kg	**	**	**	**	**	0.05	0.05	**	**
rth Xyl e	mg/kg	**	**	**	**	**	0.05	0.05	**	**
Styr	mg/kg	**	**	**	**	**	0.05	0.05	**	**
t ri Butylbe	mg/kg	**	**	**	**	**	0.05	0.05	**	**
T trachl robenz	mg/kg	**	**	**	**	**	0.05	0.05	**	**
T tra hl ro th (PCE)	mg/kg	**	**	**	**	**	0.05	0.05	**	**
T tr hyd f ra	mg/kg	**	**	**	**	**	0.05	0.05	**	**
T l	mg/kg	**	**	**	**	**	0.05	0.05	**	**
tra 12 Dchl roethe	mg/kg	**	**	**	**	**	0.05	0.05	**	**
tra 13-d hl oprop e	mg/kg	**	**	**	**	**	0.05	0.05	**	**
T hl roeth (TCE)	mg/kg	**	**	**	**	**	0.05	0.05	**	**
T hl oil rom thane	mg/kg	**	**	**	**	**	0.05	0.05	**	**
T chlorom th e	mg/kg	**	**	**	**	**	0.05	0.05	**	**
V yl Chl d	mg/kg	**	**	**	**	**	0.05	0.05	**	**

SVOC

124 T chl rob nz	mg/kg
14 D chl obenze	mg/kg
2346 T tra hl ph l (um)	mg/kg
245-T chl rophenol	mg/kg
246 T hl phe l	mg/kg
24-D chloroph nol (sum)	mg/kg
24-D m thylph nol	mg/kg
24-D itrotol e	mg/kg
26-D methylph ol	mg/kg
26-D n itrotol ne	mg/kg
2-Chl ro phthal	mg/kg
2-Chl rophen l (m)	mg/kg
2-Methylph ol	mg/kg
2 Nitrophen l	mg/kg
4-Chloro-3-m thylph l	mg/kg
4-chl robenzylph yl the	mg/kg
4-Methylphenol	mg/kg
4-Nitrophenol	mg/kg
Azobenz ne	mg/kg
b (2-chl ro thyl)ethe	mg/kg

Norwest Holst Soil Engineering Ltd
R68192 Durham Rd Newport

	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
D t S mpl d	179257	179258	179259	179260	179261	179262	179263	179264	179265
L b R f N	3	6	9	10	14	3	6	9	10
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP629	TP629	TP629	TP629	TP629	TP630	TP630	TP630	TP630
T l Pht / B h l N	0 20	1 20	1 50	2 20	2 50	0 05	0 20	1 20	1 50
D pth (m)									
H d ta d g t S r f (Y/N)									

b (2-chloro ethoxy)metha	mg/kg
b (chloro propyl)eth	mg/kg
Bromophenylth	mg/kg
Hachlorobenz	mg/kg
H chlorobenz	mg/kg
H chlorobenz	mg/kg
Isophen	mg/kg
Nitrobenz	mg/kg
tridn-propyl-p m	mg/kg
Pthalate	mg/kg
Pthalate	mg/kg

B (2-ethylhexyl)phthalate	mg/kg
Butylbenzophenone	mg/kg
Dibutylphthalate	mg/kg
Dimethylphthalate	mg/kg
D-n-butylphthalate	mg/kg
D-n-octylphthalate	mg/kg

Total Phthalate	mg/kg
-----------------	-------

ORGANO CHLORINE PESTICIDES

Aldrin	mg/kg
Beta HCH (Beta BHC)	mg/kg
Chlordane	mg/kg
DDD	mg/kg
Dieldrin	mg/kg
D (tal)	mg/kg
Endosulfan I	mg/kg
Endosulfan II	mg/kg
Endosulfan Sulfate	mg/kg
Endosulfan	mg/kg
Endosulfan Aldrin hyd	mg/kg
Gamma HCH (L delta)	mg/kg
Heptachlor	mg/kg
Heptachlor epoxide	mg/kg
Heptachlorobenzene	mg/kg
Methoxychlor	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	mg/kg
Demeton methyl	mg/kg
Diazinon	mg/kg
Dichlorvos	mg/kg
Dioxathion	mg/kg
Disulfoton	mg/kg
EPN Ethion	mg/kg
Methidathion	mg/kg
Methyl Parathion	mg/kg
Phorathion	mg/kg
Tebufozate	mg/kg

CARBAMATE (Pesticide)

Carbaryl	mg/kg
Carbofuran	mg/kg
Methidathion	mg/kg

PHENOL UREA HERBICIDES

Chlorotoluron	mg/kg
Diuron	mg/kg
Isoproturon	mg/kg
Linuron	mg/kg

Norwest Holst Soil Engineering Ltd
R68192 Durham Rd Newport

D t S mpl d	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
L b R f N	179257	179258	179259	179260	179261	179262	179263	179264	179265
C t m R f N	3	6	9	10	14	3	6	9	10
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES
T i l P l t / B h i N	TP629	TP629	TP629	TP629	TP629	TP630	TP630	TP630	TP630
D p t h (m)	0.20	1.20	1.50	2.20	2.50	0.05	0.20	1.20	1.50
H d t a d g t S r f (Y/N)									

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chloroxyfen	mg/kg
Dicamba	mg/kg
Dichloroprop	mg/kg
Mecoprop	mg/kg
Sida	mg/kg

TRIAZINES

Alfater	mg/kg
Symazine	mg/kg

PCB

PCB C g 28	mg/kg
PCB C g 52	mg/kg
PCB C g 101	mg/kg
PCB Co g 118	mg/kg
PCB C g 138	mg/kg
PCB C g 153	mg/kg
PCB Co g 180	mg/kg

Total PCB	mg/kg
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ALCOHOLS

Benzyl alcohol	mg/kg
Ethanol	mg/kg
Ethyl Glycol	mg/kg
Methanol	mg/kg
Propyl-1-ol	mg/kg
Propyl-2-ol	mg/kg

MISCELLANEOUS

Chloroform	mg/kg
Silica	mg/kg
Titanium	mg/kg

1,2-Dichloropropane	mg/kg
1,3-Dichloropropane	mg/kg
2,4-Dichlorophenol	mg/kg
Aroclor	mg/kg
Carbazole	mg/kg
Carbonylphthalide	mg/kg
Cadmium (TPH by GCFID)	mg/kg
Cyclohexane	mg/kg
Cyclohexene	mg/kg
Hexachlorocyclopentadiene	mg/kg
Hydroquinone	mg/kg
N-Nitrosodiphenylamine	mg/kg
p-Chloroaniline	mg/kg
Premethrin/Cypermethrin	mg/kg
Pyridine	mg/kg
Styrene	mg/kg
Sulpholane	mg/kg
Toluene Extractable Matter (H11c)	mg/kg
Toxaphene	mg/kg
Tributyltin	mg/kg
Tetrachloroethane	mg/kg
Vinyl Acetate	mg/kg

CONCRETE

Chloride BS1377 Part 3 method prepared	mg/kg
HAC (Reported in terms of High Alkali Cement)	mg/kg
Major Portlands-Cement/Aggregate Ratio to BS188	mg/kg

Organic Matter	%
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Notes

- Benzo(b)fluoranthene & Benzo(k)fluoranthene co-elute (reported sum)
- ² D-benzo(h)anthracene & Indeno(1,2,3-cd)pyrene co-elute (reported sum)
- 1 off counts sample
- ** Analysis scheduled in accordance with sequence called by client

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	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
D t S mpl d	179266	179267	179269	179270	179271	179272	179273	179274	179275
L b R f N	13	17	3	6	9	12	15	3	6
C tom R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP630	TP630	TP631	TP631	TP631	TP631	TP631	TP632	TP632
T l Ph/B h l N	2.50	2.70	0.10	1.20	1.90	2.60	2.70	0.20	1.20
D pth (m)									
H d t d g t S r f (Y/N)									

pH	V I	7.7
/ L ig it	%	
/ M t	%	
/ St e	/	
Asb stos	%	0.001

PHENOLICS

Butyl Ph l	mg/kg	
Cate h l	mg/kg	0.5
C l (s m)	mg/kg	0.5
N phth l	mg/kg	0.5
Ph l	mg/kg	0.5
R l	mg/kg	0.5
T m thylph ol	mg/kg	0.5
Xyl ol & Ethylph l	mg/kg	0.5
Total Ph ls	mg/kg	0.5

US EPA PRIORITY PAH

A phth	mg/kg	0.9
A phthyl e	mg/kg	1.1
Anthrace	mg/kg	0.9
B nz ()A thrace	mg/kg	3.0
Benzo()pyr	mg/kg	3.1
B nzo(b)fl ra th	mg/kg	
B nzo(k)fl ra th	mg/kg	3.6
B (g h)peryl	mg/kg	1.8
Chrys	mg/kg	5.0
D be zo(h)a thra ⁻²	mg/kg	
Ind o(1 2 3-cd)py e ⁻²	mg/kg	3.2
Fl ra th	mg/kg	6.6
Fl ne	mg/kg	1.8
N phth l	mg/kg	3.7
Phe a th ne	mg/kg	5.1
Pyr	mg/kg	6.0
T tal US EPA 16 PAH	mg/kg	45.7

OTHER PAH

A tha thre	mg/kg	
B nz ()pyr	mg/kg	
Cycl pe ta(cd)pyr ne	mg/kg	

GENERAL INORGANICS

Compl Cya d	mg/kg	
E ly L berat ble Cyan d (f e)	mg/kg	
Th cya t	mg/kg	
T tal Cya d	mg/kg	1
/		
S lph de	mg/kg	2
S lph (free)	mg/kg	140
T tal S lph te	mg/kg	100
W t S l bl S lphate	mg/kg	
W t S l ble Chl d	mg/kg	
Pho ph t	mg/kg	
Excha geabl Amm m	mg/kg	11.7
Nitrate	mg/kg	
Nitrt	mg/kg	

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D t S mpl d	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
Lab R f N	179266	179267	179269	179270	179271	179272	179273	179274	179275	
C t m R f N	13	17	3	6	9	12	15	3	6	
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	
Tri l Pit / B h l N	TP630	TP630	TP631	TP631	TP631	TP631	TP631	TP632	TP632	
D pth (m)	2.50	2.70	0.10	1.20	1.90	2.60	2.70	0.20	1.20	
H d t d g t S rfa (Y/N)										

HEAVY METALS/METALLOIDS

Al m n m	mg/kg									
A t m o n y	g/kg									
A r s c	mg/kg		43.2							
B m	mg/kg									
B r y l l m	mg/kg									
B (W t S i b l)	mg/kg		0.5							
C d m m	mg/kg		0.9							
Chrom m (T t l j)	mg/kg		35							
Chrom m (Hexaval nt)	mg/kg		2							
C b l t	mg/kg									
C p p	mg/kg		489							
G r m m	mg/kg									
L d	mg/kg		196							
M c u r y	mg/kg		0.7							
M l y b d m	mg/kg									
N k l	mg/kg		83							
S i m	mg/kg		2.5							
V a n a d u m	mg/kg									
Z c	mg/kg		299							

ESSENTIAL ELEMENTS

C l m	mg/kg									
I r o	mg/kg									
M g m	mg/kg									
M g s	mg/kg									
P t a m	mg/kg									
S o d u m	mg/kg									

MONOAROMATICS

B	mg/kg									
T l	mg/kg									
E t h y l b n z	mg/kg									
M t & P r a X y l	mg/kg									
O r t h X y l	mg/kg									

Total Xyle	mg/kg									
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MTBE	mg/kg									
1,2,4-T m thylbenze	mg/kg									
1,3,5-T m thylbenzene	mg/kg									

TOTAL HYDROCARBONS

P t r o l u m R a g O g c s (C ₆ -C ₁₀)	mg/kg		5							
D e l R g O g c s (C ₁₀ -C ₂₈)	mg/kg		<5							
H y d c a r b S r e (GC-FID)	mg/kg		<5							

VOC

1,1,1 T chloroeth ne	mg/kg	<0.05	0.05	**	**	**	**	**	**	0.05
1,1,2,2 T t r a c h l r o e t h	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
1,1,2 T c h l r o -1,2,2 t n l r o t h a	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
1,1,2 T c h l r o e t h a e	mg/kg	0.05	<0.05	**	**	**	**	**	**	0.05
1,1 D c h l r o e t h	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
1,1 D c h l o e t h e n e	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
1,2,3-T n c h l o r o p r o p n e	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
1,2,3-T n m t h y l b e n z e	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
1,2,4-T c h l o r o b n z n e	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
1,2,4-T r i m t h y l b e n z e	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
1,2 D b r o m o -3-C h l r o p r o p e	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
1,2 D c h l o r o b e n z n e	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
1,2 D i h l r o e t h e	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
1,2 D c h l o r o p r o p a e	mg/kg	<0.05	0.05	**	**	**	**	**	**	0.05
1,2 D h l r o p r o p e	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
1,3,5 T m t h y l b e n z e n e	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
1,3-D c h l b e n z e	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05

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D t S mpl d	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
Lab R f No	179266	179267	179268	179270	179271	179272	179273	179 74	179275	
C t m R f N	13	17	3	6	9	12	15	3	6	
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	
Tn i Pit / B reh l N	TP630	TP630	TP631	TP631	TP631	TP631	TP631	TP632	TP632	
D pth (m)	2.50	2.70	0.10	1.20	1.90	2.60	2.70	0.20	1.20	
H rd ta d g t S rf (Y/N)										

1,3-Dichloropropane	mg/kg	0.05	0.05		**		**	**		0.05
1,4-Dichlorobenzene	mg/kg	0.05	0.05	**	**	**	**	**		0.05
1-Chloroethane	mg/kg	0.05	0.05	**	**	**	**	**		0.05
1-Methylpropylbenzene	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
2,2-Dichloropropane	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
2-Chlorotoluene	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Benzene	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Bromobenzene	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Bromochloromethane	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Bromodichloromethane	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Bromofluoromethane	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Carbonyl sulfide (PCM)	mg/kg	0.05	0.05	**	**	**	**	**	**	<0.05
Chlorobenzene (m)	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Chlorobromomethane	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Chloroethane	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Chloroethane	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
1,2-Dichloroethane	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
1,3-Dichloropropane	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Dibromochloromethane	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Dibromomethane	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Dibromomethane	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Dichlorobenzene	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Dichlorobenzene	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Dichloromethane	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Dichloromethane	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Ethylbenzene	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Hexachlorobutadiene	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
m,p-Dichlorobenzene	mg/kg	<0.05	<0.05	**	**	**	**	**	**	0.05
Methylpropylbenzene	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Methylpropylbenzene	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Methylpropylbenzene	mg/kg	0.05	<0.05	**	**	**	**	**	**	0.05
Butylbenzene	mg/kg	0.05	0.05	**	**	**	**	**	**	<0.05
Pentachlorobenzene	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
o-Dichlorobenzene	mg/kg	<0.05	0.05	**	**	**	**	**	**	0.05
Styrene	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
tert-Butylbenzene	mg/kg	0.05	<0.05	**	**	**	**	**	**	0.05
Trichlorobenzene	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Trichlorobenzene	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Tetrahydrofuran	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Toluene	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
trans-1,2-Dichloroethane	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
trans-1,3-Dichloropropane	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Trichloroethane (TCE)	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Trichloroethane	mg/kg	0.05	0.05	**	**	**	**	**	**	<0.05
Trichloroethane	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05
Vinyl Chloride	mg/kg	0.05	0.05	**	**	**	**	**	**	0.05

SVOC

1,2,4-Trichlorobenzene	mg/kg									
1,4-Dichlorobenzene	mg/kg									
2,3,4,6-Tetrachlorophenol (m)	mg/kg									
2,4,5-Trichlorophenol	mg/kg									
2,4,6-Trichlorophenol	mg/kg									
2,4-Dichlorophenol (m)	mg/kg									
2,4-Dimethylphenol	mg/kg									
2,4-Dinitrophenol	mg/kg									
2,6-Dimethylphenol	mg/kg									
2,6-Dinitrophenol	mg/kg									
2-Chloronaphthalene	mg/kg									
2-Chlorophenol (m)	mg/kg									
2-Methylphenol	mg/kg									
2-Nitrophenol	mg/kg									
4-Chloro-3-methylphenol	mg/kg									
4-Chlorobenzophenone	mg/kg									
4-Methylphenol	mg/kg									
4-Nitrophenol	mg/kg									
Azobenzene	mg/kg									
bis(2-hydroxyethyl) ether	mg/kg									

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D t S mpl d	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
L b R f N	179266	179267	179269	179270	179271	179272	179273	179274	179275
C tom R f N	13	17	3	6	9	12	15	3	6
S mple Type	ES	ES	ES	ES	ES	ES	ES	ES	ES
Trn i Pit / B h l N	TP630	TP630	TP631	TP631	TP631	TP631	TP631	TP632	TP632
D pth (m)	2.50	2.70	0.10	1.20	1.90	2.60	2.70	0.20	1.20
H d ta d g t Surf (Y/N)									

b (2 hlo thyoxy)meth	mg/kg
b (chl ro p pyl)ethe	mg/kg
B m phe yiph nyl the	mg/kg
H hl ro-1 3 b tad	mg/kg
H chlorob	mg/kg
H hl oeth	mg/kg
i ph	mg/kg
N trob nz	mg/kg
t d n-p pyl 1 propa m ne	mg/kg
P t hl be	mg/kg
P t hl roph l	mg/kg

B (2-ethyl xy)phth l te	mg/kg
B nylb zyphth l te	mg/kg
D thyphth l t	mg/kg
D m thyphth l t	mg/kg
D b typhth l t	mg/kg
D n-o tyl phthalat	mg/kg

T tal Phth l tes	mg/kg
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ORGANO CHLORINE PESTICIDES

Ald	mg/kg
B ta HCH (B ta BHC)	mg/kg
Chl rd	mg/kg
DDD	mg/kg
D id	mg/kg
D (t t l)	mg/kg
E d lf l	mg/kg
E d lf ll	mg/kg
E d lf S lph t	mg/kg
E d	mg/kg
E d E d Ald hyd	mg/kg
G mm HCH (Lu da)	mg/kg
H pt hl	mg/kg
H pt chl p xid	mg/kg
H pt chl b e	mg/kg
M th xy hl	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Az ph m thyl	mg/kg
D m l -m thyl	mg/kg
D zino	mg/kg
D hl rv	mg/kg
D thio	mg/kg
D uff t	mg/kg
EPN Ethio	mg/kg
M l th o	mg/kg
M thyl P rath	mg/kg
P ath	mg/kg
T rbut	mg/kg

CARBAMATE (P t i d)

C b ryl	mg/kg
Carb f ra	mg/kg
Ma b	mg/kg

PHENOL UREA HERBICIDES

Chl t luro	mg/kg
D ur	mg/kg
I p oturo	mg/kg
L ro	mg/kg

D t S mpl d	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
Lab R f N	179266	179267	179269	179270	179271	179272	179273	179274	179275
C t m R f No	13	17	3	6	9	12	15	3	6
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tri l Pk / B h l N	TP630	TP630	TP631	TP631	TP631	TP631	TP631	TP632	TP632
D pth (m)	2.50	2.70	0.10	1.20	1.90	2.60	2.70	0.20	1.20
H d t d g t S rf (Y/N)									

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5-T	mg/kg
2 4 D	mg/kg
Chl o-o tolyl xya t d	mg/kg
D mba	mg/kg
Dchl p op	mg/kg
M c p p	mg/kg
Sl	mg/kg

TRIAZINES

Alt zi	mg/kg
S m zi	mg/kg

PCB

PCB C g 28	mg/kg
PCB C g 52	mg/kg
PCB C g 101	mg/kg
PCB C g 118	mg/kg
PCB C g 138	mg/kg
PCB Co g 153	mg/kg
PCB Co g ne 180	mg/kg

Total PCB

	mg/kg
--	-------

ALCOHOLS

B ta l	mg/kg
Etha l	mg/kg
Ethyl Glycol	mg/kg
M th l	mg/kg
P p 1-cl	mg/kg
P p 2-cl	mg/kg

MISCELLANEOUS

C l f V l	Cal/g
-----------	-------

S iv	mg/kg
T	mg/kg

1 2 Dchl p p	mg/kg
1 3 Dchl p p	mg/kg
2 4 D troph l	mg/kg
A t	mg/kg
C rb zole	mg/kg
C rb d lphd	mg/kg
C t (TPH by GCFID)	mg/kg
Cycl h xa	mg/kg
Cycl h	mg/kg
H hi ocy l p led	mg/kg
Hydroq	mg/kg
N-N trosodiphe yl m ne	mg/kg
p-Chloro l	mg/kg
Prem th n/Cyp m th	mg/kg
Pynd ne	mg/kg
Styr	mg/kg
S lphola	mg/kg
T l ne Extractabl M tt (H t c)	mg/kg
T ph e	mg/kg
T butyl T n	mg/kg
T hi rometha e	mg/kg
V yl Acetate	mg/kg

CONCRETE

Chlond BS1377 P r t 3 d d g p p rat	mg/kg
HAC (R p d d term at of Hgh Al m na C m	mg/kg
M Proport s C m t/Aggr reg t R to-BS188	mg/kg

O g n M tt	%
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N tes

- B nzo(b)l
- *2 O be zo(h)
- l uff c l sa
- ** A lysis che

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	15/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03
D t S mpl d	179276	179277	179278	179279	179280	179281	179282	179283	179284
L b R f N	9	3	6	10	3	6	7	11	3
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP632	TP657	TP657	TP657	TP656	TP656	TP656	TP656	TP677
T i l P r t / B o h l N	2.20	0.30	1.30	2.00	0.40	0.60	1.40	2.30	0.20
D p t h (m)									
H d t d g t S r f (Y/N)									
pH	V I	7.4	7.4			5.2			7.0
Δ L l g b	%								
/ M t r e	/								
/ S t	/								
A b e l s	Δ	0.001	0.001			0.001			0.001
PHENOLICS									
Butyl Ph ols	mg/kg								
Cat ch l	mg/kg	0.5	0.5			0.5			0.5
Cr is (m)	mg/kg	0.5	0.5			0.5			0.5
N phth l	mg/kg	0.5	0.5			0.5			0.5
Ph l	mg/kg	0.5	0.5			<0.5			0.5
R o c ol	mg/kg	0.5	0.5			0.5			0.5
T m thyiph l	mg/kg	0.5	0.5			0.5			0.5
Xyl nol & Ethyiphe ls	mg/kg	0.5	0.5			0.5			0.5
Total Ph l	mg/kg	0.5	0.5			0.5			0.5
US EPA PRIORITY PAH									
Ace phth n	mg/kg	0.8	1.4			0.5			0.5
A phthyl	mg/kg	0.5	1.7			0.5			0.5
Anthra	mg/kg	1.7	2.1			0.5			0.5
B () A th ce	mg/kg	0.5	21.4			0.5			0.5
B zo()pyre	mg/kg	1.2	2.8			0.5			0.5
B nzo(b)fl ra th	mg/kg								
B zo(k)fl ra th	mg/kg	0.5	6.0			0.5			0.5
B z (g h)peryl	mg/kg	7.1	0.5			0.5			0.5
Chrys	mg/kg	0.5	14.7			0.5			0.5
D be (h)a thrace ⁺²	mg/kg								
I d o(1,2,3-cd)pyr ⁺²	mg/kg	3.3	4.0			0.5			0.5
Fl ra th	mg/kg	11.0	27.4			0.5			0.5
Fl	mg/kg	0.5	1.7			0.5			0.5
N phth l ne	mg/kg	2.1	7.2			0.5			0.5
Ph th e	mg/kg	2.6	16.7			<0.5			0.5
Pyr	mg/kg	10.0	17.8			0.5			0.5
T tal US EPA 16 PAH	mg/kg	40.2	125.0			0.5			0.5
OTHER PAHs									
A th thre	mg/kg								
B o()pyr	mg/kg								
Cy l p ta(d)pyren	mg/kg								
GENERAL INORGANICS									
Compl x Cyan de	mg/kg								
E ly L b ratabl Cya d (f ee)	mg/kg								
Th y t	mg/kg								
Tot l Cya d	mg/kg	1	1			1			1
S lph d	mg/kg	2	<2			<2			2
S lph (f ee)	mg/kg	1910	190			8470			180
T tal S lphate	mg/kg	300	100			200			200
Wat S l ble S lphat	mg/kg								
W t S l bl Chi d	mg/kg								
Phosph l	mg/kg								
Ex h geabl Amm m	mg/kg	11.9	20.5			<5			10.2
Nitrate	mg/kg								
Nitrit	mg/kg								

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	15/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03
D t S m p l d										
L b R f N	179276	179277	179278	179279	179280	179281	179282	179283	179284	
C t m R f N	9	3	6	10	3	6	7	11	3	
S m p l T y p	ES	ES	ES	ES	ES	ES	ES	ES	ES	
T l P l t / B h l N	TP632	TP657	TP657	TP657	TP656	TP656	TP656	TP656	TP677	
D p t h (m)	2.20	0.30	1.30	2.00	0.40	0.60	1.40	2.30	0.20	
H d t a d g t S r f (Y/N)										

HEAVY METALS/METALLOIDS

	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Al m m									
Antim y									
Ars	35.2		41.6			8.6			13.5
B m									
B r y l l m									
Boro (Wat S i b l)	1.3		1.3			0.8			0.5
C d m m	1.3		1.2			0.5			0.5
Chrom m (T t l l)	51		61			14			28
Chrom m (H x a l t)	2		2						2
C b l t									
C p p e	540		749			118			53
G m m m									
L d	751		2043			96			100
M r c r y	14.3		14.8			101.0			0.6
M j y b d m									
N c k l	97		109			35			28
S l n m	27		3.6			0.5			1.0
V d m									
Z	1314		2531			331			136

ESSENTIAL ELEMENTS

C l m	mg/kg
I r o	mg/kg
M g m	mg/kg
M g	mg/kg
P t a s m	mg/kg
S d m	mg/kg

MONOAROMATICS

B z	mg/kg
T l	mg/kg
E t h y l b n z e e	mg/kg
M t a & P r a X y l	mg/kg
O r t h X y l e	mg/kg
T t a l X y l	mg/kg

MTBE

1 2 4 T m t h y l b n z e	mg/kg
1 3 5 T m t h y l b n z	mg/kg

TOTAL HYDROCARBONS

P t r o l e m R g O r g n i c s (C -C)	mg/kg	5	5		46765		5
D e s I R g O r g c s (C -C ₂₈)	mg/kg	39	<5		13656		49
H y d o c a r b S c r e e n (G C -F I D)	mg/kg	53	<5		60422		77

VOC

1 1 1 T c h l o r o e t h	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
1 1 2 2 T e t r a h l o r o e t h a	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
1 1 2 T c h l o -1 2 2 t r i o e t h n e	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
1 1,2 T c h l o e t h n e	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
1 1-D h l r o t h a	mg/kg	0.05	0.05	**	0.05	<0.05	**	0.05	0.05	**
1 1 D c h l o e t h n e	mg/kg	0.05	<0.05	**	0.05	0.05	**	0.05	0.05	**
1 2 3-T c h l o p r o p a	mg/kg	0.05	0.05	**	<0.05	0.05	**	0.05	0.05	**
1 2 3-T m t h y l b e n z e n e	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
1 2 4-T c h l o b e n z e	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
1 2 4 T m t h y l b n z e	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
1 2-D i b r o m o-3-C h l o p r o p a n e	mg/kg	<0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
1,2-D c h l o r o b e n z e e	mg/kg	<0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
1 2 D c h l o r o e t h a n e	mg/kg	<0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
1 2 D i c h l o r o p r o p a	mg/kg	<0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
1,2-D c h l o r o p r o p e	mg/kg	0.05	0.05	**	<0.05	0.05	**	0.05	0.05	**
1 3 5 T m t h y l b e n z e	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
1 3-D i c h l o b e n z e	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.10	**

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	15/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03
D t S mpl d	179276	179277	179278	179279	179280	179281	179282	179283	179284	
Lab R f N	9	3	6	10	3	6	7	11	3	
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES	
S mpl Typ	TP632	TP657	TP657	TP657	TP656	TP656	TP656	TP656	TP677	
T i Pkt / B h i N	2.20	0.30	1.30	2.00	0.40	0.60	1.40	2.30	0.20	
D pth (m)										
H d t a d g t S r f (Y/N)										
13 D hl op pe	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
14 D hl be z	mg/kg	<0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
1 Chl ot i	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
1 M thylpropylb nz	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
22 D chl prop	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
2 Chl t i	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
B	mg/kg	0.05	0.05	**	<0.05	0.05	**	0.05	0.05	**
B m b nz	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
Brom hi m tha	mg/kg	0.05	0.05	**	0.05	<0.05	**	0.05	0.05	**
Brom d hl m th	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
Brom f m	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
C b T tra hl d (PCM)	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
Chl b nz (m)	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
Chl d b m m th	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
Chl th	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
Chl rof m	mg/kg	0.05	<0.05	**	0.05	0.05	**	0.05	0.05	**
12 D hl thyl	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
13-D chl roprop	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
Dib m chl orn th	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
Dbromoeth	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
Db m m th	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
D hl b nz	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
D hl m thane	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
Ethylb	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
H chl b tad	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
m t & p ra Xyl	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
M thyl propylbe	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
M hl b nz	mg/kg	0.05	0.05	**	<0.05	0.05	**	0.05	0.05	**
M hl ph i (m)	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
B tylbenz	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
P pytb nze	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
rth Xyl	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
Styr	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
t rt Butylbenzene	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
T t hl rob	mg/kg	0.05	0.05	**	0.05	<0.05	**	0.05	0.05	**
T tra hl roethene (PCE)	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
T tra hyd f a	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
T i	mg/kg	<0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
tra 12 D hl the	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
tra 13-d chl rop pe	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
T hl oeth (TCE)	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
T hl fi m th e	mg/kg	0.05	<0.05	**	0.05	0.05	**	0.05	0.05	**
T hl rometh ne	mg/kg	0.05	0.05	**	0.05	0.05	**	0.05	0.05	**
V yl Chl d	mg/kg	0.05	0.05	**	0.05	0.05	**	<0.05	0.05	**
SVOC										
124 T hl benz	mg/kg									
14-D hl robenz	mg/kg									
2346-T trachl roph l (m)	mg/kg									
245 T chl roph l	mg/kg									
246-T hl oph l	mg/kg									
24 D chl roph l (m)	mg/kg									
24 D m thylphenol	mg/kg									
24 D itrolol	mg/kg									
26 D m thylph ol	mg/kg									
26 D itrololue e	mg/kg									
2-Chl ro phth l	mg/kg									
2 Chlorophe l (s m)	mg/kg									
2 M thylph l	mg/kg									
2 Nitroph l	mg/kg									
4-Chloro-3-m thylphe l	mg/kg									
4-chlorob nzyiphe yl ther	mg/kg									
4 M thylph l	mg/kg									
4-N troph l	mg/kg									
Az benze	mg/kg									
b (2-chloro thyl)eth	mg/kg									

	15/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03
D t S mpl d	179276	179277	179278	179279	179280	179281	179282	179283	179284
L b R f N	9	3	6	10	3	6	7	11	3
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP632	TP657	TP657	TP657	TP656	TP656	TP656	TP656	TP677
T i /P t /B h i N	2.20	0.30	1.30	2.00	0.40	0.60	1.40	2.30	0.20
D pth (m)									
H d t d g t S r f (Y/N)									

b s(2-chl ethy xy)m th	mg/kg
b (h l p py)eth	mg/kg
B m ph y lph y l th	mg/kg
H xa h l o-1.3 b tad	mg/kg
H xa h l rob rnz	mg/kg
H h l roeth	mg/kg
l ph	mg/kg
N robe	mg/kg
itro od -p o pyl 1 p p m ne	mg/kg
P t chl rob	mg/kg
P ta h l oph ol	mg/kg

B s(2-ethyl xy)phth l te	mg/kg
B tylb zylphthal t	mg/kg
D thylphth l t	mg/kg
D methylphthalate	mg/kg
D -n butylphth l t	mg/kg
D -o tylphth l t	mg/kg

T tal Phthal t	mg/kg
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ORGANO CHLORINE PESTICIDES

Ald n	mg/kg
B ta HCH (B t BHC)	mg/kg
Chl rd	mg/kg
DDD	mg/kg
D ld	mg/kg
D (total)	mg/kg
E d lf l	mg/kg
E d s lf ll	mg/kg
E do lf S lphat	mg/kg
E d	mg/kg
E d E d Ald hyd	mg/kg
G mm HCH (L d)	mg/kg
H ptachl	mg/kg
H ptachl p d	mg/kg
H pt h l rob z	mg/kg
M th xychl	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Az ph methyl	mg/kg
Dem t methyl	mg/kg
Diaz	mg/kg
D chl rv	mg/kg
D o th	mg/kg
D lf to	mg/kg
EPN Eth	mg/kg
M lath	mg/kg
M thyl P rath	mg/kg
Parath	mg/kg
T rbu f	mg/kg

CARBAMATE (P st d)

Carb ryl	mg/kg
Carbofura	mg/kg
Ma eb	mg/kg

PHENOL UREA HERBICIDES

Chlo ct l ron	mg/kg
D to	mg/kg
I oprot ro	mg/kg
Li on	mg/kg

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D t S mpl d	15/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03
Lab R f N	179276	179277	179278	179279	179280	179281	179282	179283	179284
C t m R f N	9	3	6	10	3	6	7	11	3
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES
T l P t / B rehol N	TP632	TP657	TP657	TP657	TP656	TP656	TP656	TP656	TP677
D pth (m)	2.20	0.30	1.30	2.00	0.40	0.60	1.40	2.30	0.20
H d t a d g t S r f (Y/N)									

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chloro-o-tolylxyacetic acid	mg/kg
Dacarb	mg/kg
Dichloroprop	mg/kg
Mecoprop	mg/kg
Sis	mg/kg

TRIAZINES

Altrazine	mg/kg
Smetolachlor	mg/kg

PCB

PCB Cong 28	mg/kg
PCB Cong 52	mg/kg
PCB Cong 101	mg/kg
PCB Cong 118	mg/kg
PCB Cong 138	mg/kg
PCB Cong 153	mg/kg
PCB Cong 180	mg/kg

Total PCB	mg/kg
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ALCOHOLS

Butanol	mg/kg
Ethanol	mg/kg
Ethyl Glycol	mg/kg
Methanol	mg/kg
Propanol-1	mg/kg
Propanol-2	mg/kg

MISCELLANEOUS

Calcium chloride	Ca/kg
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Shelvac	mg/kg
Toluene	mg/kg

1,2-Dichloropropane	mg/kg
1,3-Dichloropropane	mg/kg
2,4-Dinitrophenol	mg/kg
Acetone	mg/kg
Carbazole	mg/kg
Carbon disulphide	mg/kg
Creosol (TPH by GCFID)	mg/kg
Cyclohexane	mg/kg
Cyclohexane	mg/kg
Hexachlorocyclopentadiene	mg/kg
Hydroquinone	mg/kg
N,N-Diphenylamine	mg/kg
p-Chlorophenol	mg/kg
Prenthylcyclopropylmethane	mg/kg
Pyridine	mg/kg
Styrene	mg/kg
Sulpholane	mg/kg
Total Extractable Matter (Historical)	mg/kg
Toluene	mg/kg
Tributyltin	mg/kg
Tetrachloroethane	mg/kg
Vinyl Acetate	mg/kg

CONCRETE

Chloride BS1377 Part 3 chloride per cent	mg/kg
HAC (Resistance to High Alkali Cement)	mg/kg
Mix Proportion Cement / Aggregate Ratio-BS188	mg/kg

Organic Matter	%
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Note

- Benzo(b)fl
- 2-Di-benzo(a,h)
- Insufficient
- Analysis checked

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	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03
D t S mpl d										
L b R f N	179285	179286	179287	179288	179290	179291	179292	179293	179294	
C tom R f N	6	9	10	13	3	6	9	13	3	
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	
T i Pit / Boreh i N	TP677	TP677	TP677	TP677	TP676	TP676	TP676	TP676	TP697	
D pth(m)	0 90	1 00	1 20	1 50	0 30	1 30	2 30	2 50	0 30	
H d t nd g t S rf (Y/N)										

pH	Val e	7 3
/ L lg it	/	
/ M t	%	
/ St s	%	
Asb t s	%	0 001

PHENOLICS

B tyl Phe l	mg/kg	
C t hol	mg/kg	0 5
C l (m)	mg/kg	0 5
N phth l	mg/kg	0 5
Phe l	mg/kg	0 5
Re l	mg/kg	0 5
T m thylph l	mg/kg	0 5
Xyl l & Ethylphe ls	mg/kg	0 5
T tal Ph l	mg/kg	0 5

US EPA PRIORITY PAH

A phth	mg/kg	0 5
Ace phthyl	mg/kg	0 5
A th e	mg/kg	0 5
B nzo(a)Anthra e	mg/kg	0 5
B nz ()pyre	mg/kg	0 5
B nzo(b)fl ra the	mg/kg	
B (k)fl ra thene	mg/kg	0 5
B nzo(g h)pery	mg/kg	0 5
Chrys	mg/kg	0 5
D benzo(h)ja thra	mg/kg	
l de c(1 2 3-cd)pyre ⁻²	mg/kg	0 5
Fl ra th	mg/kg	0 5
Fl	mg/kg	0 5
Naphth le	mg/kg	0 5
Ph thre	mg/kg	0 5
Py	mg/kg	0 5
T tal US EPA 16 PAH	mg/kg	<0 5

OTHER PAH

Anth th	mg/kg	
B nzo(e)pyren	mg/kg	
Cycl p ta(cd)pyre	mg/kg	

GENERAL INORGANICS

C mpl Cya d	mg/kg	
E ly Lib rat bl Cy d (free)	mg/kg	
Thocy t	mg/kg	
T tal Cya d	mg/kg	1
S lphid	mg/kg	2
S lph r (free)	mg/kg	170
Total S lph t	mg/kg	200
W te Sol bl Sulph te	mg/kg	
W l Sol bl Chlo d	mg/kg	
Ph ph te	mg/kg	
E ch g abl Amm m	mg/kg	12 2
N trat	mg/kg	
N tt	mg/kg	

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D t S mpl d	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03
L b R f N	179285	179286	179287	179288	179290	179291	179292	179293	179294	
C t m R f N	6	9	10	13	3	6	9	13	3	
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tri l Pit / B h l N	TP677	TP677	TP677	TP677	TP676	TP676	TP676	TP676	TP676	TP676
D pth (m)	0 90	1 00	1 20	1 50	0 30	1 30	2 30	2 50	0 30	
H d t d g t S rfa (Y/N)										

HEAVY METALS/METALLOIDS

Al m m	mg/kg									
A t m y	mg/kg									
Ars	mg/kg						54 4			
Ba m	mg/kg									
B ryl m	mg/kg									
B (W t S iubl)	mg/kg						0 5			
C dm m	mg/kg						2 1			
Ch m m (T t l)	mg/kg						47			
Ch m m (H l nt)	mg/kg									
Cob lt	mg/kg									
C ppe	mg/kg						4099			
G m m	mg/kg									
L d	mg/kg						566			
M c ry	mg/kg						1 4			
M lybd m	mg/kg									
N k l	mg/kg						101			
S l m	mg/kg						3 3			
V d m	mg/kg									
Z	mg/kg						968			

ESSENTIAL ELEMENTS

C l m	mg/kg									
I	mg/kg									
M g m	mg/kg									
M g	mg/kg									
P ta m	mg/kg									
S d m	mg/kg									

MONOAROMATICS

B ne	mg/kg									
T l	mg/kg									
Ethylbenz	mg/kg									
M t & P ra Xyl	mg/kg									
Orth Xyl ne	mg/kg									

T tal Xyl	mg/kg									
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MTBE	mg/kg									
1 2 4 T m thylb nz	mg/kg									
1 3 5 T m thylb nzene	mg/kg									

TOTAL HYDROCARBONS

P trol m R ge Org cs (C ₆ -C ₁₀)	mg/kg						5			
D I R g Org cs (C ₆ -C ₂₆)	mg/kg						8			
Hydrocarbo Scre (GC FID)	mg/kg						8			

VOC

1 1 1 T hl thane	mg/kg	0 05	0 05	0 05	0 05	**	**	<0 05	**	0 05
1 1 2 T t chl roeth	mg/kg	0 05	0 05	<0 05	0 05	**	**	0 05	**	0 05
1 1 2 T hl ro-1 2 2 trfl oroeth	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
1 1 2 T hl ro tha	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
1 1 D chl roeth	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
1 1 D chl roethe	mg/kg	0 05	<0 05	0 05	0 05	**	**	<0 05	**	0 05
1 2 3-T chl roprop ne	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
1 2 3-T m thylbenze e	mg/kg	0 05	<0 05	0 05	<0 05	**	**	0 05	**	0 05
1 2 4-T chl b nzene	mg/kg	0 05	<0 05	0 05	0 05	**	**	0 05	**	0 05
1 2 4-T m thylbenzene	mg/kg	0 05	0 05	<0 05	0 05	**	**	0 05	**	0 05
1 2 D b mo-3-Chl ropropa e	mg/kg	0 05	0 05	0 05	0 05	**	**	<0 05	**	0 05
1 2 D chl b nz ne	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	<0 05
1 2 D chl oetha	mg/kg	0 05	<0 05	0 05	0 05	**	**	0 05	**	0 05
1 2 D chl ropropane	mg/kg	0 05	<0 05	0 05	<0 05	**	**	0 05	**	0 05
1 2 D chl opropa e	mg/kg	0 05	<0 05	0 05	<0 05	**	**	0 05	**	0 05
1 3 5 T m thylbenzene	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
1 3 D chl robe e	mg/kg	0 05	<0 05	0 05	0 05	**	**	0 05	**	0 05

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D t S mpl d Lab R f N C t m R f N S mpl Typ Tri l P t / B h i N D pth (m) H d ta di g t S r f (Y/N)		16/09/03 179285	16/09/03 179286	16/09/03 179287	16/09/03 179288	16/09/03 179290	16/09/03 179291	16/09/03 179292	16/09/03 179293	16/09/03 179294
		6	9	10	13	3	6	9	13	3
		ES	ES	ES	ES	ES	ES	ES	ES	ES
		TP677	TP677	TP677	TP677	TP676	TP676	TP676	TP676	TP697
		0 90	1 00	1 20	1 50	0 30	1 30	2 30	2 50	0 30
1 3 D hi op opa e	mg/kg	0 05	0 05	0 05	0 05	**		0 05	**	0 05
1 4-D hi benz	mg/kg	0 05	0 05	0 05	0 05	**		0 05	**	0 05
1 Chi rotoi	mg/kg	0 05	0 05	0 05	<0 05	**	**	0 05	**	0 05
1 M thylpropylbe	g/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
2 2 D chl rop pane	mg/kg	0 05	0 05	0 05	0 05	**		0 05	**	0 05
2 Chl roi l	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
B nz	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
B m benz	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
Brom chl m th	mg/kg	0 05	0 05	<0 05	0 05	**	**	0 05	**	0 05
Brom d chlorom th	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
Brom f m	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
C rb T tra hi d (PCM)	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
Chl rob (s m)	mg/kg	0 05	0 05	<0 05	0 05	**	**	0 05	**	0 05
Chl rod brom m tha	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
Chl roeth	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
Chl rof m	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
s 1 2 Dichloroethylene	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
s 1 3-D hlo oprope	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
Dib mochl m th	mg/kg	0 05	0 05	<0 05	0 05	**	**	0 05	**	0 05
D b moeth	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
Dibrom m tha	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
D chl rob z	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
D hl m th	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
Ethylbenz e	mg/kg	<0 05	0 05	<0 05	0 05	**	**	<0 05	**	0 05
He hl robutad	mg/kg	0 05	0 05	<0 05	0 05	**	**	0 05	**	0 05
m t & p Xylene	mg/kg	0 05	0 05	0 05	<0 05	**	**	0 05	**	0 05
M thyl p pytb nz	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
M chl rob ze	mg/kg	0 05	0 05	0 05	<0 05	**	**	0 05	**	0 05
M chl rophe ol (m)	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
Butylbenze	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	<0 05
Propylb	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
nth Xyl	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
Styr	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
l r l B tyb nz ne	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
T tr hi b nzen	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
T trachl th (PCE)	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	<0 05
T trahyd f ra	mg/kg	<0 05	0 05	0 05	<0 05	**	**	0 05	**	0 05
T l	mg/kg	0 05	0 05	0 05	<0 05	**	**	0 05	**	0 05
tra 1 2 D chl oeth	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
tr 1 3-d hl ropropene	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
T hl th (TCE)	mg/kg	0 05	0 05	<0 05	0 05	**	**	0 05	**	<0 05
T hirofl m tha	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	<0 05
T chl rometh	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
V yl Chl d	mg/kg	0 05	0 05	0 05	0 05	**	**	0 05	**	0 05
SVOC										
1 2 4 T chl obenz ne	mg/kg									
1 4-D chl robenz ne	mg/kg									
2 3 4 6-T trachl rophe ol (m)	mg/kg									
2 4 5-T chloroph l	mg/kg									
2 4 6 T chl oph l	mg/kg									
2 4-D chl phe l (m)	mg/kg									
2 4 D m thylph ol	mg/kg									
2 4-D itrotol e e	mg/kg									
2 6-D m thylph l	mg/kg									
2 6-D itrotol e	mg/kg									
2-Chl ronaphthal	mg/kg									
2 Chl rophe ol (s m)	mg/kg									
2-M thylph l	mg/kg									
2 Nitroph l	mg/kg									
4-Chl ro-3 m thylph l	mg/kg									
4-chl robe zylphenyleth	mg/kg									
4-M thylph nol	mg/kg									
4-Nitroph n l	mg/kg									
Az b nze	mg/kg									
b s(2-chlo oethyl)eth	mg/kg									

	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03
D t S mpl d	179285	179286	179287	179288	179290	179291	179292	179293	179294
L b R f N	6	9	10	13	3	6	9	13	3
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP677	TP677	TP677	TP677	TP676	TP676	TP676	TP676	TP697
T l P d / B h i N	0.90	1.00	1.20	1.50	0.30	1.30	2.30	2.50	0.30
D pth (m)									
H rd ta d g t S rf (Y/N)									

b (2-chloro-thoxy)methane	mg/kg
b (chloro-propyl)ethane	mg/kg
Bromophenylphenyl	mg/kg
Hexahydro-1,3-butadiene	mg/kg
Hexahydrobenzene	mg/kg
Hexahydroethane	mg/kg
Isophorone	mg/kg
Nitrobenzene	mg/kg
Tris(4-propylphenyl)phosphine oxide	mg/kg
Pentachlorobenzene	mg/kg
Pentachlorophenol	mg/kg

Bis(2-ethylhexyl)phthalate	mg/kg
Bis(2-ethylhexyl)phthalate	mg/kg
Dibutylphthalate	mg/kg
Dimethylphthalate	mg/kg
D-n-butylphthalate	mg/kg
D-n-octylphthalate	mg/kg

Tetralin	mg/kg
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ORGANO CHLORINE PESTICIDES

Aldrin	mg/kg
Beta-HCH (Beta-BHC)	mg/kg
Chlordane	mg/kg
DDD	mg/kg
Dieldrin	mg/kg
Dibutyltin	mg/kg
Endosulfan I	mg/kg
Endosulfan II	mg/kg
Endosulfan Siphon	mg/kg
Endosulfan	mg/kg
Endosulfan Aldrin hyd	mg/kg
Gamma-HCH (Lindane)	mg/kg
Heptachlor	mg/kg
Heptachlor epoxide	mg/kg
Heptachlorobenzene	mg/kg
Methoxychlor	mg/kg
pp-DDE	mg/kg
pp-DDT	mg/kg
pp-TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	mg/kg
Diminon-methyl	mg/kg
Diazinon	mg/kg
Dichlorvos	mg/kg
Diazathion	mg/kg
Difluthion	mg/kg
EPN Ethion	mg/kg
Milbex	mg/kg
Methylphosphorothion	mg/kg
Phosphorothion	mg/kg
Terbufos	mg/kg

CARBAMATE (Pesticides)

Carbaryl	mg/kg
Carbofenthiol	mg/kg
Methidathion	mg/kg

PHENOL UREA HERBICIDES

Chlorotoluron	mg/kg
Dropanol	mg/kg
Isoproturon	mg/kg
Linuron	mg/kg

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	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03
D t S mpl d									
L b R f N	179285	179286	179287	179288	179290	179291	179292	179293	179294
C t m R f N	6	9	10	13	3	6	9	13	3
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tr n l Pit / B reh l N	TP677	TP677	TP677	TP677	TP676	TP676	TP676	TP676	TP697
D pth (m)	0.90	1.00	1.20	1.50	0.30	1.30	2.30	2.50	0.30
H d ta d g t S rfa (Y/N)									

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5 T	mg/kg
2 4-D	mg/kg
Chl ro-o-t lyl xyacet a d	mg/kg
D camb	mg/kg
D chl rop p	mg/kg
M coprop	mg/kg
S lve	mg/kg

TRIAZINES

Alinz	mg/kg
S m z i e	mg/kg

PCB

PCB Co g 28	mg/kg
PCB Cong n 52	mg/kg
PCB C g 101	mg/kg
PCB C g e 118	mg/kg
PCB C g 138	mg/kg
PCB C g e 153	mg/kg
PCB Cong e 180	mg/kg

T tal PCB	mg/kg
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ALCOHOLS

B t l	mg/kg
Etha l	mg/kg
Ethyl Glycol	mg/kg
M th l	mg/kg
Propan-1-ol	mg/kg
Prop 2-ol	mg/kg

MISCELLANEOUS

C i f Val	C l/g
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Sil	mg/kg
T	mg/kg

1 2 D chlo propa	mg/kg
1 3 D chloroprop e	mg/kg
2 4 D trophenol	mg/kg
A t n	mg/kg
C rb zole	mg/kg
C rbo d lphide	mg/kg
C eo t (TPH by GCFID)	mg/kg
Cycl hexane	mg/kg
Cycl h	mg/kg
He chl rocy l p tadiene	mg/kg
Hydroq e	mg/kg
N-N tro od phe yl m	mg/kg
p-Chl roa l	mg/kg
P em thnz/Cyperm th	mg/kg
Pynd	mg/kg
Styr	mg/kg
Sulph lan	mg/kg
Toi ne Extractabl Matte (H t c)	mg/kg
T xaph	mg/kg
Tnbutyl Tn	mg/kg
T chl rometha	mg/kg
Vnyl Acetal	mg/kg

CONCRETE

Chlo d BS1377 Part 3 cl di g prep rati	mg/kg
HAC (R pid d t m b of H gh Alum na Cem	mg/kg
Mix Proportu ns-C me l/Aggreg t R to-BS188	mg/kg

Org Matt	%
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N tes
Benzo(b)fl
D-benzo(h)
Insufficient sa
Analysis he

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	16/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
D t S mpl d	16/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
L b r f N	179295	179297	179298	179299	179300	179301	179302	179303	179304	179304
C t m R f N	7	12	5	6	11	12	3	6	9	9
S mpl Typ	ES	ES	ES	D	ES	D	ES	ES	ES	ES
Tn i Pt / B hol N	TP697	TP632	TP635A	TP635A	TP635A	TP635A	TP675	TP675	TP675	TP675
D pth (m)	1.30	2.40	1.70	1.90	2.10	2.30	0.20	0.40	0.40	1.40
H dsta dl g t S rfa (Y/N)										
pH	Val	7.4		7.8		6.3				7.9
‰ L lg t	‰									
% M tu	/									
/ St	/									
A b t	/	0.001		0.001		0.001				0.001
PHENOLICS										
B yl Ph l	mg/kg									
C t ch l	mg/kg	0.5		0.5		0.5				0.5
Cre l (m)	mg/kg	0.5		0.5		0.5				0.5
N phth l	mg/kg	0.5		0.5		0.5				0.5
Ph l	mg/kg	0.5		0.5		0.5				0.5
R sorci ol	mg/kg	0.5		0.5		0.5				0.5
T m thylph l	mg/kg	0.5		0.5		0.5				0.5
Xyl l & Ethylphe ls	mg/kg	0.5		0.5		0.5				0.5
Total Ph l	mg/kg	0.5		<0.5		0.5				0.5
US EPA PRIORITY PAH										
A e phth	mg/kg	1.9		1.9		0.6				0.5
A phthyl	mg/kg	0.5		3.4		0.5				0.5
A thrace	mg/kg	3.6		23.0		0.5				0.5
B nz ()A thrac	mg/kg	21.5		92.8		4.1				0.5
B ()pyr	mg/kg	17.5		39.7		0.5				0.5
B (b)fl ra th	mg/kg									
B nzo(k)fl ra th	mg/kg	13.2		0.5		2.0				0.5
B z (g h)peryl	mg/kg	13.8		0.5		11.2				0.5
Chrys	mg/kg	28.1		0.5		5.1				0.5
D benzo(h)a thracene ⁻²	mg/kg									
I d o(1,2,3-cd)pyr ⁻²	mg/kg	8.0		0.5		1.5				0.5
Fl ra th	mg/kg	19.9		173.1		4.9				0.5
Fl rene	mg/kg	1.2		8.1		0.5				0.5
N phthal	mg/kg	3.7		1.2		0.5				0.5
Ph th	mg/kg	17.9		24.0		3.7				0.5
Pyre	mg/kg	32.7		76.7		2.0				0.5
T t l US EPA 16 PAH	mg/kg	182.9		443.8		35.0				0.5
OTHER PAH										
Antha thre	mg/kg									
B ()pyr e	mg/kg									
Cyclope ta(cd)pyr ne	mg/kg									
GENERAL INORGANICS										
Compl Cya d	mg/kg									
E ly Liberatabl Cya d (fee)	mg/kg									
Th cyanat	mg/kg									
Total Cya d	mg/kg	1		1		1				1
S lph d	mg/kg	<2		21.3		2.7				2
S lph (f)	mg/kg	830		3400		710				50
T t l S lphat	mg/kg	100		100		300				2200
W te Sol bl S lphate	mg/kg									
W t Sol ble chl d	mg/kg									
Ph phate	mg/kg									
Exch g ble Amm m	mg/kg	6.1		5.6		23.2				8.1
Nitrate	mg/kg									
Nitrite	mg/kg									

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	16/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
D t S mpl d										
L b R f N	179295	179297	179298	179299	179300	179301	179302	179303	179304	
C t m R f N	7	12	5	6	11	12	3	6	9	
S mpl Type	ES	ES	ES	D	ES	D	ES	ES	ES	
Tr n l Pit / Bo h l l N	TP697	TP632	TP635A	TP635A	TP635A	TP635A	TP675	TP675	TP675	
D pth (m)	1.30	2.40	1.70	1.90	2.10	2.30	0.20	0.40	1.40	
H d t d i g t S r f (Y/N)										

HEAVY METALS/METALLOIDS

	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Al m m									
A l m y									
A	62.4			34.7		23.0			10.1
B m									
B ryl m									
B (W te S lubl)	0.9			0.5		7.6			8.1
C dm m	2.4			1.1		0.5			0.7
Chrom m (T t l)	53			28		45			26
Chrom m (H l t)	2			2		2			2
C b ll									
C ppe	501			116		36			11800
G rma m									
L d	741			244		99			68
M cury	5.9			2.0		0.5			0.5
M lybd m									
N k l	110			44		34			121
S l n m	3.9			0.5		0.7			0.5
V d m									
Z	1512			979		167			119

ESSENTIAL ELEMENTS

	mg/kg
C lca m	
lro	
M g m	
M g	
P ta m	
S d m	

MONOAROMATICS

	mg/kg	mg/kg	mg/kg	mg/kg
Be		0.2		0.2
T lu e		0.2		<0.2
Ethylb nz		0.2		0.9
M ta & P ra Xyle		0.2		<0.2
Orth Xyl		0.2		<0.2

T tal Xyle es	mg/kg

MTBE	mg/kg

1 2 4 T m thylb nz	mg/kg

1 3 5-T m thylb z	mg/kg

TOTAL HYDROCARBONS

P trol m R ge Org cs (C ₆ -C ₁₀)	mg/kg	mg/kg	mg/kg
	5		5
D es l Ra g Org cs (C ₁₁ -C ₂₈)	781		5
Hydrocarbo Sc e (GC-FID)	804		5

VOC

	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1 1 1 T chloroeth								<0.05	0.05
1 1 2 2 Tetrachl than								0.05	0.05
1 1 2 T chloro-1,2 2 trifi roeth e								0.05	0.05
1 1 2 T chl roethane								0.05	0.05
1 1 D chloroethane								0.05	<0.05
1 1 D chl roethe								0.05	<0.05
1 2 3-Tn hl roprop								0.05	0.05
1 2 3-Tn methylbenzene								<0.05	0.05
1 2 4-T chlorobenze								0.05	0.05
1 2 4 T m thylbenzen								<0.05	0.05
1 2 D bromo-3-Chl rop pane								0.05	0.05
1 2-Dichl robenzene								<0.05	0.05
1 2 D chl roetha								0.05	0.05
1 2-D chl roprop ne								0.05	0.05
1 2 Dichl ropropene								0.05	0.05
1 3 5-T m thylbenze								<0.05	0.05
1 3-Di hlrobenzene								<0.05	0.05

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	16/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
D t S mpl d										
L b R f N	179295	179297	179298	179299	179300	179301	179302	179303	179304	179304
C t m R f N	7	12	5	6	11	12	3	6	9	
S mpl Typ	ES	ES	ES	D	ES	D	ES	ES	ES	
Tri P f / Bo h i N	TP697	TP632	TP635A	TP635A	TP635A	TP635A	TP675	TP675	TP675	
D pth (m)	1.30	2.40	1.70	1.90	2.10	2.30	0.20	0.40	1.40	
H d t d g t S r f (Y/N)										

1,3-D hl rop p ne	mg/kg	**	**	**	**	**	0.05	0.05	**
1,4-D hl b z	mg/kg	**	**	**	**	**	0.05	0.05	**
1-Chl rot l e	mg/kg	**	**	**	**	**	0.05	0.05	**
1-M thylpropylbenze	mg/kg	**	**	**	**	**	0.05	0.05	**
2,2-D chl roprop	mg/kg	**	**	**	**	**	0.05	0.05	**
2-Chl rotol e	mg/kg	**	**	**	**	**	0.05	0.05	**
Be ze	mg/kg	**	**	**	**	**	0.05	0.05	**
Brom b ze	mg/kg	**	**	**	**	**	0.05	0.05	**
B om hi rom th ne	mg/kg	**	**	**	**	**	0.05	0.05	**
Brom d hl rom th	mg/kg	**	**	**	**	**	0.05	0.05	**
Brom f rm	mg/kg	**	**	**	**	**	0.05	0.05	**
C rb T tra hl d (PCM)	mg/kg	**	**	**	**	**	0.05	0.05	**
Chl b z (m)	mg/kg	**	**	**	**	**	0.05	0.05	**
Chl d b om m tha	mg/kg	**	**	**	**	**	0.05	0.05	**
Chl roeth	mg/kg	**	**	**	**	**	0.05	0.05	**
Chl rof rm	mg/kg	**	**	**	**	**	0.05	0.05	**
1,2-D hl oro thyl	mg/kg	**	**	**	**	**	0.05	0.05	**
s 1,3-D hl rop rope	mg/kg	**	**	**	**	**	0.05	<0.05	**
D bromochl rom tha	mg/kg	**	**	**	**	**	0.05	0.05	**
D brom tha	mg/kg	**	**	**	**	**	0.05	0.05	**
Dibrom meth e	mg/kg	**	**	**	**	**	0.05	0.05	**
D chl robenze e	mg/kg	**	**	**	**	**	0.05	0.05	**
D chl meth e	mg/kg	**	**	**	**	**	0.05	0.05	**
Ethylbenze	mg/kg	**	**	**	**	**	0.05	0.05	**
H hl butad	mg/kg	**	**	**	**	**	0.05	0.05	**
m ta & p ra Xyl	mg/kg	**	**	**	**	**	0.05	0.05	**
M thyl p pybenz e	mg/kg	**	**	**	**	**	0.05	0.05	**
M hl rob nz e	mg/kg	**	**	**	**	**	0.05	0.05	**
Mo ochl roph i (m)	mg/kg	**	**	**	**	**	0.05	0.05	**
B tybenz ne	mg/kg	**	**	**	**	**	0.05	0.05	**
P pybenz e	mg/kg	**	**	**	**	**	0.05	0.05	**
rh Xyl	mg/kg	**	**	**	**	**	0.05	0.05	**
Styre	mg/kg	**	**	**	**	**	0.05	0.05	**
t r t B tybenze	mg/kg	**	**	**	**	**	0.05	0.05	**
T trachl robenze	mg/kg	**	**	**	**	**	0.05	0.05	**
T tra hl ro th (PCE)	mg/kg	**	**	**	**	**	0.05	0.05	**
T trahyd f ra	mg/kg	**	**	**	**	**	0.05	0.05	**
T lue	mg/kg	**	**	**	**	**	<0.05	0.05	**
tra 1,2-D chl roeth ne	mg/kg	**	**	**	**	**	0.05	0.05	**
tra 1,3-d hl rop rope	mg/kg	**	**	**	**	**	0.05	0.05	**
T chl the (TCE)	mg/kg	**	**	**	**	**	<0.05	0.05	**
T chl rof ro metha	mg/kg	**	**	**	**	**	0.05	0.05	**
T hl rom th ne	mg/kg	**	**	**	**	**	0.05	0.05	**
V yl Chl d	mg/kg	**	**	**	**	**	0.05	0.05	**

SVOC

1,2,4-T chl robe zene	mg/kg
1,4-D chl ob nze	mg/kg
2,3,4,6-T trachl ph l (s m)	mg/kg
2,4,5-T hl oroph noi	mg/kg
2,4,6-T chl oroph noi	mg/kg
2,4-D chl roph noi (m)	mg/kg
2,4-Dim thylphen l	mg/kg
2,4-D troloue e	mg/kg
2,6-D methylph ol	mg/kg
2,6-D troloue	mg/kg
2-Chl ro phthal ne	mg/kg
2-Chlorophe ol (m)	mg/kg
2-M thylphe l	mg/kg
2-Nitroph l	mg/kg
4-Chl ro-3-methylph nol	mg/kg
4-chl robenzylphe yl the	mg/kg
4-M thylph l	mg/kg
4-N troph noi	mg/kg
Azobenz ne	mg/kg
b (2-chl roethyl)eth	mg/kg

D t S mpl d	16/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
L b R f N	179295	179297	179298	179299	179300	179301	179302	179303	179304
C t m R f N	7	12	5	6	11	12	3	6	9
S mpl Typ	ES	ES	ES	D	ES	D	ES	ES	ES
T l Pit/B hol N	TP697	TP632	TP635A	TP635A	TP635A	TP635A	TP675	TP675	TP675
D pth (m)	1.30	2.40	1.70	1.90	2.10	2.30	0.20	0.40	1.40
H dsta d g t S rf ce (Y/N)									

b (2-chl ro thyoxy)m th	mg/kg
b (hlo p py)eth	mg/kg
Brom ph yiph yl the	mg/kg
H xa hloro-1 3 butad	mg/kg
H hi obe	mg/kg
H hi ro th	mg/kg
l ph ro	mg/kg
Ni b nz e	mg/kg
ros d-n-propyl 1 prop m ne	mg/kg
Pe tachl rob nz e	mg/kg
P tachl ph l	mg/kg

B (2-ethyl xyl)phth lat	mg/kg
B tylbe zylphth l l	mg/kg
D thylphth l t	mg/kg
D m thylphth l t	mg/kg
D -n-butylphth l t	mg/kg
D -octyl phth l t	mg/kg

T tal Phth lates	mg/kg
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ORGANO CHLORINE PESTICIDES

Ald	mg/kg
Beta HCH (B t BHC)	mg/kg
Chl d n	mg/kg
DDD	mg/kg
D ld n	mg/kg
D (t t l)	mg/kg
E d ulfa l	mg/kg
E d ulf ll	mg/kg
E do lf S lph t	mg/kg
E d	mg/kg
Endrn Endn Ald hyd	mg/kg
G mma HCH (L d)	mg/kg
H pla hl	mg/kg
H pt chl p d	mg/kg
H pla hl robenz ne	mg/kg
M th xychl	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azi ph m thyl	mg/kg
D m lon- m thyl	mg/kg
D azin	mg/kg
D chl rvo	mg/kg
D xath	mg/kg
D lf t	mg/kg
EPN Eth	mg/kg
M l th	mg/kg
M thyl P rath o	mg/kg
Parath	mg/kg
T rbufo	mg/kg

CARBAMATE (P tl d)

C rbaryf	mg/kg
C rbof ran	mg/kg
M eb	mg/kg

PHENOL UREA HERBICIDES

Chlorol iuro	mg/kg
D ro	mg/kg
l oproturo	mg/kg
Li ro	mg/kg

	16/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
D t S m pl d /									
L b R f N	179295	179297	179298	179299	179300	179301	179302	179303	179304
C t m R f N	7	12	5	6	11	12	3	6	9
S m pl Typ	ES	ES	ES	D	ES	D	ES	ES	ES
T P h / B h l N	TP697	TP632	TP635A	TP635A	TP635A	TP635A	TP675	TP675	TP675
D p th (m)	130	240	170	190	210	230	020	040	140
H r d t d g t S r f (Y/N)									

CHLOROPHENOXY ACIDIC HERBICIDES

245 T	mg/kg
24 D	mg/kg
Chl ro o-l lyl xya ti d	mg/kg
D camb	mg/kg
D hl rop p	mg/kg
M p p	mg/kg
S l ex	mg/kg

TRIAZINES

Alt zi	mg/kg
S m z	mg/kg

PCB

PCB C g 28	mg/kg
PCB C g ne 52	mg/kg
PCB C g 101	mg/kg
PCB C g 118	mg/kg
PCB C g 138	mg/kg
PCB C g ne 153	mg/kg
PCB Co g n 180	mg/kg

T tal PCB	mg/kg	2667.4	17.6
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ALCOHOLS

B t l	mg/kg
E th l	mg/kg
E thyl Glycol	mg/kg
M th l	mg/kg
Prop 1-ol	mg/kg
P p 2-ol	mg/kg

MISCELLANEOUS

C i f Val	C lg
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S iv	mg/kg
T in	mg/kg

12 D chl prop	mg/kg
13 D hl r propene	mg/kg
24 D troph l	mg/kg
Acet e	mg/kg
C rbaz l	mg/kg
Carbo d lph d	mg/kg
C osole (TPH by GCFID)	mg/kg
Cycl h	mg/kg
Cy l h a e	mg/kg
H xa hlo ocycl p t d e	mg/kg
Hydroq e	mg/kg
N Nitr d ph yl m	mg/kg
p-Chl roa l	mg/kg
P m th n/Cyp m th n	mg/kg
Pynd ne	mg/kg
Styre	mg/kg
S lph l	mg/kg
T l Extractabl M tt (H t)	mg/kg
Toxaphe	mg/kg
T b tyl Tin	mg/kg
T chlo metha	mg/kg
Vnyl Acetate	mg/kg

CONCRETE

Chlo de BS1377 Part 3 i cl d g preparation	mg/kg
HAC (R p d d t m natio f H gh Alum na Cem)	mg/kg
Mix Prop rto -C m l/Aggreg t R to-BS188	mg/kg

Org Matter	%	8.1	7.7
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Notes

- Benzo(b)fluo
- 2 Di-benzo(h):
- Insuffici nt sa
- 2 An lysis che

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	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
D t S mpl d	179307	179308	179309	179310	179311	179312	179330	179331	179332
L b R f N	15	3	6	9	13	16	3	6	9
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP675	TP674	TP674	TP674	TP674	TP674	TP633	TP633	TP633
T l Pit / B h l N	2 50	0 10	0 30	1 30	2 30	2 80	0 10	0 30	1 30
D pth (m)									
H d t a d g t S r f a (Y/N)									
pH						7.2		7.6	
/ L s l g t									
% M t									
/ St									
Asb t						0.001		0.001	
PHENOLICS									
B t y l P h e i s									
C t h l						0.5		0.5	
C i (s m)						0.5		0.5	
N p h t h l						0.5		0.5	
Ph i						0.5		0.5	
R i						0.5		0.5	
T methylp h n o l						0.5		0.5	
X y l e i & E t h y l p h e i						0.5		0.5	
T t a l Ph i						0.5		0.5	
US EPA PRIORITY PAH									
A p h t h e						0.5		0.5	
A p h t h y l n						0.5		2.4	
Anthracene						1.0		2.6	
B e z o (a) t h r a c e						3.4		7.9	
B n z o (a) p y r e						0.5		7.6	
B z o (b) f l r a t h									
B (k) f l r a t h						2.8		4.0	
B e (g) h p e r y l						3.0		0.5	
Chrys						3.3		9.6	
D b z o (h) j a t h									
I d o (1 2 3 - c d) p y r						1.5		2.0	
F l t h						5.6		13.5	
Fl						0.6		1.4	
N p h t h l						0.5		10.4	
Ph t h						0.5		1.1	
Py						7.0		10.6	
T t l US EPA 16 PAH						28.3		73.0	
OTHER PAH									
A t h t h n e									
B e () p y r									
C y l p e t i (c d) p y r									
GENERAL INORGANICS									
Compl Cya d									
Ea l y L b e r a t b l e C y a i d (f r e e)									
Thocya t									
Tot l Cya d						1		1	
S l p h d						5.3		2	
S l p h (f)						250		220	
T t l S l p h a t e						300		100	
Wat S l b l Sulph t									
W t S l b l Chl d e									
Ph p h t e									
E h a g b l Ammo m						19.4		5.6	
N t r a t									
N i t									

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D t S m p l d	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
L b R f N	179307	179308	179309	179310	179311	179312	179330	179331	179332	
C t m R f N	15	3	6	9	13	16	3	6	9	
S m p l T y p	ES	ES	ES	ES	ES	ES	ES	ES	ES	
T I P R / B h l N	TP675	TP674	TP674	TP674	TP674	TP674	TP633	TP633	TP633	
D p t h (m)	2.50	0.10	0.30	1.30	2.30	2.80	0.10	0.30	1.30	
H d t a d g t S r f (Y/N)										

HEAVY METALS/METALLOIDS

Al m m	mg/kg									
A t m o y	mg/kg									
A r s	mg/kg					28.2		88.8		
B m	mg/kg									
B r y l m	mg/kg									
B r o (W a t S o l u b l e)	mg/kg					7.0		1.2		
C d m m	mg/kg					0.9		1.5		
C h m m (T t a l)	mg/kg					51		33		
C h r o m m (H v a l t)	mg/kg					2		2		
C b f t	mg/kg									
C p p	mg/kg					134		315		
G e r m m	mg/kg									
L d	mg/kg					167		12300		
M r c r y	mg/kg					3.1		1.4		
M l y b d m	mg/kg									
N c k e l	mg/kg					46		76		
S i m	mg/kg					1.1		3.1		
V a d m	mg/kg									
Z	mg/kg					223		1264		

ESSENTIAL ELEMENTS

C l m	mg/kg									
i o n	mg/kg									
M g m	mg/kg									
M g	mg/kg									
P t m	mg/kg									
S o d m	mg/kg									

MONOAROMATICS

B e n z	mg/kg									
T l u e	mg/kg									
E t h y l b	mg/kg									
M t a & P r a X y l	mg/kg									
O r t h X y l	mg/kg									

T t a l X y l e n	mg/kg									
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M T B E	mg/kg									
1,2,4 T m t h y l b e n z e n e	mg/kg									
1,3,5-T m t h y l b e n	mg/kg									

TOTAL HYDROCARBONS

P t r o l e u m R n g O r g a n o s (C ₆ -C ₁₀)	mg/kg					5		5		
D e s i R a g O r g a n o s (C ₁₀ -C ₂₆)	mg/kg					5		40		
H y d r o c a r b o S c r (GC FID)	mg/kg					5		40		

VOCs

1,1,1 T r i c h l o r o e t h a n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	**	**	**
1,1,2,2 T r a c h l o r o e t h a n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	**	**	**
1,1,2 T r i c h l o r o e t h a n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	**	**	**
1,1,2 T r i c h l o r o e t h a n e	mg/kg	0.05	0.05	<0.05	0.05	0.05	0.05	**	**	**
1,1 D i c h l o r o e t h a n e	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05	**	**	**
1,1 D i c h l o r o e t h a n e	mg/kg	0.05	0.05	0.05	0.05	0.05	<0.05	**	**	**
1,2,3-T r i c h l o r o p r o p a n e	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05	**	**	**
1,2,3-T r i c h l o r o p r o p a n e	mg/kg	0.05	0.05	0.05	0.05	<0.05	0.05	**	**	**
1,2,4-T r i c h l o r o b e n z e n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	**	**	**
1,2,4-T r i c h l o r o b e n z e n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	**	**	**
1,2 D i b r o m o-3-Chl o r o p r o p a n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	**	**	**
1,2-D i c h l o r o b e n z e n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	**	**	**
1,2 D i c h l o r o e t h a n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	**	**	**
1,2-D i c h l o r o p r o p a n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	**	**	**
1,2-D i c h l o r o p r o p a n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	**	**	**
1,3,5-T m e t h y l b e n z e n e	mg/kg	0.05	0.05	0.05	0.05	<0.05	0.05	**	**	**
1,3-D i c h l o r o b e n z e n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	**	**	**

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	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
D t S mpl d	179307	179308	179309	179310	179311	179312	179330	179331	179332	
L b R f N	15	3	6	9	13	16	3	6	9	
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES	
S mpl Typ	TP675	TP6 4	TP674	TP674	TP674	TP674	TP633	TP633	TP633	
T l P t / B reh l N	2 50	0 10	0 30	1 30	2 30	2 80	0 10	0 30	1 30	
D pth (m)										
H d tand gat S rf (Y/N)										
1 3 D chl rop op ne	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
1 4-D chl rob e	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
1-Chl t l	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
1 M thylpropylbe e	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
2 2 D chl rop rop	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
2-Chl rot l	mg/kg	0 05	0 05	0 05	<0 05	0 05	0 05	**	**	**
B nz	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
B m b nze	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
B m chl rom th	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
Brom d hl rom th	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
B m f m	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
Carb T tra hl d (PCM)	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
Chl ob ze (m)	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
Chl d brom m th e	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
Chloroeth	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
Chl rol m	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
cis 1 2 D hl roethyle	mg/kg	0 05	0 05	0 05	0 05	0 05	<0 05	**	**	**
c 1 3 D chloroprop	m /kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
Dbromo hlorom tha	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
Db moeth	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
Dbrom m tha	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
D hl robenze	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
D hlorom thane	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
Ethylb nze	mg/kg	0 05	0 05	0 05	<0 05	0 05	0 05	**	**	**
H xachl robutad	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
m l & p ra Xyl	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
M thyl propylbe ze	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
M chlorob ze e	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
M hl roph ol (m)	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
Butylb nzene	mg/kg	0 05	0 05	0 05	<0 05	0 05	0 05	**	**	**
Propylbe z	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
rth Xyl	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
Styre	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
l r t B tybenz	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
T tra hl rob nze	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
T trachl ro th (PCE)	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
T trahydrof ra	mg/kg	0 05	0 05	0 05	0 05	<0 05	<0 05	**	**	**
T l	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
trans 1 2-D chl roethe e	mg/kg	0 05	0 05	0 05	<0 05	0 05	0 05	**	**	**
tra 1 3-d chlorop p	mg/kg	<0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
T hl roeth ne (TCE)	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
T chlrofl m th ne	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
Trchl rom thane	mg/kg	0 05	0 05	<0 05	0 05	0 05	0 05	**	**	**
V yl Chl d	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	**	**	**
SVOC										
1 2 4 T chl be	mg/kg									
1 4-D chl rob z	mg/kg									
2 3 4 6-T trachl ph l (m)	mg/kg									
2 4 5-T chl rophenol	mg/kg									
2 4 6 T chloroph nol	mg/kg									
2 4-D chl roph nol (s m)	mg/kg									
2 4 D m thylph ol	mg/kg									
2 4-D t r t l	mg/kg									
2 6-D m thylphe l	mg/kg									
2 6-D trolol e	mg/kg									
2 Chloro phthal e	mg/kg									
2 Chlo ph l (m)	mg/kg									
2 M thylph nol	mg/kg									
2 N troph ol	mg/kg									
4-Chl ro-3-m thylph ol	mg/kg									
4-chlorob nzyph nylethe	mg/kg									
4 M thylphe ol	mg/kg									
4-N trophe l	mg/kg									
Azobenzene	mg/kg									
b (2-chl roethyl)eth	mg/kg									

	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
D t S mpl d	179307	179308	179309	179310	179311	79312	179330	179331	179332
L b R f N	15	3	6	9	13	16	3	6	9
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP675	TP674	TP674	TP674	TP674	TP674	TP633	TP633	TP633
T I P t / B h i N	2.50	0.10	0.30	1.30	2.30	2.80	0.10	0.30	1.30
D pth (m)									
H d ta d g t S rfa (Y/N)									

b (2-chl thyoxy)m th	mg/kg
bis(hl propyl)eth	mg/kg
Brom ph nyph yl th	mg/kg
H chl ro 13 butad	mg/kg
H achi rob ze	mg/kg
H hl th	mg/kg
I ph ro	mg/kg
Ntrob nz n	mg/kg
tr od p pyl 1 prop m	mg/kg
P t hl b	mg/kg
P t hl roph l	mg/kg

B s(2-ethyl xyl)phth i t	mg/kg
B tyb nzyolphthal t	mg/kg
D thyolphthalat	mg/kg
Dim thyolphth l t	mg/kg
D n-butylphth lat	mg/kg
D n-octyl phth i t	mg/kg

T tal Phth i t	mg/kg
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ORGANO CHLORINE PESTICIDES

Ald	mg/kg
B t HCH (B ta BHC)	mg/kg
Chl rd	mg/kg
DDD	mg/kg
D ld	mg/kg
D (t t l)	mg/kg
E d ff l	mg/kg
E d ff ll	mg/kg
E d ff Sulph l	mg/kg
E d	mg/kg
E d E d Ald hyd	mg/kg
G mm HCH (L d)	mg/kg
H pt hl	mg/kg
H pt hl p d	mg/kg
H pt chl be z	mg/kg
M th xy hl	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azi ph m thyl	mg/kg
D met s m thyl	mg/kg
D zi	mg/kg
D hl rvo	mg/kg
D th	mg/kg
D lf t	mg/kg
EPN Eth o	mg/kg
M lath o	mg/kg
Methyl P rath	mg/kg
P rath n	mg/kg
T rbuf s	mg/kg

CARBAMATE (P stu ld)

C rbaryl	mg/kg
C rbof ra	mg/kg
M b	mg/kg

PHENOL UREA HERBICIDES

Chl rolol	mg/kg
Diuro	mg/kg
I proturo	mg/kg
L ro	mg/kg

	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
D te S mpl d										
Lab R f N	179307	179308	179309	179310	179311	179312	179330	179331	179332	179332
C t m R f N	15	3	6	9	13	16	3	6	9	9
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
T l PK / B h l N	TP675	TP674	TP674	TP674	TP674	TP674	TP674	TP633	TP633	TP633
D pth (m)	2.50	0.10	0.30	1.30	2.30	2.80	0.10	0.30	1.30	1.30
H rd t d g t S rf (Y/N)										

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chl o-o-t lyl xya eti cid	mg/kg
D camb	mg/kg
D hi p p	mg/kg
M prop	mg/kg
Si	mg/kg

TRIAZINES

Altrzi	mg/kg
S ma	mg/kg

PCB

PCB C g e 28	mg/kg
PCB C g 52	mg/kg
PCB Co g 101	mg/kg
PCB Co g 118	mg/kg
PCB C g 138	mg/kg
PCB C g 153	mg/kg
PCB C g 180	mg/kg

T tal PCB	mg/kg
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ALCOHOLS

B t l	mg/kg
Eth l	mg/kg
Ethyl Gly l	mg/kg
M th l	mg/kg
Prop 1-ol	mg/kg
Prop 2-ol	mg/kg

MISCELLANEOUS

Cal fc V l	Cal/g
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Si	mg/kg
T	mg/kg

1,2-D hi p p	mg/kg
1,3-D chl rop pe	mg/kg
2,4-D troph l	mg/kg
Acet	mg/kg
C rb ole	mg/kg
C rbo dis lph d	mg/kg
C s t (TPH by GCFID)	mg/kg
Cycl he e	mg/kg
Cy l h n	mg/kg
H chl rocycl pe t d	mg/kg
Hydroq e	mg/kg
N Nitr sod ph yl min	mg/kg
p-Chl ro l	mg/kg
Prem th n/Cyperm th	mg/kg
Pynd e	mg/kg
Styre	mg/kg
Sulphol e	mg/kg
Tol ene Extractabl M tt (H lo c)	mg/kg
T xaph e	mg/kg
T b tyl T	mg/kg
T chloromethane	mg/kg
V yl Acetat	mg/kg

CONCRETE

Chl de BS1377 P rt 3 cl d ng pr p rali	mg/kg
HAC (R p d d term tu f H gh Al m na Cem	mg/kg
M Proport C me t/Aggreg te R lo-BS188	mg/kg

Org c Matt

Notes

- Benzo(b)fl
- ²D-benzo(h)
- l ufficie t sa
- ** Analys che

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	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	16/09/03	16/09/03	16/09/03
D t S mpl d	179 33	179334	179335	179336	179337	179339	179345	179346	179347
L b R f N	13	16	3	6	9	15	3	6	9
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP633	TP633	TP676	TP676	TP676	TP676	TP655A	TP655A	TP655A
T i P t / B h i N	2 30	2 60	0 20	0 50	1 90	2 30	0 50	1 20	2 30
D pth (m)									
H d t d g t S r f (Y/N)									
pH				7.8				11.5	
% L i g t o	/								
/ M t e	/								
/ St	/								
A b e t				0.001				0.001	
PHENOLICS									
Butyl Phe l									
C l h i				0.5				0.5	
C l (m)				0.5				0.5	
N phth is				0.5				0.5	
Ph l				0.5				0.5	
R c i l				0.5				0.5	
T m thylph l				0.5				0.5	
Xyl l & Ethylph l				0.5				0.5	
T tal Ph l				0.5				0.5	
US EPA PRIORITY PAH									
Acen phth				0.9				0.5	
A phthylie				0.5				0.5	
A thrac				0.5				0.5	
B nzo()A thracen				3.1				0.5	
B nzo()pyr				3.1				0.5	
B nzo(b)fl ra th									
B (k)fl ra th ne				4.3				0.5	
Be (g h)peryl				0.5				0.5	
Chrys e				4.6				<0.5	
D benzo(h) a thra									
l d o(1 2 3-cd)pyre				0.5				0.5	
Fl ra th				5.1				0.5	
Fl o				0.8				0.5	
N phth ie				4.7				0.5	
Ph thre				4.1				0.5	
Pyre				2.8				0.5	
T tal US EPA 16 PAH				33.5				0.5	
OTHER PAH									
Anith th ne									
B zo()py n									
Cycl pe ta(cd)pyre									
GENERAL INORGANICS									
Comple Cy d									
E ily Liberatabl Cy de(f)									
Th ocya t									
T tal Cya d				1				1	
S iph d				2.2				2	
S lphur(f)				140				74500	
T tal S lph t				200				100	
W te S l ble S lphat									
Wate Solubl Chl de									
Ph phat									
Excha geabl Ammo m				5				7.1	
Nitrate									
Nitrit									

	15/09/0	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	16/09/03	16/09/03	16/09/03
D t S mpl d										
L b R f N	179333	179334	179335	179336	179337	179339	179345	179346	179347	179347
C st m R f N	13	16	3	6	9	15	3	6	9	9
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
T i Pit / B reh i N	TP633	TP633	TP676	TP676	TP676	TP676	TP655A	TP655A	TP655A	TP655A
D pth (m)	2.30	2.60	0.20	0.50	1.90	2.30	0.50	1.20	2.30	2.30
H rd ta d g t S ri (Y/N)										

HEAVY METALS/METALLOIDS

	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Al m m									
A tm ny				31.7				5	
Ar s									
B ri m									
B ryl m									
B (W t S i bl)				0.7				0.5	
C dm m				2.7				0.5	
Chrom m (T tal)				31				3	
Chrom m (H l t)									
Cob li									
Coppe				1329				29	
G rma m									
Le d				575				17	
M rc ry				3.0				0.5	
M lybd n m									
N ck l				89				9	
S i m				2.0				0.5	
V d m									
Z c				761				47	

ESSENTIAL ELEMENTS

	mg/kg
Cal m	
Iro	
M gne m	
M ga e	
Pota si m	
Sod m	

MONOAROMATICS

	mg/kg	mg/kg	mg/kg	mg/kg
B ne				0.2
T i				0.2
Ethylb nze				0.2
M ta & P ra Xyl				0.2
Orth Xyl ne				0.2

T tal Xyl s

	mg/kg
MTBE	
1,2,4-T m thylbenz	
1,3,5-T methylb nzene	

TOTAL HYDROCARBONS

	mg/kg	mg/kg	mg/kg
Petrol m Ra ge Org cs (C ₆ -C ₁₀)		5	
Dies l Ra ge Orga cs (C ₈ -C ₂₆)		5	
Hydrocarbo Scree (GC-FID)		5	

VOC

	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1,1,1-T hloroetha	**	**	0.05	0.05	0.05	0.05	**	**	0.05
1,1,2,2 Tetra hloroethane	**	**	0.05	<0.05	0.05	0.05	**	**	0.05
1,1,2-T chl ro-1,2,2 trfl roetha	**	**	0.05	<0.05	0.05	0.05	**	**	0.05
1,1,2 Trichl roetha	**	**	0.05	0.05	0.05	0.05	**	**	0.05
1,1-Dchl roeth ne	**	**	<0.05	0.05	<0.05	0.05	**	**	0.05
1,1 Dchloroeth ne	**	**	0.05	0.05	0.05	0.05	**	**	0.05
1,2,3-T chl ropropa	**	**	0.05	0.05	0.05	0.05	**	**	0.05
1,2,3 T methylbenze	**	**	0.05	0.05	0.05	0.05	**	**	<0.05
1,2,4-T chlorobenze e	**	**	<0.05	0.05	0.05	<0.05	**	**	<0.05
1,2,4-T methylbenz ne	**	**	0.05	0.05	0.05	0.05	**	**	0.05
1,2 D bromo-3-Chlo oprop e	**	**	0.05	0.05	0.05	<0.05	**	**	0.05
1,2 D chl rob nze	**	**	0.05	0.05	<0.05	<0.05	**	**	<0.05
1,2 D chloroethan	**	**	0.05	0.05	<0.05	0.05	**	**	0.05
1,2-D chl opropa	**	**	0.05	0.05	0.05	0.05	**	**	0.05
1,2 D chloropropene	**	**	0.05	0.05	0.05	<0.05	**	**	<0.05
1,3,5-T m thylbe zene	**	**	<0.05	0.05	0.05	<0.05	**	**	0.05
1,3-D chl be ze	**	**	0.05	0.05	0.05	<0.05	**	**	0.05

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	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	16/09/03	16/09/03	16/09/03
D t S mpl d	179333	179334	179335	179336	179337	179339	179345	179346	179347
L b R f N	13	16	3	6	9	15	3	6	9
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP633	TP633	TP676	TP676	TP676	TP676	TP655A	TP655A	TP655A
T l Pk / B h l N	2 30	2 60	0 20	0 50	1 90	2 30	0 50	1 20	2 30
D pth (m)									
H rd ta d g t S rf (Y/N)									
1 3 D chl roprop	mg/kg	**	0 05	0 05	0 05	0 05	**		0 05
1 4-D chl rob z	mg/kg	**	0 05	0 05	0 05	0 05	**		0 05
1 Chl rol l	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
1 M thylpropylbe n	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
2 2 D hl ropropa e	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
2 Chl rol l e	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
B nz	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
Brom b z	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
B m hl rom th e	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
Brom d hl m th	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
B m f m	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
C rb T trachl d (PCM)	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
Chl rob nza (m)	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
Chl d brom m tha	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
Chl ro tha	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
Chl rof m	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
1 2 D chloro thyl e	mg/kg	**	<0 05	0 05	0 05	0 05	**	**	0 05
1 3-D hl rop p e	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
D brom chl rom th	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
D brom th	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
D b mom tha	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
D chl rob nz	mg/kg	**	<0 05	0 05	0 05	0 05	**	**	0 05
D hl rom th	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
Ethylb z ne	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
H xachl rob tad e	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
m la & para Xyl	mg/kg	**	<0 05	0 05	0 05	0 05	**	**	0 05
Methyl propylbenz	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
M ochl rob nz	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
M chl roph l (m)	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
B tyfb nz	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
Propylbenz	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
rth Xyl	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
Styr	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
l n Butylbenz ne	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
Tetra hl rob nz ne	mg/kg	**	0 05	0 05	0 05	0 05	**	**	<0 05
T trachl oeth ne (PCE)	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
T trahyd f ra	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
T l ne	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
tra s 1 2 D hl roeth	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
tra 1 3-d chl roprope	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
T chl roeth (TCE)	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
T chl rofl rom tha	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
T chl meth	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
V yl Chl d	mg/kg	**	0 05	0 05	0 05	0 05	**	**	0 05
SVOC s									
1 2 4 T chl robe z	mg/kg								
1 4-D chl rob nz ne	mg/kg								
2 3 4 6 Tetra hl ph ol (um)	mg/kg								
2 4 5 T chl roph l	mg/kg								
2 4 6-T chl rophenol	mg/kg								
2 4-D chl ophe l (s m)	mg/kg								
2 4-D m thylph l	mg/kg								
2 4-D trol ene	mg/kg								
2 6-D methylph ol	mg/kg								
2 6-D itrol ue e	mg/kg								
2-Chlo naphthal ne	mg/kg								
2-Chl roph l (sum)	mg/kg								
2-Methylphe ol	mg/kg								
2 Nitrope ol	mg/kg								
4-Chl ro-3 m thylphenol	mg/kg								
4-chlorobenzylph yl the	mg/kg								
4 Methylphen l	mg/kg								
4 Nitrophen ol	mg/kg								
Azobenze	mg/kg								
bi (2-chl ro thyl)ethe	mg/kg								

	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	16/09/03	16/09/03	16/09/03
D t S mpl d	179333	179334	179335	179336	179337	179339	179345	179346	179347
L b R f N	13	16	3	6	9	15	3	6	9
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP633	TP633	TP676	TP676	TP676	TP676	TP655A	TP655A	TP655A
T i P r t / B h l N	2.30	2.60	0.20	0.50	1.90	2.30	0.50	1.20	2.30
D pth (m)									
H r d t d i g t S r f a (Y/N)									

b (2-hl oethy xy)m th	mg/kg
b (chlo s popyl)ethe	mg/kg
B m ph nyph yl th	mg/kg
H ilo o-1.3 but d	mg/kg
H hl ob	mg/kg
H hl ro th	mg/kg
I ph ro e	mg/kg
N tr benz	mg/kg
l d p pyl 1 p p m	mg/kg
P t chl benz	mg/kg
P t hl phe l	mg/kg

B (2-ethyln xy)phth l t	mg/kg
Butylb zylphth l t	mg/kg
D thylphth l t	mg/kg
D m thylphth l t	mg/kg
D butylphth l t	mg/kg
D -ocyl phth l t	mg/kg

T tal Phth l t	mg/kg
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ORGANO CHLORINE PESTICIDES

Ald	mg/kg
B ta HCH (Bet BHC)	mg/kg
Chl d	mg/kg
DDD	mg/kg
D ld	mg/kg
D (l tal)	mg/kg
E d suff l	mg/kg
E d lf ll	mg/kg
E d lf S lph te	mg/kg
E d	mg/kg
E d E d Ald hyd	mg/kg
G mma HCH (L d)	mg/kg
H pt hl	mg/kg
H pt hl poxd	mg/kg
H pt chl obenzene	mg/kg
M th xychl	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Az ph m thyl	mg/kg
D m t r -m thyl	mg/kg
D zn	mg/kg
D hl rvo	mg/kg
D xath	mg/kg
D lf to	mg/kg
EPN Eth	mg/kg
M l th on	mg/kg
M thyl P th	mg/kg
P rath	mg/kg
T rbuf	mg/kg

CARBAMATE (P t r id)

C rb nyl	mg/kg
C rbof ra	mg/kg
M b	mg/kg

PHENOL UREA HERBICIDES

Chlorol i ro	mg/kg
D	mg/kg
Isop oturo	mg/kg
L	mg/kg

	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03	16/09/03	16/09/03	16/09/03
D t S mpl d									
L b R f N	179333	179334	179335	179336	179337	179339	179345	179346	179347
C t m R f N	13	16	3	6	9	15	3	6	9
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES
T IPit /B h l No	TP633	TP633	TP676	TP676	TP676	TP676	TP655A	TP655A	TP655A
D pth (m)	2 30	2 60	0 20	0 50	1 90	2 30	0 50	1 20	2 30
H d ta d g t S rfa (Y/N)									

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5 T	mg/kg
2 4 D	mg/kg
Chl ð-c-l lylo ya t a d	mg/kg
D camb	mg/kg
D hi p p	mg/kg
M p p	mg/kg
S i	mg/kg

TRIAZINES

Alt n z i	mg/kg
S m z	mg/kg

PCB

PCB C g 28	mg/kg
PCB Co g 52	mg/kg
PCB C g 101	mg/kg
PCB C g 118	mg/kg
PCB C g 138	mg/kg
PCB Co g 153	mg/kg
PCB Co ge 180	mg/kg

Tot l PCB	mg/kg
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ALCOHOLS

Buta l	mg/kg
Eth l /	mg/kg
Ethyl Gly l	mg/kg
M th l	mg/kg
P p n-1-ol	mg/kg
P pan-2-ol	mg/kg

MISCELLANEOUS

C l n f c V l	C l/g
---------------	-------

S l	mg/kg
T	mg/kg

1 2 D hi p op	mg/kg
1 3 D hi rop pe	mg/kg
2 4 D t ph nol	mg/kg
Ac t e	mg/kg
C rb z ol	mg/kg
C rb d lph d	mg/kg
C eo t (TPH by GCFID)	mg/kg
Cycl h xa	mg/kg
Cycloh ano	mg/kg
He chl rocycl pe tade	mg/kg
Hydroq no	mg/kg
N N trosod ph yl m	mg/kg
p Chl roa il e	mg/kg
Prem th n/Cypermeth	mg/kg
Pynd ne	mg/kg
Styr	mg/kg
S lph la	mg/kg
T l e Extractabl M tt (H t)	mg/kg
T aph	mg/kg
T butyl T	mg/kg
T hi m th	mg/kg
V nyl Acetal	mg/kg

CONCRETE

Chlo d BS1377 Part3 cl d g prep ratio	mg/kg
HAC (Rap d d i m atio of H gh Al m Cem	mg/kg
M Proporti Cem 1/Aggreg te R tio-BS188	mg/kg

O ganu M tt	%
-------------	---

0 3

N l
B nzo(b)fl o
*2 D benzo(a h)
l uff cient sa
** Anatsi che

Norwest Holst Soil Engineering Ltd
R68192 Durham Rd, Newport

	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	R68192
D t S mpl d	179348	179349	179350	179351	179352	179353	179354	AQC
L b R f N	3	6	9	3	6	9	13	Lab Std
C t m R f N	ES	ES	ES	ES	ES	ES	ES	
S mpl Typ	TP656B	TP656B	TP656B	TP615	TP615	TP615	TP615	
T l Pit / B reh i N	0.85	1.90	2.10	0.20	0.50	1.50	2.30	
D pth (m)								
H d ta d g t S rf (Y/N)								
pH		7.4			7.6			7.8
L nlg t n	/							
/ M tu	%							
% St s	/							
Asbesto	/	0.001			0.001			
PHENOLICS								
Butyl Ph l	mg/kg				0.5			
C t ch l	mg/kg	0.5			0.5			
C l (m)	mg/kg	0.5			0.5			
N phth i	mg/kg	0.5			0.5			
Ph l	mg/kg	0.5			0.5			
R l	mg/kg	0.5			0.5			
T m thylph l	mg/kg	0.5			0.5			
Xyl l & Ethylphe l	mg/kg	0.5			0.5			
T tal Ph l	mg/kg	0.5			0.5			
US EPA PRIORITY PAH								
Ace phth	mg/kg	0.5			0.5			
A phthylen	mg/kg	0.5			0.5			
Anthra ne	mg/kg	0.5			0.5			
B z (a)A thrace	mg/kg	<0.5			0.5			
B nzo()pyre	mg/kg	0.5			0.5			
B nzo(b)fl ra th	mg/kg				0.5			
B (k)fl ra th	mg/kg	0.5			0.5			
B (g h)p ryl	mg/kg	0.5			0.5			
Chrys	mg/kg	0.5			0.5			
D benzo(h)ja thra	mg/kg				0.5			
I d o(1 2 3 cd)pyr -2	mg/kg	0.5			0.5			
Fluora th ne	mg/kg	0.5			0.5			
Fl	mg/kg	0.5			0.5			
N phth i	mg/kg	0.5			0.5			
Ph thre	mg/kg	0.5			0.5			
Pyre	mg/kg	0.5			<0.5			
T tal US EPA 16 PAH	mg/kg	0.5			0.5			
OTHER PAH								
Anth thre	mg/kg							
B nz ()pyr	mg/kg							
Cy i pe ta(cd)pyre	mg/kg							
GENERAL INORGANICS								
C mpi Cya de	mg/kg							
E ly Lib retable Cya d (fre)	mg/kg							
Thocyanate	mg/kg							
T tal Cy d	mg/kg	1			1			2.0
S lph d	mg/kg	6.4			2			2
S lph (fre)	mg/kg	2250			60			550
Total S lph l	mg/kg	300			1600			6700
W t S l bl S lph te	mg/kg							
W t Sol bl Chl d	mg/kg							
Ph ph t	mg/kg							
Exch geabl Amm i m	mg/kg	16.9			5			142.7
N trate	mg/kg							
Nitrit	mg/kg							

Norwest Holst Soil Engineering Ltd
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	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	R68192
D t S mpl d	179348	179349	179350	179351	179352	179353	179354		AQC
L b R f N	3	6	9	3	6	9	13		Lab Std
C t m R f N	ES	ES	ES	ES	ES	ES	ES		
S mpl Typ	TP656B	TP656B	TP656B	TP615	TP615	TP615	TP615		
T IPt/B h l N	0.85	1.90	2.10	0.20	0.50	1.50	2.30		
D pth (m)									
H d t a d g t S r f (Y/N)									

HEAVY METALS/METALLOIDS

Al m m	mg/kg								
A tm y	mg/kg								
A	mg/kg	72.4				40.4			19.8
Ba m	mg/kg								
Beryl m	mg/kg								
B (W t S i b l)	mg/kg	1.5				1.2			2.0
C dm m	mg/kg	3.1				2.3			2.0
Chrom m(T t l)	mg/kg	130				115			244
Chrom m(H val nt)	mg/kg								10
C b l t	mg/kg								
C pp	mg/kg	722				287			76
G m m	mg/kg								
L d	mg/kg	297				956			156
M ry	mg/kg	122.0				3.1			1.6
M lybd m	mg/kg								
N k l	mg/kg	513				97			36
S i m	mg/kg	0.9				3.5			1.2
V d m	mg/kg								
Z	mg/kg	967				1041			130

ESSENTIAL ELEMENTS

C l um	mg/kg								
I	mg/kg								
M g i m	mg/kg								
Ma g ese	mg/kg								
P la m	mg/kg								
S d m	mg/kg								

MONOAROMATICS

B	mg/kg								
T l	mg/kg								
Ethylbe e	mg/kg								
M ta & P ra Xyl	mg/kg								
Orth Xyl	mg/kg								

T tal Xyl	mg/kg								
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MTBE	mg/kg								
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1 2 4-T m thylb nz ne	mg/kg								
1 3 5 T m thylb nz	mg/kg								

TOTAL HYDROCARBONS

P trol m R g Org cs (C ₆ -C)	mg/kg					5			
Die l R g Org cs (C C ₂₆)	mg/kg					28			
Hydrocarbo S re (GC-FID)	mg/kg					28			

VOC

1 1 1 T chl th	mg/kg	**	<0.05	0.05	**	0.05	0.05	0.05	
1 1 2 2 Tetrachl ro th e	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	
1 1 2 T hlo o-1 2 2 triff roetha	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	
1 1 2 Trichl roethane	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	
1 1 D chl roetha	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	
1 1 D chl roeth e	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	
1 2 3-T hloroprop	mg/kg	**	0.05	<0.05	**	0.05	0.05	0.05	
1 2 3 T m thylbenzene	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	
1 2 4-T chl robenz ne	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	
1 2 4-T methylb nze	mg/kg	**	0.05	0.05	**	0.05	<0.05	0.05	
1 2 D bromo-3-Chl ropropa	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	
1 2 D chlorobenzene	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	
1 2 Dichloroeth ne	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	
1 2 D chl ropropane	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	
1 2 D chloroprope	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	
1 3 5-T m thylbenzene	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	
1 3-D chl robe ne	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	

D t Samp l	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	R68192
L b R f N	179348	179349	179350	179351	179352	179353	179354	AQC
C t m R f N	3	6	9	3	6	9	13	L b Std
S mp l Typ	ES	ES	ES	ES	ES	ES	ES	
T l P t / B h l N	TP656B	TP656B	TP656B	TP615	TP615	TP615	TP615	
D pth (m)	0.85	1.90	2.10	0.20	0.50	1.50	2.30	
H d ta d g t S rface (Y/N)								

b (2-hydroxy)methe	mg/kg
b (hydroxy)eth	mg/kg
B-methylphth	mg/kg
H-hydroxy-benz	mg/kg
H-hydroxy-benz	mg/kg
H-hydroxy	mg/kg
I-ph	mg/kg
N-tri-benz	mg/kg
n-trochlorophenyl	mg/kg
P-trochlorophen	mg/kg
P-trochlorophenyl	mg/kg

B-(2-ethylxy)phthyl	mg/kg
Butylbenzylphthyl	mg/kg
D-thylphthyl	mg/kg
D-methylphthyl	mg/kg
D-benzylphthyl	mg/kg
D-octylphthyl	mg/kg

T-tal Phthyl	mg/kg
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ORGANO CHLORINE PESTICIDES

Aldrin	mg/kg
Beta-HCH (B-lachlor)	mg/kg
Chlordane	mg/kg
DDD	mg/kg
Dieldrin	mg/kg
Dieldrin (I)	mg/kg
Endrin	mg/kg
Endrin II	mg/kg
Endrin Siphat	mg/kg
Endrin	mg/kg
Endrin Aldrin hyd	mg/kg
Gamma HCH (Lindane)	mg/kg
Heptachlor	mg/kg
Heptachlor epoxide	mg/kg
Heptachlor benzene	mg/kg
Methoxychlor	mg/kg
pp-DDE	mg/kg
pp-DDT	mg/kg
pp-TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	mg/kg
Dimethoate-methyl	mg/kg
Diazinon	mg/kg
Dichlorvos	mg/kg
Diazinon	mg/kg
Diazinon	mg/kg
Disulfoton	mg/kg
EPN Ethion	mg/kg
Methylphosphorothioate	mg/kg
Phosphorothioate	mg/kg
Terbufos	mg/kg

CARBAMATE (Pesticides)

Carbaryl	mg/kg
Carbofenthoate	mg/kg
Methidathion	mg/kg

PHENOL UREA HERBICIDES

Chlorpyrifos	mg/kg
Diuron	mg/kg
Isoproturon	mg/kg
Lindane	mg/kg

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D t S mpl d	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	16/09/03	R68192
L b r f N	179348	179349	179350	179351	179352	179353	179354		AQC
C t m R f N	3	6	9	3	6	9	13		Lab Std
S mpl Typ	ES	ES	ES	ES	ES	ES	ES		
T l PIt/B h l N	TP656B	TP656B	TP656B	TP615	TP615	TP615	TP615		
D pth (m)	0.85	1.90	2.10	0.20	0.50	1.50	2.30		
H d t a d g t S r f (Y/N)									

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chl o-o-t lyl xy t c d	mg/kg
D camb	mg/kg
Di hl roprop	mg/kg
M coprop	mg/kg
Si	mg/kg

TRIAZINES

Altrzi	mg/kg
Sm z	mg/kg

PCB

PCB Co g 28	mg/kg
PCB C g 52	mg/kg
PCB C g 101	mg/kg
PCB C g 118	mg/kg
PCB C gen 138	mg/kg
PCB C g 153	mg/kg
PCB Co g 180	mg/kg

T tal PCB	mg/kg	0.8	1.4
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ALCOHOLS

B t l	mg/kg
Eth l	mg/kg
Ethyl ne Gly l	mg/kg
M th l	mg/kg
Prop 1-ol	mg/kg
P p 2-ol	mg/kg

MISCELLANEOUS

Cal f V l	Cal/g
Slv	mg/kg
T n	mg/kg

1,2-Dchl roprop e	mg/kg
1,3-Dchl rop p	mg/kg
2,4-D itroph l	mg/kg
A t	mg/kg
C rb zole	mg/kg
C rb d lph d	mg/kg
C eo t (TPH by GCFID)	mg/kg
Cycl h xane	mg/kg
Cycl h a	mg/kg
H chlorocycl p tad e	mg/kg
Hd oq ne	mg/kg
N N tro odph yl m	mg/kg
p-Chl ro l	mg/kg
P m th n/Cyperm th	mg/kg
P ynd	mg/kg
Styr	mg/kg
S lph l e	mg/kg
Tol Extractable M tt (H t)	mg/kg
T xaphene	mg/kg
T butyl T	mg/kg
T hlorometha	mg/kg
V yl Acetate	mg/kg

CONCRETE

Chl d BS1377 P rt 3 nclud g preparat	mg/kg
HAC (R p d d term to f High Al m na Cem	mg/kg
Mi Proport Cem l/Aggreg t R to-BS188	mg/kg

Org M tte	%	6.3	8.6
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N tes
B nzo(b)fl or
2-Di-benzo(h)
Insuffi c t sa
** Analysis che

Norwest Holst Soil Engineering Ltd
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		15/09/03	15/09/03	16/09/03	R68192
D t S mpl d		179268	179305	179344	AQC
L b R f N		18	11	10	L b Std
C st m R f N		WS	WS	WS	
S mpl Type		TP630	TP675	TP656A	
T l P t / B h i N					
pH	V l e	6.8	6.8	7.1	8.3
TOC	mg/l				
S p ded S l ds	mg/l				
El tncal C d (µS/cm)	µS/cm				
PHENOLICS					
Butyl Phe ls	g/l				
C tech l	ug/l			<0.5	
C es ls (m)	g/l			<0.5	
N phthols	ug/l			0.5	
Ph l	g/l			0.5	
Reso cinol	ug/l			0.5	
T m thylph nol	ug/l			0.5	
Xyle ls & Ethylphenols	g/l			0.5	
Tot l Ph l	g/l			0.5	291.0
US EPA PRIORITY PAH					
Ace phth	ug/l				
Acenaphthyl	ug/l				
Anthrace	ug/l				
Benzo()Anthrace	g/l				
B nzo()pyr	ug/l				
Benz (b)l nthe e	ug/l				
Benzo(k)fluo a th ne	ug/l				
B nzo(g h)peryl	ug/l				
Chrys	ug/l				
D b nzo(h) thra en	ug/l				
l d no(1 2 3-cd)pyre	ug/l				
Fluora the e	ug/l				
Flu	ug/l				
N phth lene	g/l				
Ph th ene	g/l				
Pyr	ug/l				
Total US EPA 16 PAH	ug/l				
OTHER PAH					
A th th e	ug/l				
B nzo()pyre	ug/l				
Cycl p ta(cd)pyr	ug/l				
GENERAL INORGANICS					
C mplex Cyan de	ug/l				
Eas ly Lib ratabl Cy d (free)	g/l				
Th ocyanat	ug/l				
Total Cy d	ug/l	5	5	5	1970
S lph de	ug/l	100	100	100	735
S lph (f)	ug/l				
S lphat	ug/l			78888	99544
Chlo de	ug/l				
Pho phat	ug/l				
Exchangeabl Ammo um	ug/l	322	768	1079	100750
N ttrate	ug/l				
N trite	ug/l				

Date Sampled	15/09/03	15/09/03	16/09/03	R68192
Lab Ref N	179268	179305	179344	AQC
Client Ref N	18	11	10	L b Std
Sample Type	WS	WS	WS	
TPH/BHLN	TP630	TP675	TP656A	

HEAVY METALS/METALLOIDS

Element	Unit	15/09/03	15/09/03	16/09/03
Aluminium	g/l			
Arsenic	ug/l			
Bismuth	ug/l			
Boron	ug/l			
Chromium (Diluted)	ug/l			
Chromium (Hexavalent)	ug/l			
Cobalt	ug/l			
Copper	ug/l			
Germanium	ug/l			
Lithium	ug/l			
Magnesium	ug/l			
Molybdenum	ug/l			
Nickel	ug/l			
Silicon	ug/l			
Vanadium	ug/l			
Zinc	ug/l			

ESSENTIAL ELEMENTS

Element	Unit
Calcium	ug/l
Iron	ug/l
Magnesium	ug/l
Manganese	ug/l
Potassium	ug/l
Sodium	ug/l

MONOAROMATICS

Compound	Unit
Benzene	ug/l
Toluene	ug/l
Ethylbenzene	ug/l
Methyl & Propyl Xylenes	ug/l
Ortho Xylene	ug/l
Total Xylenes	ug/l
MTBE	ug/l
1,2,4-Trimethylbenzene	ug/l
1,3,5-Trimethylbenzene	ug/l

TOTAL HYDROCARBONS

Parameter	Unit	15/09/03	15/09/03	16/09/03
Petroleum Hydrocarbons (C-C ₂₈)	ug/l			
Diluted Organics (C-C ₂₈)	ug/l	940		100
Hydrocarbon Screen (GC FID)	ug/l	2019		<1

VOC

Compound	Unit
1,1,1-Trichloroethane	ug/l
1,1,2,2-Tetrachloroethane	ug/l
1,1,2-Trichloro-1,2,2,2-tetrafluoroethane	ug/l
1,1,2-Trichloroethane	ug/l
1,1-Dichloroethane	ug/l
1,1-Dichloroethene	ug/l
1,2,3-Trichloropropane	ug/l
1,2,3-Trimethylbenzene	ug/l
1,2,4-Trichlorobenzene	ug/l
1,2,4-Trimethylbenzene	ug/l
1,2-Dibromo-3-Chloropropane	ug/l
1,2-Dichlorobenzene	ug/l
1,2-Dichloroethane	ug/l
1,2-Dichloropropane	ug/l
1,2-Dichloropropane	ug/l
1,3,5-Trimethylbenzene	ug/l
1,3-Dichlorobenzene	ug/l
1,3-Dichloropropane	ug/l
1,4-Dichlorobenzene	ug/l
1-Chloroethene	ug/l
1-Methylpropylbenzene	ug/l
2,2-Dichloropropane	ug/l
2-Chlorotoluene	ug/l
Benzene	ug/l
Bromobenzene	ug/l
Bromochloroethane	ug/l
Bromodichloromethane	ug/l
Bromoform	ug/l
Carbonyl Sulfide (PCM)	ug/l
Chlorobenzene	ug/l

D t S mpl d	15/09/03	15/09/03	16/09/03	R68192
L b R f N	179268	179305	179344	AQC
C st m R f N	18	11	10	Lab Std
S mpl Typ	WS	WS	WS	
T IP1/B h l N	TP630	TP675	TP656A	

Chl od b m m th	g/l
Chl roeth	g/l
Chloroform	ug/l
c 1 2 D chl thyl	ug/l
c 1 3-D chl roprop e	ug/l
D brom chl rom th ne	ug/l
D bromoetha	ug/l
D brom m th ne	ug/l
D hl rob	ug/l
D chlorom th e	ug/l
Ethylbenz	ug/l
H chl robutad	g/l
m ta & p Xyl e	ug/l
M thyl propylb nze e	g/l
M o hl rob nzen	ug/l
Mo ochl rophe l (s m)	g/l
Butylb	ug/l
P pylb nz	ug/l
rtho Xyl	g/l
Styr e	g/l
t r Butylb nz	g/l
T tr chl b	ug/l
Tet chloro th (PCE)	ug/l
Tetr hyd f	ug/l
T l	ug/l
trans 1 2 D hl o th ne	ug/l
t ns 1 3-d chl p pen	ug/l
T hl roeth (TCE)	ug/l
T hirof rom th	ug/l
T hl rom th e	ug/l
V yl Chl d	ug/l

SVOC	
1 2 4 T chl robenz	ug/l
1 4 D chl rob nzen	g/l
2 3 4 6-Tetrachl rop h nol (s m)	ug/l
2 4 5-T chl rop h nol	ug/l
2 4 6-T chl rop h nol	ug/l
2 4 D hl rop h nol (m)	ug/l
2 4-D m thylph nol	ug/l
2 4 D t t l ne	g/l
2 6-D m thylph nol	ug/l
2 6-D t tol e e	g/l
2 Chl o p hth l ne	ug/l
2 Chl phenol (m)	ug/l
2 M thylphenol	ug/l
2 N troph nol	ug/l
4 Chl o-3-m thylph nol	ug/l
4 chl rob nzyiph yl th	ug/l
4 M thylph nol	ug/l
4 N troph nol	ug/l
Azob nz e	ug/l
b (2 chloro thyl)ethe	ug/l
b s(2-chl ro thyoxy)metha	g/l
b (chl o p pyl)ethe	ug/l
Brom phe yiphe ylether	ug/l
Hex chl ro-1 3-butad	g/l
Hexachl robenzen	ug/l
Hex chl etha	ug/l
l phoro	ug/l
N trobenz	ug/l
n-n tro d n-propyl 1 prop m	ug/l
P tachlo ob nz ne	ug/l
Pe tachloroph ol	ug/l

Bis(2-ethylhexyl)phthal te	ug/l
B tylb nzyiphthal te	ug/l
D ethylphthalat	ug/l
D methylphthal te	ug/l
D n-butylphthalat	ug/l
Di n-octyl phth l t	ug/l

T tal Phth lates	ug/l
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ORGANO CHLORINE PESTICIDES

Ald	ug/l
Beta-HCH (Beta BHC)	ug/l
Chlo da	ug/l
DDD	ug/l

Det S mpl d	15/09/03	15/09/03	16/09/03	R68192
L b R f N	179268	179305	179344	AQC
C t m R f N	18	11	10	Lab Std
mpl Typ	WS	WS	WS	
T IPt/B h l N	TP630	TP675	TP656A	

D id	ug/l
D s (t tal)	ug/l
E d If l	ug/l
E do If ll	g/l
E d lfa S lph t	g/l
E d	g/l
E d E d Ald hyd	g/l
Gamma HCH (L nd)	g/l
Hept chlo	ug/l
H pt hl po de	ug/l
H pta hlorob nze e	ug/l
M th ychl	ug/l
pp DDE	g/l
pp DDT	ug/l
pp TDE	g/l

ORGANO PHOSPHOROUS PESTICIDES

Azi pho m thyl	ug/l
D m ton- m thyl	ug/l
D az	ug/l
D chl rv	ug/l
D ox tho	ug/l
D If t	ug/l
EPN Eth	ug/l
M l thio	ug/l
M thyl P rathion	g/l
Pa th	ug/l
T rb f	ug/l

CARBAMATE (P stu d)

C rb ny'	g/l
C rb fu	ug/l
Ma b	ug/l

PHENOL UREA HERBICIDES

Chl rotol ro	ug/l
D ro	ug/l
Isop t ro	ug/l
L ro	g/l

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5-T	ug/l
2 4-D	ug/l
Chl ro o-t lyla yac tic cid	g/l
D camb	ug/l
D chl roprop	ug/l
M coprop	ug/l
S i ex	g/l

TRIAZINES

Altnz e	ug/l
Smazine	ug/l

PCB

PCB C ng ne 28	ug/l
PCB C ngener 52	ug/l
PCB Cong 101	ug/l
PCB Cong ne 118	g/l
PCB C ng ne 138	ug/l
PCB Congene 153	ug/l
PCB C nge 180	g/l

Tot l PCB	ug/l
-----------	------

ALCOHOLS

But nol	ug/l
Ethanol	ug/l
Ethylene Glycol	ug/l
M th ol	ug/l
Prop n-1-ol	ug/l
Prop 2-ol	ug/l

MISCELLANEOUS

Sil e	ug/l
T n	ug/l

1 2 D chl ropropane	ug/l
1 3-D chl ropropene	ug/l
2 4 D trophenol	ug/l

D t S mpl d	15/09/03	15/09/03	16/09/03	R68192
L b R f N	179268	179305	179344	AQC
C st m R f No	18	11	10	L b Std
S mpl Typ	WS	WS	WS	
T l Pt/B h l N	TP630	TP675	TP656A	

A et	g/l
C rb le	ug/l
C rb ds iphd	ug/l
C eo t (TPH by GCFID)	g/l
Cy l h	ug/l
Cycl he a ne	ug/l
Hex chl rocyclopentad en	g/l
Hydroquino	ug/l
N Nitro d ph yl m e	ug/l
p-Chloro l e	ug/l
Prem th r/Cype meth	g/l
Pynd	g/l
Styr	ug/l
S iph l	ug/l
T l Extr ctabl M tt (Hist)	g/l
T ph	ug/l
T butyl T	ug/l
T hl rom th	ug/l
V yl A tat	ug/l
V yl Acetat	ug/l

Notes

B nzo(b)fluo th & Be zo(k)fluo nth co-elut (eport d as m)
 D b nzo(h) th ace e & l d no(1,2,3-cd)pyre co- lut (ep rt d as sum)
 Ins ff cr mt mpl
 Analys ched led ncorrectly ubsequently ca illed by cl t

ENVIRONMENTAL ANALYSIS LABORATORIES

15 Burgess Road Ivyhouse Lane Industrial Estate Hastings East Sussex TN35 4NR
 Tel 01424 444433 Fax 01424 442299 info@environmentalanalysis.com

ANALYTICAL REPORT No R68192

Location Durham Rd Newport

Your Project No F13041

Reporting Date 13/10/03

CLIENT **Norwest Holst Soil Engineering Ltd**

Parkside Lane Dewsbury Road
 Leeds LS11 5SX

Soils

	15/09/03	15/09/03	16/09/03	16/09/03
Date Sampled	15/09/03	15/09/03	16/09/03	16/09/03
Lab Ref No	179299	179301	179346	179348
Customer Ref No	6	12	6	3
Sample Type	D	D	ES	ES
Trial Pit / Borehole No	TP635A	TP635A	TP655A	TP656B
Depth (m)	1.90	2.30	1.20	0.85

Aromatic

C ₅ C ₇	(mg/kg) N	<5	<5	<5
>C ₇ C ₈	(mg/kg) N	<5	<5	<5
>C ₈ C ₁₀	(mg/kg) N	<5	<5	<5
>C ₁₀ C ₁₂	(mg/kg) N	<5	<5	101
>C ₁₂ C ₁₆	(mg/kg) N	<5	<5	533
>C ₁₆ C ₂₁	(mg/kg) N	63	131	160
>C ₂₁ C ₃₅	(mg/kg) N	<5	15	<5

Aliphatic

C ₅ C ₆	(mg/kg) N	<5	<5	<5
>C ₆ C ₈	(mg/kg) N	<5	<5	<5
>C ₈ C ₁₀	(mg/kg) N	<5	<5	<5
>C ₁₀ C ₁₂	(mg/kg) N	<5	<5	21
>C ₁₂ C ₁₆	(mg/kg) N	7	6	42
>C ₁₆ C ₂₁	(mg/kg) N	119	122	83
>C ₂₁ C ₃₄	(mg/kg) N	15	20	25

Insufficient sample for analysis

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t = not tested

16

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ANALYTICAL REPORT No R68192

Location Durham Rd Newport

Your Project No F13041

Reporting Date 13/10/03

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
Leeds LS11 5SX

Water

Date Sampled	16/09/03
Lab Ref No	179344
Customer Ref No	10
Sample Type	WS
Trial Pit / Borehole No	TP656A
Depth (m)	2.30

Aromatic

C ₅ C ₇	(µg/l)	N	<100
>C ₇ C ₉	(µg/l)	N	<100
>C ₈ C ₁₀	(µg/l)	N	<100
>C ₁₀ C ₁₂	(µg/l)	N	<100
>C ₁₂ C ₁₈	(µg/l)	N	<100
>C ₁₆ C ₂₁	(µg/l)	N	<100
>C ₂₁ C ₃₅	(µg/l)	N	<100

Aliphatic

C ₅ C ₆	(µg/l)	N	<100
>C ₆ C ₈	(µg/l)	N	<100
>C ₈ C ₁₀	(µg/l)	N	<100
>C ₁₀ C ₁₂	(µg/l)	N	<100
>C ₁₂ C ₁₈	(µg/l)	N	<100
>C ₁₆ C ₂₁	(µg/l)	N	<100
>C ₂₁ C ₃₄	(µg/l)	N	<100

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t not tested

.m

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Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 21/10/03

ANALYTICAL REPORT No R68588

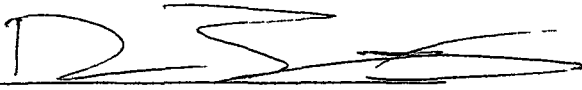
Location Durham Rd Newport

Your Project No F13041

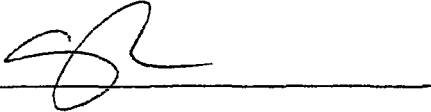
The attached analytical results relate to samples received on 14 Oct 2003

The report is only valid if it contains the total number of pages indicated at the bottom of this page

Checked by



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If you have any queries regarding this report please contact Steve Chapman or Steve Knight

■ ENVIRONMENTAL ANALYSIS LABORATORIES
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A Division of Norwest Holst Soil Engineering Ltd
Registered in England No 980795
Registered Office Parkside Lane Dewsbury Road Leeds LS11 5SX

Norwest Holst Soil Engineering Ltd
R68588 Durham Rd Newport

Date Sampled	Lab Ref No	178827	178849	179319	179346	179507	179533	179544	179792
Location Ref No	Sample Type	Leachate TP670	Leachate TP691	Leachate TP616	Leachate TP655A	Leachate TP636	Leachate TP719	Leachate TP613	Leachate TP660
Trials / Borehole No	Value								
pH		7.3	7.4	7.6	7.3		7.7	7.2	6.6
TOC	mg/l								
Electrical Conductivity (µS/cm)	µS/cm								
PHENOLICS									
Butyl Phenols	ug/l	0.5	0.5	0.5	<0.5		0.5	0.5	0.5
Catechol	g/l	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Cresols (sum)	ug/l	<0.5	0.5	0.5	0.5		0.5	0.5	0.5
Naphthols	ug/l	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Phenol	ug/l	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Resorcinol	ug/l	0.5	0.5	0.5	0.5		0.5	0.5	0.5
T-methylphenol	ug/l	<0.5	0.5	<0.5	0.5		0.5	0.5	0.5
Xylenols & Ethylphenols	ug/l	0.5	0.5	<0.5	0.5		0.5	0.5	0.5
Total Phenols	ug/l	0.5	0.5	<0.5	<0.5		0.5	0.5	0.5
US EPA PRIORITY PAHs									
Acenaphthene	ug/l	0.2	0.2	<0.2	<0.2		0.2	0.2	0.2
Acenaphthylene	g/l	0.2	0.2	0.2	0.2		0.2	0.2	0.2
Anthracene	g/l	0.2	0.2	<0.2	0.2		0.2	0.2	0.2
Benzo(a)anthracene	ug/l	0.2	0.2	0.2	0.2		0.2	<0.2	0.2
Benzo(a)pyrene	ug/l	0.2	0.2	<0.2	0.2		0.2	0.2	0.2
Benzo(b)fluoranthene	ug/l	0.2	0.2	<0.2	0.2		0.2	0.2	0.2
Benzo(k)fluoranthene	g/l	0.2	0.2	0.2	0.2		0.2	<0.2	0.2
Benzo(g,h,i)perylene	ug/l	0.2	0.2	<0.2	0.2		0.2	0.2	0.2
Chrysene	g/l	0.2	0.2	0.2	<0.2		0.2	0.2	0.2
Dibenz(a,h)anthracene ⁺²	ug/l	0.2	0.2	<0.2	0.2		0.2	0.2	0.2
Indeno(1,2,3-cd)pyrene ⁺²	ug/l	0.2	0.2	<0.2	0.2		0.2	0.2	0.2
Fluoranthene	ug/l	0.2	0.2	0.2	0.2		0.2	0.2	0.2
Fluorene	ug/l	0.2	0.2	<0.2	0.2		0.2	0.2	0.2
Naphthalene	ug/l	0.2	0.2	<0.2	0.2		0.2	<0.2	0.2
Phenanthrene	ug/l	0.2	0.2	0.2	0.2		0.2	0.2	0.2
Pyrene	g/l	0.2	0.2	0.2	0.2		0.2	<0.2	0.2
Total US EPA 16 PAH	ug/l	0.2	0.2	<0.2	0.2		0.2	<0.2	0.2
OTHER PAHs									
Anthracene	ug/l								
Benzo(e)pyrene	g/l								
Cyclopta(cd)pyrene	g/l								
GENERAL INORGANICS									
Complex Cyanide	ug/l								
Easily Liberatable Cyanide (free)	ug/l								
Thiocyanate	ug/l								
Total Cyanide	ug/l	5	<5	5	5		5	<5	5
Sulphide	ug/l	100	100	<100	<100		100	100	100
Sulphur (free)	ug/l								
Sulphate	g/l	43318	37718	239541	32925		38487	39163	31045
Chloride	g/l								
Phosphate	ug/l								
Exchangeable Ammonium	g/l	177	161	100	<100		100	193	230
Nitrate	ug/l								
Nitrite	ug/l								

Norwest Hoist Soil Engineering Ltd
R68588 Durham Rd Newport

Date Sampled	Lab Ref No	178827	178849	179319	179346	179507	179533	179544	179792
Location	Ref No								
Sample Type	Ref No								
Trail Plot/Block No									
		Leachate TP670	Leachate TP691	Leachate TP616	Leachate TP655A	Leachate TP636	Leachate TP719	Leachate TP613	Leachate TP660

HEAVY METALS/METALLOIDS

Element	Unit	178827	178849	179319	179346	179507	179533	179544	179792
Aluminium	ug/l								
Antimony	ug/l								
Arsenic	ug/l	10	10	<10	10		10	10	10
Barium	g/l								
Beryllium	ug/l								
Boron	ug/l	20	20	66	20		20	20	32
Cadmium	ug/l	1	1	1	<1		1	1	1
Chromium (Dissolved)	g/l	20	20	<20	20		20	20	20
Chromium (Hexavalent)	ug/l								
Cobalt	ug/l								
Copper	ug/l	5	5	8	<5		5	5	5
Germanium	ug/l								
Lead	ug/l	<20	20	20	20		20	20	20
Mercury	ug/l	0.1	0.1	<0.1	<0.1		0.1	0.1	0.1
Molybdenum	g/l								
Nickel	ug/l	<20	20	93	20		20	20	20
Selenium	ug/l	10	10	<10	10		10	10	10
Vanadium	ug/l								
Zinc	ug/l	50	50	50	50		50	50	50

ESSENTIAL ELEMENTS

Element	Unit
Calcium	g/l
Iron	ug/l
Magnesium	g/l
Manganese	ug/l
Potassium	g/l
Sodium	ug/l

MONOAROMATICS

Compound	Unit
Benzene	ug/l
Toluene	ug/l
Ethylbenzene	ug/l
Meta & Para Xylene	ug/l
Ortho Xylene	ug/l

Total Xylenes

ug/l

MTBE

ug/l

Compound	Unit
1,2,4-Tmethylbenzene	g/l
1,3,5-Tmethylbenzene	g/l

TOTAL HYDROCARBONS

Compound Class	Unit	178827	178849	179319	179346	179507	179533	179544	179792
Petroleum Range Organics (C ₆ -C ₁₀)	ug/l	20	20	20	<20		20	20	20
Diesel Range Organics (C ₁₀ -C ₂₈)	ug/l	100	100	100	100		100	100	100
Hydrocarbon Screen (GC FID)	ug/l	100	100	100	100		100	100	100

VOCs

Compound	Unit
1,1,1-Trichloroethane	ug/l
1,1,2,2-Tetrachloroethane	ug/l
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l
1,1,2-Trichloroethane	ug/l
1,1-Dichloroethane	ug/l
1,1-Dichloroethene	ug/l
1,2,3-Trichloropropane	ug/l
1,2,3-Trimethylbenzene	ug/l
1,2,4-Trichlorobenzene	ug/l
1,2,4-Trimethylbenzene	ug/l
1,2-Dibromo-3-Chloropropane	ug/l
1,2-Dichlorobenzene	ug/l
1,2-Dichloroethane	ug/l
1,2-Dichloroethane	ug/l
1,2-Dichloropropane	ug/l
1,2-Dichloropropane	ug/l
1,3-Dichloropropane	ug/l
1,3-Dichlorobenzene	ug/l
1,3-Dichloropropane	ug/l
1,4-Dichlorobenzene	ug/l
1-Chlorotoluene	ug/l
1-Methylpropylbenzene	ug/l
2,2-Dichloropropane	ug/l
2-Chlorotoluene	g/l

Norwest Holst Soil Engineering Ltd
R68588 Durham Rd Newport

Date Sampled	178827	178849	179319	179346	179507	179533	179544	179792
Lab Ref No								
Contaminant Ref No								
Sample Type	Leachate	Leachate	Leachate	Leachate	Leachate	Leachate	Leachate	Leachate
Well / Borehole No	TP670	TP691	TP616	TP655A	TP636	TP719	TP613	TP660

Benzene	ug/l
Bromobenzene	ug/l
Bromochloromethane	g/l
Bromodichloromethane	ug/l
Bromoform	g/l
Carbon Tetrachloride (PCM)	ug/l
Chlorobenzene (sum)	ug/l
Chlorodibromomethane	g/l
Chloroethane	g/l
Chloroform	ug/l
cis-1,2-Dichloroethylene	ug/l
cis-1,3-Dichloropropene	ug/l
Dibromochloromethane	ug/l
Dibromoethane	ug/l
Dibromomethane	ug/l
Dichlorobenzene	ug/l
Dichloromethane	ug/l
Ethylbenzene	ug/l
Heptachlorocyclopentadiene	ug/l
Hexachlorocyclopentadiene	ug/l
Methyl isopropylbenzene	g/l
Monochlorobenzene	ug/l
Monochlorophenols (sum)	ug/l
n-Butylbenzene	ug/l
n-Propylbenzene	ug/l
ortho-Xylene	g/l
Styrene	ug/l
tert-Butylbenzene	g/l
Tetrachlorobenzene	g/l
Tetrachloroethene (PCE)	ug/l
Tetrahydrofuran	ug/l
Toluene	ug/l
trans-1,2-Dichloroethene	ug/l
trans-1,3-dichloropropene	ug/l
Trichloroethene (TCE)	g/l
Trichlorofluoromethane	ug/l
Trichloromethane	g/l
Vinyl Chloride	g/l

SVOCs	
1,2,4-Trichlorobenzene	g/l
1,4-Dichlorobenzene	ug/l
2,3,4,6-Tetrachlorophenol (sum)	ug/l
2,4,5-Trichlorophenol	g/l
2,4,6-Trichlorophenol	ug/l
2,4-Dichlorophenol (sum)	ug/l
2,4-Dimethylphenol	g/l
2,4-Dinitrotol	ug/l
2,6-Dimethylphenol	g/l
2,6-Dinitrotoluene	ug/l
2-Chlorophthalene	g/l
2-Chlorophenol (sum)	g/l
2-Methylphenol	ug/l
2-Nitrophenol	ug/l
4-Chloro-o-3-methylphenol	ug/l
4-chlorobenzylphenylether	ug/l
4-Methylphenol	ug/l
4-Nitrophenol	g/l
Azobenzene	ug/l
bis(2-chloroethyl)ether	ug/l
bis(2-chloroethoxy)methane	ug/l
bis(chloroisopropyl)ether	ug/l
Bromophenylphenylether	ug/l
Hexachloro-o-1,3-butadiene	ug/l
Hexachlorobenzene	ug/l
Hexachloroethane	ug/l
Isophorone	ug/l
Nitrobenzene	ug/l
n-nitrosod-n-propyl-1-propanamine	ug/l
Pentachlorobenzene	ug/l
Pentachlorophenol	ug/l
Bis(2-ethylhexyl)phthalate	ug/l

Date Sampled	178827	178849	179319	179346	179507	179533	179544	179792
Lab Ref No								
Customer Ref No								
Sampl Type	Leachate	Leachate	Leachate	Leachate	Leachate	Leachate	Leachate	Leachate
Trial Pit / Borehole No	TP670	TP691	TP616	TP655A	TP636	TP719	TP613	TP660

Butylbenzylphthalate	g/l
D ethylphthalate	ug/l
D methylphthalate	g/l
D n butylphthalate	g/l
D n-octyl phthalate	ug/l

Total Phthalates ug/l

ORGANO CHLORINE PESTICIDES

Ald	ug/l
Beta HCH (Beta BHC)	ug/l
Chlord e	ug/l
DDD	g/l
D eld	ug/l
Drins (total)	ug/l
Endos ifan I	g/l
Endosulfan II	g/l
Endos ifan Sulphate	ug/l
Endrn	g/l
Endr Endrn Aldehyde	g/l
Gamma HCH (Lindane)	ug/l
Hept chlo	ug/l
Hept chlo epoxide	ug/l
Heptachlorobe ne	g/l
Metho ychlo	ug/l
pp DDE	ug/l
pp DDT	ug/l
pp TDE	ug/l

ORGANO PHOSPHOROUS PESTICIDES

Az nphos methyl	ug/l
Demeton s-methyl	ug/l
D az on	ug/l
D chlorvos	g/l
D o atho	ug/l
D s if to	g/l
EPN Eth on	g/l
Malath n	ug/l
Methyl P th o	ug/l
P ath o	ug/l
Terbufos	g/l

CARBAMATE (P st c de)

Date Sampled	178827	178849	179319	179346	179507	179533	179544	179792
Lab Ref No								
Customer Ref No								
Sample Type	Leachate	Leachate	Leachate	Leachate	Leachate	Leachate	Leachate	Leachate
Total Pit / Borehole No	TP670	TP691	TP616	TP655A	TP636	TP719	TP613	TP660
Carbaryl	ug/l							
Carbofuran	g/l							
Maneb	ug/l							
PHENOL UREA HERBICIDES								
Chlorotoluron	ug/l							
Diuron	ug/l							
Isoproturon	ug/l							
Linuron	ug/l							
CHLOROPHENOXY ACIDIC HERBICIDES								
2,4,5-T	ug/l							
2,4-D	ug/l							
Chloro-o-tolixyoxyacetic acid	ug/l							
Dicamba	ug/l							
Dichloroprop	ug/l							
Mecoprop	g/l							
Siloxane	g/l							
TRIAZINES								
Atrazine	ug/l							
Symazine	g/l							
PCB s								
PCB Congener 28	ug/l							
PCB Congener 52	ug/l							
PCB Congener 101	ug/l							
PCB Congener 118	g/l							
PCB Congener 138	g/l							
PCB Congener 153	ug/l							
PCB Congener 180	ug/l							
Total PCB s	ug/l							
ALCOHOLS								
Benzanol	g/l							
Ethanol	g/l							
Ethylene Glycol	g/l							
Methanol	g/l							
Propan-1-ol	g/l							
Propan-2-ol	ug/l							
MISCELLANEOUS								
Siloxane	ug/l							
Tin	ug/l							
1,2-Dichloropropane	ug/l							
1,3-Dichloropropane	g/l							
2,4-Dinitrophenol	ug/l							
Acetone	g/l							
Carbazole	ug/l							
Carbonyl sulphide	ug/l							
Creosote (TPH by GCFID)	ug/l							
Cyclohexane	ug/l							
Cyclohexanone	ug/l							
Hexachlorocyclopentadiene	ug/l							
Hydroquinone	ug/l							
N-Nitrosodiphenylamine	ug/l							
p-Chloroaniline	ug/l							
Premethrin/Cypermethrin	ug/l							
Pyridine	ug/l							
Styrene	ug/l							
Sulphoxide	ug/l							
Toluene Extractable Matter (Historic)	g/l							
Toluene	ug/l							
Tributyl Tin	ug/l							
Trichloromethane	ug/l							
Vinyl Acetate	ug/l							

Notes

Benzo(b)fluoranthene & Benzo(k)fluoranthene co-elute (reported as sum)
Dibenz(a,h)anthracene & Indeno(1,2,3-cd)pyrene co-elute (reported as sum)
insufficient soil sample for leachability

Norwest Holst Soil Engineering Ltd
R68588 Durham Rd Newport

Dat Sampled				
Lab Ref No		179947	180433	R68588
Customer Ref No				AQC
Sample Type		Leachate	Leachate	Lab Std
TP / Borehole No		TP608	TP609	
pH	Value	6.6	7.3	8.2
TOC	mg/l			
Electrical Conductivity (µS/cm)	µS/cm			
PHENOLICS				
Btyl Phenols	ug/l	<0.5	0.5	
Ctchol	ug/l	0.5	0.5	
Cesols (s m)	g/l	0.5	0.5	
Naphthols	g/l	0.5	0.5	
Phenol	g/l	0.5	0.5	
Resonol	ug/l	0.5	0.5	
Trmethylphenol	ug/l	0.5	0.5	
Xylole & Ethylphenols	ug/l	0.5	0.5	
Total Phenols	ug/l	0.5	0.5	302.0
US EPA PRIORITY PAHs				
Acaphthene	ug/l	0.2	0.2	
Acenaphthylene	ug/l	0.2	0.2	
Anthracene	g/l	0.2	0.2	
Benzo(a)anthracene	ug/l	0.2	0.2	
Benzo(a)pyrene	g/l	0.2	0.2	12.7
Benzo(b)fluoranthene	ug/l	0.2	0.2	
Benzo(k)fluoranthene	ug/l	0.2	0.2	
Benzo(g,h,i)perylene	ug/l	0.2	0.2	
Chrysenes	ug/l	0.2	0.2	
Dibenzo(a,h)anthracene *2	ug/l	0.2	0.2	
Indeno(1,2,3-cd)pyrene *2	ug/l	0.2	0.2	
Fluoranthene	g/l	0.2	0.2	
Fluorene	ug/l	0	0.2	
Naphthalene	ug/l	0.2	0.2	15.1
Phenanthrenes	g/l	0.2	0.2	
Pyrene	ug/l	0.2	0.2	
Total US EPA 16 PAH	ug/l	0.2	0.2	
OTHER PAHs				
Anthracene	ug/l			
Benzo(e)pyrene	g/l			
Cyclopenta(cd)pyrene	ug/l			
GENERAL INORGANICS				
Complex Cyanide	ug/l			
Easily Liberatable Cyanide (free)	ug/l			
Thiocyanate	ug/l			
Total Cyanide	ug/l	<5	5	1897
Sulphide	ug/l	100	100	745
Sulphur (free)	ug/l			
Sulphate	ug/l	31157	33827	103877
Chloride	ug/l			
Phosphate	ug/l			
Exchangeable Ammonium	ug/l	139	242	100269
Nitrate	ug/l			
Nitrite	ug/l			

Date Sampled	179947	180433	R68588
Lab Ref No			AQC
Customer Ref No	Leachate	Leachate	Lab Std
Sample Type	TP608	TP609	
Test Point/Borehole No			

HEAVY METALS/METALLOIDS

Aluminium	ug/l			
Antimony	ug/l			
Arsenic	g/l	10	10	61
Barium	ug/l			
Beryllium	ug/l			
Boron	ug/l	42	20	171
Cadmium	ug/l	1	1	13
Chromium (Dissolved)	ug/l	20	20	53
Chromium (Hexavalent)	ug/l			
Cobalt	g/l			
Copper	ug/l	5	5	148
Germanium	ug/l			
Lead	ug/l	20	20	37
Mercury	g/l	0.1	0.1	6.5
Molybdenum	g/l			
Nickel	ug/l	<20	20	54
Selenium	ug/l	10	10	39
Vanadium	g/l			
Zinc	ug/l	50	50	420

ESSENTIAL ELEMENTS

Calcium	g/l
Iron	ug/l
Magnesium	g/l
Manganese	ug/l
Potassium	ug/l
Sodium	g/l

MONOAROMATICS

Benzene	ug/l
Toluene	g/l
Ethylbenzene	ug/l
Methyl and Para Xylene	g/l
Ortho Xylene	g/l
Total Xylenes	g/l

MTBE

1,2,4-Trimethylbenzene	ug/l
1,3,5-Trimethylbenzene	g/l

TOTAL HYDROCARBONS

Petroleum Range Organics (C ₆ -C ₁₀)	g/l	20	<20
Diesel Range Organics (C ₁₀ -C ₂₆)	ug/l	100	<100
Hydrocarbon Screen (GC FID)	ug/l	100	100

VOCs

1,1,1-Trichloroethane	g/l
1,1,2-Tetrachloroethane	ug/l
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l
1,1,2-Trichloroethane	ug/l
1,1-Dichloroethane	ug/l
1,1-Dichloroethene	g/l
1,2,3-Trichloropropane	ug/l
1,2,3-Trimethylbenzene	g/l
1,2,4-Trichlorobenzene	ug/l
1,2,4-Trimethylbenzene	g/l
1,2-Dibromo-3-Chloropropane	ug/l
1,2-Dichlorobenzene	ug/l
1,2-Dichlorobenzene	ug/l
1,2-Dichloroethane	ug/l
1,2-Dichloropropane	ug/l
1,2-Dichloropropane	ug/l
1,3,5-Trimethylbenzene	ug/l
1,3-Dichlorobenzene	ug/l
1,3-Dichloropropane	ug/l
1,4-Dichlorobenzene	g/l
1-Chlorotoluene	ug/l
1-Methylpropylbenzene	ug/l
2,2-Dichloropropane	ug/l
2-Chlorotoluene	ug/l

De Sampled	179947	180433	R68588
Lab Ref No			
Contam Ref No			AQC
Sample Type	Leachate	Leachate	Lab Std
Trial Pit/Bolehol No	TP608	TP609	

Benzene	g/l
Bromobenzene	ug/l
Bromochloromethane	ug/l
Bromodichloromethane	g/l
Bromoform	g/l
Carbon Tetrachloride (PCM)	ug/l
Chlorobenzene (sum)	g/l
Chlorodibromomethane	g/l
Chloroethane	g/l
Chloroform	g/l
cis 1 2 Dichloroethylene	g/l
cis 1 3 Dichloropropene	ug/l
Dibromochloromethane	g/l
Dibromoethane	ug/l
Dibromomethane	g/l
Dichlorobenzene	ug/l
Dichloromethane	ug/l
Ethylbenzene	ug/l
Hexachlorobutadiene	ug/l
meta & para Xylene	ug/l
Methyl isopropylbenzene	g/l
Monochlorobenzene	g/l
Monochlorophenols (sum)	g/l
n Butylbenzene	ug/l
n Propylbenzene	g/l
ortho Xylene	g/l
Styrene	g/l
tert Butylbenzene	g/l
Tetrachlorobenzene	ug/l
Tetrachloroethene (PCE)	g/l
Tetrahydrofuran	ug/l
Toluene	g/l
trans 1 2 Dichloroethene	g/l
trans 1 3 dichloropropene	g/l
Trichloroethene (TCE)	g/l
Trichloromethane	ug/l
Trichloroethane	g/l
Vinyl Chloride	g/l

SVOCs	
1 2 4 Trichlorobenzene	g/l
1 4 Dichlorobenzene	g/l
2 3 4 6 Tetrachlorophenol (sum)	g/l
2 4 5 Trichlorophenol	g/l
2 4 6 Trichlorophenol	ug/l
2 4-Dichlorophenol (sum)	g/l
2 4 Dimethylphenol	g/l
2 4 Dinitrotoluene	g/l
2 6 Dimethylphenol	ug/l
2 6 Dinitrotoluene	ug/l
2-Chloronaphthalene	g/l
2-Chlorophenol (sum)	ug/l
2 Methylphenol	ug/l
2 Nitrophenol	ug/l
4-Chloro-3 methylphenol	g/l
4-chlorobenzylphenylether	ug/l
4 Methylphenol	ug/l
4 Nitrophenol	ug/l
Azobenzene	ug/l
bis(2-chloroethyl)ether	ug/l
bis(2-chloroethoxy)methane	g/l
bis(chloroisopropyl)ether	g/l
Bromophenylphenylether	ug/l
Hexachloro 1 3-butadiene	g/l
Hexachlorobenzene	ug/l
Hexachloroethane	g/l
Isophorone	ug/l
Nitrobenzene	g/l
n-nitrosod-n-propyl 1 p opanamine	ug/l
Pentachlorobenzene	ug/l
Pentachlorophenol	g/l
Bis(2-ethylhexyl)phthalate	ug/l

Date Sampled			
Lab Ref No	179947	180433	R68588
Customer Ref No			AQC
Sample Type	Leachate	Leachate	Lab Std
Trial Pit / Borehole No	TP608	TP609	

Butylbenzylphthalate	ug/l
Diethylphthalate	ug/l
Dimethylphthalate	ug/l
Dibutylphthalate	ug/l
Dinonylphthalate	ug/l

Total Phthalates	ug/l
------------------	------

ORGANO CHLORINE PESTICIDES

Aldrin	ug/l
Beta HCH (Beta BHC)	ug/l
Chlordane	ug/l
DDD	ug/l
DDT	ug/l
Dieldrin	ug/l
Dioxins (total)	ug/l
Endosulfan I	ug/l
Endosulfan II	ug/l
Endosulfan Sulphate	ug/l
Endrin	ug/l
Endrin Aldehyde	ug/l
Gamma HCH (Lindane)	ug/l
Heptachlor	ug/l
Heptachlor epoxide	ug/l
Heptachlorobenzene	ug/l
Methoxychlor	ug/l
pp DDE	ug/l
pp DDT	ug/l
pp DDE	ug/l

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	ug/l
Demeton-s methyl	ug/l
Diazinon	ug/l
Dichlorvos	ug/l
Disulfoton	ug/l
EPN Ethion	ug/l
Malathion	ug/l
Methyl Parathion	ug/l
Parathion	ug/l
Terbufos	ug/l

CARBAMATE (Pesticide)

D t S mpl d
Lab R f N 179947 180433 R68588
C t me R f No AQC
S mpl Type Leachate Leachate Lab Std
T I P t / B o h o l e N o TP608 TP609

Carb ryl ug/l
Carbofu an ug/l
Ma eb ug/l

PHENOL UREA HERBICIDES

Chlorotolu o ug/l
Diuron ug/l
Isoprotu on ug/l
Lnuron ug/l

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5 T ug/l
2 4 D ug/l
Chloro-o tolyoxyacetic acid ug/l
Dicamba ug/l
Dchloroprop ug/l
Mecop op ug/l
Sll e ug/l

TRIAZINES

Alt zine g/l
Smaz ne g/l

PCB s

PCB Congener 28 ug/l
PCB Conge er 52 ug/l
PCB Cong ner 101 g/l
PCB Conge e 118 ug/l
PCB Congener 138 g/l
PCB Co gene 153 ug/l
PCB Conge er 180 g/l

T tal PCB s ug/l

ALCOHOLS

Buta ol ug/l
Eth l g/l
Ethyle e Glycol ug/l
Metha ol g/l
P op 1-ol g/l
P opan 2-ol g/l

MISCELLANEOUS

Sl r ug/l
Tn ug/l

1,2 D chloropropane ug/l
1 3 D chlorop ope e g/l
2 4 D nitrophenol ug/l
Acetone ug/l
Carbazole ug/l
Carbo d sulph de ug/l
Creosote (TPH by GCFID) ug/l
Cyclohexane ug/l
Cyclohexa one ug/l
He achlorocyclopentad ene ug/l
Hydroqu none ug/l
N Nitrosod phenylamine ug/l
p-Chloroanil ne ug/l
Premethnn/Cype methrn ug/l
Pynd ne ug/l
Styre e ug/l
Sulpholane ug/l
Tol e e Extractable Matte (Historic) ug/l
Toxaphene ug/l
Trnbutyl Tin ug/l
Trnchloromethane ug/l
Vnyl Acetate ug/l

Notes

Benzo(b)fluor
↔ D benzo(a h)
Ins fficient so

ENVIRONMENTAL ANALYSIS LABORATORIES

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ANALYTICAL REPORT No R68588

Location Durham Rd Newport

Your Project No F13041

Reporting Date 21/10/03

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
Leeds LS11 5SX

Leachates

	TP/BH Our ref	TP670 178827	TP691 178849	TP616 179319	TP655A 179346	TP636 179507	TP719 179533	TP613 179544	TP660 179792	TP608 179947	TP609 180433
<u>Aromatic</u>											
C ₅ C ₇	(µg/l) N	<100	<100	<100	<100		<100	<100	<100	<100	<100
>C ₇ C ₈	(µg/l) N	<100	<100	<100	<100		<100	<100	<100	<100	<100
>C ₈ C ₁₀	(µg/l) N	<100	<100	<100	<100		<100	<100	<100	<100	<100
>C ₁₀ C ₁₂	(µg/l) N	<100	<100	<100	<100		<100	<100	<100	<100	<100
>C ₁₂ C ₁₆	(µg/l) N	<100	<100	<100	<100		<100	<100	<100	<100	<100
>C ₁₆ C ₂₁	(µg/l) N	<100	<100	<100	<100		<100	<100	<100	<100	<100
>C ₂₁ C ₃₅	(µg/l) N	<100	<100	<100	<100		<100	<100	<100	<100	<100
<u>Aliphatic</u>											
C ₅ C ₆	(µg/l) N	<100	<100	<100	<100		<100	<100	<100	<100	<100
>C ₆ C ₈	(µg/l) N	<100	<100	<100	<100		<100	<100	<100	<100	<100
>C ₈ C ₁₀	(µg/l) N	<100	<100	<100	<100		<100	<100	<100	<100	<100
>C ₁₀ C ₁₂	(µg/l) N	<100	<100	<100	<100		<100	<100	<100	<100	<100
>C ₁₂ C ₁₆	(µg/l) N	<100	<100	<100	<100		<100	<100	<100	<100	<100
>C ₁₆ C ₂₁	(µg/l) N	<100	<100	<100	<100		<100	<100	<100	<100	<100
>C ₂₁ C ₃₄	(µg/l) N	<100	<100	<100	<100		<100	<100	<100	<100	<100

Insufficient soil sample for leachability

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t = not tested

M.B

www.environmentalanalysis.com

Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 21/10/03

ANALYTICAL REPORT No R68572

Location Durham Rd Newport

Your Project No F13041

The attached analytical results relate to samples received on 22 Sep 2003

The report is only valid if it contains the total number of pages indicated at the bottom of this page

Checked by 

Authorised by 

If you have any queries regarding this report please contact Steve Chapman or Steve Knight

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Registered Office Parkside Lane Dewsbury Road Leeds LS11 5SX

Norwest Holst Soil Engineering Ltd
R68572 Durham Rd Newport

D t S mpled									
L b Ref No		178559	178840	179524	179556	179560	179780	179784	179789
C t m r R f N									
S mpl Typ		ES	ES	ES	ES	ES	ES	ES	ES
Tri Pit / Bo hol N		TP710	TP673	TP700	TP681	TP721	TP619	TP679	TP640
D pth (m)		1.20	2.20	0.60	1.80	1.40	0.80	0.50	0.30
Had t nd gat S rf (Y/N)									
pH	Vai	8.0	7.8	8.1	7.1	8.5	8.0	7.6	7.2
/ L o Igniton	/								
/ M istur	/								
/ St n s	/								
Asbestos	/	0.001		0.001	0.001	0.001	0.001	0.001	0.001
PHENOLICS									
Butyl Ph nols	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
C t chol	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Cresol (m)	mg/kg	0.5	0.5	0.5	0.5	<0.5	0.5	0.5	
N phth ls	mg/kg	0.5	0.5	0.5	<0.5	0.5	0.5	0.5	
Phe ol	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
R o c a l	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
T methylph l	mg/kg	0.5	0.5	0.5	<0.5	0.5	0.5	0.5	
Xyl ols & Ethylph nols	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
T t l Phenol	mg/kg	0.5	0.5	0.5	0.5	0.5	<0.5	0.5	
US EPA PRIORITY PAH s									
Ac aphth e	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Ac aphthyl	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Anthra ene	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Be (a)Anthra e e	mg/kg	6.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Benzo()pyr e	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
B nz (b)l ra th	mg/kg								
Benzo(k)flu ra the	mg/kg	13.3	0.5	0.5	0.5	<0.5	<0.5	0.5	0.5
Be zo(g h) p ryle	mg/kg	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Chrysen	mg/kg	5.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5
D b nzo(a h)a thrace e ²	mg/kg								
l d o(1 2 3-cd)pyr n ²	mg/kg	<0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Fl ranth e	mg/kg	15.7	0.5	0.5	<0.5	0.5	0.5	0.5	0.5
Fl e	mg/kg	<0.5	0.5	0.5	0.5	<0.5	0.5	0.5	<0.5
Naphth i ne	mg/kg	11.5	0.5	0.5	0.5	0.5	0.5	<0.5	0.5
Phe nth e	mg/kg	16.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Pyre	mg/kg	11.9	<0.5	0.5	0.5	0.5	0.5	<0.5	0.5
Tot l US EPA 16 PAH	mg/kg	80.9	<0.5	0.5	<0.5	<0.5	0.5	<0.5	0.5
OTHER PAH									
A th the e	mg/kg								
Benzo()pyr e	mg/kg								
Cycl pe ta(cd)pyr e	mg/kg								
GENERAL INORGANICS									
C mpl Cyan d	mg/kg								
Ea ly L b ratable Cya d (f ee)	mg/kg								
Th cyanate	mg/kg								
Total Cya de	mg/kg	1	1	1	1	1	1	1	2.5
S lph de	mg/kg	2	2	2	16.0	3.3	4.2	<2	2
Sulph (f ee)	mg/kg	140	40	20	170	70	70	20	80
Total Sulph te	mg/kg	100	5000	300	100	100	200	200	100
Wai Sol bl S lphate	mg/kg		120						
Water Soluble Chlorid									
Ph sphate	mg/kg								
Excha geabl Ammo um									
N'trate	mg/kg	11.6	16.7	14.1	13.4	30.7	19.2	22.4	15.4
Nitrite	mg/kg								

D t S m p l d	178559	178840	179524	179556	179560	179780	179784	179789
L b R f N								
C t m R f N								
S m p l e T y p e	ES	ES	ES	ES	ES	ES	ES	ES
T i P t / B h o l N	TP710	TP673	TP700	TP681	TP721	TP619	TP679	TP640
D p t h (m)	1.20	2.20	0.60	1.80	1.40	0.80	0.50	0.30
H d t d g t S r f c e (Y/N)								

HEAVY METALS/METALLOIDS

Element	Unit	178559	178840	179524	179556	179560	179780	179784	179789
Al m m	mg/kg								
A t m o y	mg/kg								
A r s c	mg/kg	71.7	12.4	12.8	10.0	18.0	15.3	15.4	26.8
B m	mg/kg								
B e r y l l m	mg/kg								
B o o (W a t e S o l u b l)	mg/kg	0.5	1.7	2.2	3.1	1.1	0.7	1.1	2.1
C d m m	mg/kg	2.4	1.1	0.6	<0.5	0.5	0.5	0.6	1.2
C h o m m (T t a l)	mg/kg	27	25	44	45	21	31	48	50
C h r o m m (H e i t)	mg/kg	2		<2	2		<2	2	2
C b l t	mg/kg								
C o p p e	mg/kg	550	5720	22	16	39	57	23	80
G m m	mg/kg								
L a d	mg/kg	932	119	28	31	182	88	43	133
M e c u r y	mg/kg	1.1	0.5	0.5	<0.5	0.6	0.5	0.5	0.5
M o l y b d e m	mg/kg								
N c k l	mg/kg	53	81	34	33	17	28	39	43
S e l m	mg/kg	1.3	<0.5	0.5	0.5	0.7	1.2	0.5	1.1
V a a d m	mg/kg								
Z n	mg/kg	826	475	102	108	130	234	118	229

ESSENTIAL ELEMENTS

Element	Unit
Cal m	mg/kg
I r o	mg/kg
M a g m	mg/kg
M a n g e s e	mg/kg
P o t a m	mg/kg
S o d m	mg/kg

MONOAROMATICS

Element	Unit
B n e	mg/kg
T o l	mg/kg
E t h y l n z	mg/kg
M e t a & P a r a X y l	mg/kg
O r t h X y l e	mg/kg
T o t l X y l	mg/kg

Element	Unit
M T B E	mg/kg
1,2,4-T methylbenzene	mg/kg
1,3,5-T methylbenzene	mg/kg

TOTAL HYDROCARBONS

Element	Unit	178559	178840	179524	179556	179560	179780	179784	179789
P t l m R a g O r g a n c s (C ₆ -C ₁₀)	mg/kg	<5			5	5	5	5	
D e s l R a g e O g a c s (C ₈ -C ₂₈)	mg/kg	165	5	<5	5	37	31	5	<5
H y d r o c a r b o n s (GC-FID)	mg/kg	279	5	5	5	61	5	5	5

VOC s

Element	Unit
1,1,1 Trichloroethane	mg/kg
1,1,2 Tetrachloroethane	mg/kg
1,1,2 Trichloro-1,2,2 trichloroethane	mg/kg
1,1,2 Trichloroethane	mg/kg
1,1 Dichloroethane	mg/kg
1,1 Dichloroethene	mg/kg
1,2,3 Trichloropropane	mg/kg
1,2,3-Trimethylbenzene	mg/kg
1,2,4-Toluene	mg/kg
1,2,4-Trimethylbenzene	mg/kg
1,2-Dibromo-3-Chloropropane	mg/kg
1,2-Dichloroethane	mg/kg
1,2-Dichloroethene	mg/kg
1,2-Dichloropropane	mg/kg
1,2-Dichloropropane	mg/kg
1,3,5-Toluene	mg/kg
1,3-Dichlorobenzene	mg/kg

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D t S mpl d L b R f N C t m R f N S mpl Typ T i Pit / Bo ehol N D pth (m) H d t d g t S r f ce (Y/N)	178559	178840	179524	179556	179560	179780	179784	179789
	ES	ES	ES	ES	ES	ES	ES	ES
	TP710	TP673	TP700	TP681	TP721	TP619	TP679	TP640
	1.20	2.20	0.60	1.80	1.40	0.80	0.50	0.30

1,3-Dichlorobenzene	mg/kg
1,4-Dichlorobenzene	mg/kg
1-Chlorobenzene	mg/kg
1-Methyl-2-phenylbenzene	mg/kg
2,2-Dichloropropane	mg/kg
2-Chlorobenzene	mg/kg
Benzene	mg/kg
Bromobenzene	mg/kg
Bromochloromethane	mg/kg
Bromoform	mg/kg
Carbon Tetrachloride (PCM)	mg/kg
Chlorobenzene (m)	mg/kg
Chlorobromomethane	mg/kg
Chloroethane	mg/kg
Chloroform	mg/kg
1,1,2-Dichloroethane	mg/kg
1,1,1,2-Tetrachloroethane	mg/kg
Di-bromomethane	mg/kg
Di-bromoethane	mg/kg
Dibromomethane	mg/kg
Dibromobenzene	mg/kg
Dichloromethane	mg/kg
Ethylbenzene	mg/kg
Heptachlorocyclopentadiene	mg/kg
M-xylene	mg/kg
Methyl propylbenzene	mg/kg
Methylchlorobenzene	mg/kg
Monoisobutylene (m)	mg/kg
Butylene	mg/kg
Propylbenzene	mg/kg
m-xylene	mg/kg
Styrene	mg/kg
tert-Butylbenzene	mg/kg
Tetrachloroethylene	mg/kg
Trichloroethylene (PCE)	mg/kg
Trichlorofluoromethane	mg/kg
Toluene	mg/kg
1,1,2,2-Tetrachloroethane	mg/kg
1,1,1,3-Tetrachloropropane	mg/kg
Trichloroethylene (TCE)	mg/kg
Trichloroethane	mg/kg
Trichloroethane	mg/kg
Vinyl Chloride	mg/kg

SVOC

1,2,4-Trichlorobenzene	mg/kg
1,4-Dichlorobenzene	mg/kg
2,3,4,6-Tetrachlorophenol (m)	mg/kg
2,4,5-Trichlorophenol	mg/kg
2,4,6-Trichlorophenol	mg/kg
2,4-Dichlorophenol (s m)	mg/kg
2,4-Dimethylphenol	mg/kg
2,4-Dinitrophenol	mg/kg
2,6-Dimethylphenol	mg/kg
2,6-Dinitrophenol	mg/kg
2-Chloronaphthalene	mg/kg
2-Chlorophenol (sum)	mg/kg
2-Methylphenol	mg/kg
2-Nitrophenol	mg/kg
4-Chloro-3-methylphenol	mg/kg
4-chlorobenzylphenyl ether	mg/kg
4-Methylphenol	mg/kg
4-Nitrophenol	mg/kg
Azobenzene	mg/kg
1,4-bis(2-chlorophenyl)ethane	mg/kg

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D t S mpled	178559	178840	179524	179556	179560	179780	179784	179789
L b R f No								
C t m R f N								
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES
T I P t / Bo h l N	TP710	TP673	TP700	TP681	TP721	TP619	TP679	TP640
D pth (m)	1.20	2.20	0.60	1.80	1.40	0.80	0.50	0.30
H d t dng t S r f e (Y/N)								

b (2-hl ethoxy)m the	mg/kg
b (hlo propyl) the	mg/kg
Brom ph ylph yl th	mg/kg
H achl ro-13 b tad	mg/kg
H a hl b n e	mg/kg
H achl tha	mg/kg
I pho	mg/kg
N tr benz e	mg/kg
tr sod n p pyl i propa m	mg/kg
P t chl b	mg/kg
Pent chlo ophe ol	mg/kg

B s(2-ethylhexyl)phth i te	mg/kg
Butylbe zylphthal t	mg/kg
D ethylphthalat	mg/kg
D methylphthalat	mg/kg
D n-butylphthal ate	mg/kg
D -octyl phthalate	mg/kg

T t l Phth lates	mg/kg
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ORGANO CHLORINE PESTICIDES

Aldnn	mg/kg
B t HCH (Beta BHC)	mg/kg
Chloro ne	mg/kg
DDD	mg/kg
D Id	mg/kg
D (total)	mg/kg
E d lf n l	mg/kg
E d sulfa ll	mg/kg
E d lf an S lphate	mg/kg
End	mg/kg
E d End Aldehyde	mg/kg
Gamma HCH (L da)	mg/kg
H pta hlo	mg/kg
H ptachlo po d	mg/kg
H pt hlo b z ne	mg/kg
M thoxy hl	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Az pho methyl	mg/kg
Demeto s methyl	mg/kg
Diazino	mg/kg
D hlorsos	mg/kg
Doxath on	mg/kg
D sulfolon	mg/kg
EPN Eth o	mg/kg
Malath n	mg/kg
Methyl Parath o	mg/kg
P rath	mg/kg
T rbufos	mg/kg

CARBAMATE (P t id)

C rb ryf	mg/kg
Carbofura	mg/kg
Man b	mg/kg

PHENOL UREA HERBICIDES

Chlo tolu	mg/kg
D ro	mg/kg
ls proturo	mg/kg
Li ro	mg/kg

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D t Sampl d	178559	178840	179524	179556	179560	179780	179784	179789
Lab R f No								
C tom R f N								
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES
T l Pit /Bo hol N	TP710	TP673	TP700	TP681	TP721	TP619	TP679	TP640
D pth (m)	1 20	2 20	0 60	1 80	1 40	0 80	0 50	0 30
H dst nd g tS rf e (Y/N)								

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5-T	mg/kg
2 4 D	mg/kg
Chloro-o-t lyl xyacet c acid	mg/kg
D camba	mg/kg
Dichlo op op	mg/kg
Me prop	mg/kg
Si e	mg/kg

TRIAZINES

Altraz ne	mg/kg
S maz n	mg/kg

PCB

PCB Congeø 28	mg/kg
PCB Co g e 52	mg/kg
PCB Co ge ør 101	mg/kg
PCB Co g r 118	mg/kg
PCB Co ge ø 138	mg/kg
PCB Co gen 153	mg/kg
PCB Co gene 180	mg/kg

Total PCB	mg/kg
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ALCOHOLS

B t ol	mg/kg
Ethanol	mg/kg
Ethylen Glycol	mg/kg
M th n l	mg/kg
P opa 1-ol	mg/kg
Pr pan 2-ol	mg/kg

MISCELLANEOUS

Calo fc V l e	Cal/g
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Si e	mg/kg
T	mg/kg

1 2 D chl rop op e	mg/kg
1 3-D chl roprop e	mg/kg
2 4-D nitrophenol	mg/kg
A t ne	mg/kg
Carbazole	mg/kg
C rbon d lph de	mg/kg
C osote (TPH by GCFID)	mg/kg
Cyclohe ane	mg/kg
Cycl hexanon	mg/kg
Hexachlorocyclopentad e	mg/kg
Hydroqu non	mg/kg
N Nitro od phe ylam ne	mg/kg
p-Chloroa il ne	mg/kg
P emeth n/Cyp rmeth n	mg/kg
Pyndine	mg/kg
Styrene	mg/kg
S lph l e	mg/kg
T luen Extractable Matte (H to c)	mg/kg
Toxaphe e	mg/kg
T butyl Tin	mg/kg
Tnchloromethane	mg/kg
Vnyl Acetate	mg/kg

CONCRETE

Chl nde BS1377 Part 3 includ ng preparato	mg/kg
HAC (Rapid determ ati of H gh Al m a Cem	mg/kg
M Proporu s-Cement/Aggregate Ratio-BS188	mg/kg

Notes

- B nzo(b)fluoranthene & Benz (k)fluora the co-elute (reported as m)
- ²D benzo(a h)a thrace e & l deno(1,2 3-cd)pyren co-elute (report d as sum)
- l uffici t sampl

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D t S mpl d						R68572	
L b R f N		179792	182270	182271	182272	182273	AQC
C tom Ref N							Lab Std
S mpl Typ		ES	ES	ES	ES	ES	
T i P t / Bo hol N		TP660	TP669	TP691	TP714	TP726	
D pth (m)		0.90	2.60	0.32	2.30	2.28	
H d t d g t S rf (Y/N)							
pH	Valu	8.1	7.5	7.4	7.5	7.9	7.5
/ Lo o lgn to	/						
/ M st	/						
/ St e	%						
Asbestos	/	0.001	0.001	0.001	0.001	0.001	
PHENOLICS							
B tyl Phenols	mg/kg		0.5	0.5	0.5	0.5	
Cat ch l	mg/kg		0.5	0.5	0.5	0.5	
C esols (sum)	mg/kg		0.5	0.5	0.5	0.5	
Naphthols	mg/kg		0.5	0.5	0.5	0.5	
Ph ol	mg/kg		0.5	0.5	0.5	0.5	
Re orc n l	mg/kg		0.5	0.5	0.5	0.5	
T m thylph nol	mg/kg		0.5	0.5	0.5	0.5	
Xylenols & Ethylphenols	mg/kg		0.5	0.5	0.5	0.5	
Total Ph nol	mg/kg		<0.5	0.5	0.5	0.5	0.302
US EPA PRIORITY PAH s							
Ace aphythene	mg/kg	0.5	0.5	0.5	0.5	0.5	
A phtyle	mg/kg	0.5	0.5	0.5	0.5	0.5	
Anthra e e	mg/kg	0.5	0.5	0.5	0.5	0.5	
B n o(a)Anth a en	mg/kg	0.5	0.5	3.6	0.5	0.5	
Benzo(a)pyrene	mg/kg	0.5	0.5	0.5	0.5	0.5	
B (b)fl ra the e	mg/kg						
Benzo(k)fluora ithene	mg/kg	0.5	0.5	4.8	0.5	0.5	
Benzo(g h)peryle	mg/kg	0.5	0.5	<0.5	0.5	0.5	
Chryse e	mg/kg	0.5	0.5	4.0	0.5	0.5	
D -benzo(a h)anthracen	mg/kg						
l d o(1 2 3-cd)pyre e	mg/kg	0.5	0.5	0.5	0.5	0.5	
Fl ra th e e	mg/kg	0.5	0.5	14.3	0.5	0.5	
Fluo e e	mg/kg	0.5	0.5	0.5	0.5	0.5	
Naphthale	mg/kg	0.5	0.5	0.5	0.5	0.5	
Ph th e e	mg/kg	0.5	0.5	15.5	0.5	0.5	
Pyre	mg/kg	0.5	0.5	10.0	0.5	0.5	
Total US EPA 16 PAH	mg/kg	<0.5	0.5	52.2	0.5	0.5	4610.5
OTHER PAH							
Antha thr n	mg/kg						
B zo(e)pyrene	mg/kg						
Cyclop ta(cd)pyren	mg/kg						
GENERAL INORGANICS							
C mple Cyan d	mg/kg						
Easly L b atable Cya d (fee)	mg/kg						
Th ocya te	mg/kg						
Total Cya de	mg/kg	1.0	1	1.0	1	1	2.1
S lph de	mg/kg		32.2	6.3	<2	2	0.7
S lph r (free)	mg/kg	20	1480	190	70	70	460
Total S lph ate	mg/kg	300	100	100	100	200	6400
W te S luble S lph ate	mg/kg						436
W t Sol bl Chlond	mg/kg						
Ph phat	mg/kg						
Ex hangeable Ammon m	mg/kg	12.8	19.9	21.1	6.4	13.4	142.0
N trate	mg/kg						
Nitrite	mg/kg						

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D t Sampled						R68572
L b R f No	179792	182270	182271	182272	182273	AQC
C o r m R f No						Lab Std
S m p l T y p	ES	ES	ES	ES	ES	
T i P l / B o h l N	TP660	TP669	TP691	TP714	TP726	
D p t h (m)	0.90	2.60	0.32	2.30	2.28	
H d t d g t S r f (Y/N)						

HEAVY METALS/METALLOIDS

Element	Unit	179792	182270	182271	182272	182273	Lab Std
Al m i u m	mg/kg						
A n t i m o n y	mg/kg						
A s e c	mg/kg	17.0	26.5	44.5	58.2	49.2	19.4
B a r i u m	mg/kg						
B e r y l l i u m	mg/kg						
B o (W a t e r S o l u b l e)	mg/kg	1.7	4.5	0.7	1.4	1.1	2.4
C a d m i u m	mg/kg	0.6	0.8	1.5	1.8	2.3	2.0
C h r o m i u m (T o t a l)	mg/kg	51	37	76	34	30	227
C h r o m i u m (H e x a v a l e n t)	mg/kg	2		<2	2	2	10
C o b a l t	mg/kg						
C o p p e r	mg/kg	16	54	336	1200	339	73
G a l l i u m	mg/kg						
L e a d	mg/kg	37	105	487	755	498	163
M e r c u r y	mg/kg	<0.5	4.9	1.1	0.5	1.4	2.1
M o n o c o b a l t	mg/kg						
N i c k e l	mg/kg	38	32	92	108	78	35
S e l e n i u m	mg/kg	0.5	0.9	2.6	3.3	4.4	1.6
V a n a d i u m	mg/kg						
Z i n c	mg/kg	117	217	499	800	720	130

ESSENTIAL ELEMENTS

Element	Unit
C a l c i u m	mg/kg
I r o n	mg/kg
M a g n e s i u m	mg/kg
M a n g a n e s e	mg/kg
P h o s p h o r u s	mg/kg
S o d i u m	mg/kg

MONOAROMATICS

Compound	Unit
B e n z e n e	mg/kg
T o l u e n e	mg/kg
E t h y l b e n z e n e	mg/kg
M e t h y l & P a r a X y l e n e	mg/kg
O r t h o X y l e n e	mg/kg
T e r t i a r y X y l e n e s	mg/kg
M T B E	mg/kg
1,2,4-T m e t h y l b e n z e n e	mg/kg
1,3,5-T m e t h y l b e n z e n e	mg/kg

TOTAL HYDROCARBONS

Method	Unit	179792	182270	182271	182272	182273
P e t r o l e u m R a n g e O r g a n i c s (C - C)	mg/kg		5	5	5	5
D e s e l R a n g e O r g a n i c s (C - C ₂₆)	mg/kg		5	98	5	26
H y d r o c a r b o n S c r e e n (G C - F I D)	mg/kg		5	153	5	52

VOC

Compound	Unit
1,1,1-T r i c h l o r o e t h a n e	mg/kg
1,1,2-T e t r a c h l o r o e t h a n e	mg/kg
1,1,2-T r i c h l o r o - 1,2,2-t r i f l u o r o e t h a n e	mg/kg
1,1,2-T r i c h l o r o e t h a n e	mg/kg
1,1-D i c h l o r o e t h a n e	mg/kg
1,1-D c h l o r o e t h a n e	mg/kg
1,2,3-T r i c h l o r o p r o p a n e	mg/kg
1,2,3-T r i m e t h y l b e n z e n e	mg/kg
1,2,4-T r i c h l o r o b e n z e n e	mg/kg
1,2,4-T r i m e t h y l b e n z e n e	mg/kg
1,2-D i b r o m o - 3-C h l o r o p r o p a n e	mg/kg
1,2-D c h l o r o b e n z e n e	mg/kg
1,2-D c h l o r o e t h a n e	mg/kg
1,2-D c h l o r o p r o p a n e	mg/kg
1,2-D c h l o r o p r o p e n e	mg/kg
1,3,5-T m e t h y l b e n z e n e	mg/kg
1,3-D c h l o r o b e n z e n e	mg/kg

D t S mpl d	179792	182270	182271	182272	182273	R68572
L b R f No						AQC
C st m R f No						Lab Std
S mpl Typ	ES	ES	ES	ES	ES	
Tri l P t / Bo h l No	TP660	TP669	TP691	TP714	TP726	
D pth (m)	0 90	2 60	0 32	2 30	2 28	
H d t d g t S rfa (Y/N)						
1 3 D hl p opane						mg/kg
1 4 D chl benz e						mg/kg
1 Chl ot l						mg/kg
1 M thylpropylb nz e						mg/kg
2 2 D chl op op ne						mg/kg
2 Chl t l						mg/kg
B						mg/kg
B m b nze						mg/kg
B om chlo om th						mg/kg
B m d hlo om th e						mg/kg
B m form						mg/kg
C bo Tetrachl d (PCM)						mg/kg
Chl ob nze e (s m)						mg/kg
Chl od b om m tha						mg/kg
Chl etha						mg/kg
Chl rof rm						mg/kg
ci 1 2 D hloro thyl n						mg/kg
c 1 3 D chl rop p n						mg/kg
Dibrom chl rometh						mg/kg
D b omoe th e						mg/kg
D b mom th ne						mg/kg
D chlo obenz						mg/kg
D hl romethane						mg/kg
Ethylb nz						mg/kg
H achl r b tad e e						mg/kg
m la & p ra Xyl e						mg/kg
M thyl p opylbe zene						mg/kg
M hlo ob nz						mg/kg
Mo ochl roph i (um)						mg/kg
B tyib						mg/kg
n P pylb nze						mg/kg
rth Xyl						mg/kg
Styr						mg/kg
tert B tyib						mg/kg
T tra hlorobe						mg/kg
T trachi roethene (PCE)						mg/kg
Tet ahyd fura						mg/kg
T l e						mg/kg
tra 1 2 Dichlo oethe						mg/kg
tra 1 3-d chlo prope e						mg/kg
Trnchlo eth e (TCE)						mg/kg
T hl ofl o m th						mg/kg
Trnchlorometha e						mg/kg
V yl Chlo d						mg/kg
SVOC						
1 2 4-T chl benz ne						mg/kg
1 4-D chlorob z						mg/kg
2 3 4 6-Tetr chl oph ol (s m)						mg/kg
2 4 5-T chlorophe ol						mg/kg
2 4 6-T hlo ph nol						mg/kg
2 4-D chl rophenol (s m)						mg/kg
2 4-D m thylphe ol						mg/kg
2 4-D trolue e						mg/kg
2 6-D methylphenol						mg/kg
2 6-D n trol e						mg/kg
2 Chloron phthale						mg/kg
2-Chlo ophe ol (s m)						mg/kg
2 Methylphenol						mg/kg
2 N trophe ol						mg/kg
4-Chloro-3-methylphe ol						mg/kg
4-chlo ben ylph nyl the						mg/kg
4-Methylph l						mg/kg
4-N trophe ol						mg/kg
Azobenz						mg/kg
b (2 chloroethyl) ther						mg/kg

D t S mpl d	179792	182270	182271	182272	182273	R68572
L b R f No						AQC
C tom R f No						Lab Std
S mpl Type	ES	ES	ES	ES	ES	
Tr l Prt / Bo hol N	TP660	TP669	TP691	TP714	TP726	
D pth (m)	0.90	2.60	0.32	2.30	2.28	
H d ta d ng t Surf (Y/N)						

b s(2 chloro thyoxy)m th	mg/kg
b s(chloro is p pyl)ethe	mg/kg
Bromophe ylphenyl th	mg/kg
H chl ro 1 3 butad	mg/kg
H achl robenz e	mg/kg
He chloro tha	mg/kg
l ph o e	mg/kg
Nitrobenz e	mg/kg
t sod propyl 1 p p am n	mg/kg
Pentachloroben ene	mg/kg
P ta hl phe ol	mg/kg

B s(2 ethylne yl)phth lat	mg/kg
Butylbe zylphth late	mg/kg
D thylphth l te	mg/kg
D m thylphth l t	mg/kg
D b tylphthalate	mg/kg
D octyl phthal t	mg/kg

Total Phthalat mg/kg

ORGANO CHLORINE PESTICIDES

Ald	mg/kg
Bet HCH (B ta BHC)	mg/kg
Chlorda e	mg/kg
DDD	mg/kg
Deld n	mg/kg
D ns (total)	mg/kg
E d lf l	mg/kg
E d s lfa ll	mg/kg
End s lfan S lph t	mg/kg
End	mg/kg
End E d Aldehyde	mg/kg
G mm HCH (L da)	mg/kg
H plachl	mg/kg
H pla hlo p d	mg/kg
H pla hl obe z	mg/kg
M tho ychl	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Az ph m thyl	mg/kg
Demet methyl	mg/kg
D az o	mg/kg
D chl rv	mg/kg
D th	mg/kg
D lfoto	mg/kg
EPN Eth o	mg/kg
M l th o	mg/kg
M thyl P rath on	mg/kg
Parath n	mg/kg
Terb f	mg/kg

CARBAMATE (P st d)

Carbaryl	mg/kg
C rbof ra	mg/kg
Maneb	mg/kg

PHENOL UREA HERBICIDES

Chl t l on	mg/kg
D o	mg/kg
Isoproturo	mg/kg
L uro	mg/kg

D t Sampled	179792	182270	182271	182272	182273	R68572
Lab Ref No						AQC
Contract Ref N						Lab Std
Sample Type	ES	ES	ES	ES	ES	
Tri Pit / Borehole N	TP660	TP669	TP691	TP714	TP726	
Depth (m)	0.90	2.60	0.32	2.30	2.28	
Height of Sample at Surface (Y/N)						

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chloro-o-toloxycetic acid	mg/kg
Dicamba	mg/kg
Dichloroprop	mg/kg
Mecoprop	mg/kg
Sil	mg/kg

TRIAZINES

Atrazine	mg/kg
Simazine	mg/kg

PCB

PCB Congener 28	mg/kg
PCB Congener 52	mg/kg
PCB Congener 101	mg/kg
PCB Congener 118	mg/kg
PCB Congener 138	mg/kg
PCB Congener 153	mg/kg
PCB Congener 180	mg/kg

Total PCB	mg/kg
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ALCOHOLS

Benzanol	mg/kg
Ethanol	mg/kg
Ethyl Glycol	mg/kg
Methanol	mg/kg
Propan-1-ol	mg/kg
Propan-2-ol	mg/kg

MISCELLANEOUS

Calofolicol	mg/kg
Silica	mg/kg
Tar	mg/kg

1,2-Dichloropropane	mg/kg
1,3-Dichloropropane	mg/kg
2,4-Dinitrophenol	mg/kg
Acetone	mg/kg
Carbazole	mg/kg
Carbonyl sulphide	mg/kg
Cresol (TPH by GCFID)	mg/kg
Cyclohexane	mg/kg
Cyclohexane	mg/kg
Hexachlorocyclopentadiene	mg/kg
Hydroquinone	mg/kg
Nitrosodiphenylamine	mg/kg
p-Chlorophenol	mg/kg
Premethin/Cypermethin	mg/kg
Pyridine	mg/kg
Styrene	mg/kg
Sulpholane	mg/kg
Toluene Extractable Matter (H stone)	mg/kg
Toluene	mg/kg
Tert-butyltin	mg/kg
Trichloromethane	mg/kg
Vinyl Acetate	mg/kg

CONCRETE

Chloride BS1377 Part 3 chloride preparation	mg/kg
HAC (Rapid determination of High Alkaline Content)	mg/kg
Mix Proportion Cement/Aggregate Ratio-BS188	mg/kg

Notes

Benz (b)fluor
-2 D benzo(a h)
insufficient

Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 07/10/03

ANALYTICAL REPORT No R68221

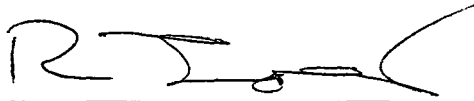
Location Durham Rd Newport

Your Project No F13041

The attached analytical results relate to samples received on 18 Sep 2003

The report is only valid if it contains the total number of pages indicated at the bottom of this page

Checked by



Authorised by



If you have any queries regarding this report please contact Steve Chapman or Steve Knight

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A Division of Norwest Holst Soil Engineering Ltd
Registered in England No 980795
Registered Office Parkside Lane Dewsbury Road Leeds LS11 5SX

Norwest Holst Soil Engineering Ltd
R68221 Durham Rd Newport

D t Sampled	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	Not
Lab Ref N	179503	179504	179505	179506	179507	179508	179509	179510		R e d
C stome Ref No	3	6	9	3	6	9	3	6		3
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES		ES
T 1Prt / B r hol No	TP636C	TP636C	TP636C	TP636D	TP636D	TP636D	TP656C	TP656C		TP656C
D pth (m)	0.35	1.60	2.10	0.90	1.90	2.10	0.20	2.30		0.30
H d ta d ng t S rface (Y/N)										
pH						7.6				
/ L s o l g i t n										
/ M ture										
% St s										
Asbesto										0.001
PHENOLICS										
B tyl Ph ols										
C t ch l										0.5
C sol (m)										0.5
Naphthol										0.5
Ph nol										0.5
Re o c ol										0.5
Tn methylph l										0.5
Xyl nols & Ethylph ols										0.5
Total Ph ols										0.5
US EPA PRIORITY PAH s										
A a phthene										0.5
Ac naphthyle e										0.5
A thace e										0.5
Be zo(a)A th e e										0.5
Be zo(a)py e										0.5
B n (b)fl ora thene										0.5
B nzo(k)fl o th n										0.5
B (g h)peryle e										0.5
Chryse e										0.5
D be o(a h)a th e ⁺²										0.5
Inde (1,2,3-cd)pyre e ⁺²										0.5
Fl o nthene										0.5
Fl o e e										0.5
Naphthale e										0.5
Ph th										0.5
Py e e										0.5
T t l US EPA 16 PAH										0.5
OTHER PAH										
A th th										mg/kg
B zo()py e e										mg/kg
Cyclope t (d)py e										mg/kg
GENERAL INORGANICS										
Compl Cya de										mg/kg
Eas ly Lliberatable Cya d (f ee)										mg/kg
Th ocyate										mg/kg
Total Cyan de										1
Sulph de										17.5
S lph (fre)										30
Total S lphate										100
W te Sol bl S lphat										mg/kg
W t S l ble Chlo d										mg/kg
Phosphate										mg/kg
E changeable Ammon m										5
N trate										mg/kg
N trit										mg/kg

Norwest Holst Soil Engineering Ltd
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D t S mpl d	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	N t
L b R f No	179503	179504	179505	179506	179507	179508	179509	179510	179510	R d
C t m R f No	3	6	9	3	6	9	3	6	6	3
Sampl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
T al Pt /Bo eh l No	TP636C	TP636C	TP636C	TP636D	TP636D	TP636D	TP656C	TP656C	TP656C	TP656C
Depth (m)	0.35	1.60	2.10	0.90	1.90	2.10	0.20	2.30	2.30	0.30
H d t d g t S r f (Y/N)										

HEAVY METALS/METALLOIDS

Al m m	mg/kg	
Antimo y	mg/kg	
Ars	mg/kg	39.1
Ban m	mg/kg	
B ryl m	mg/kg	
Boro (Wate S l ble)	mg/kg	2.2
C dm m	mg/kg	2.4
Ch om m (Total)	mg/kg	37
Ch om m (H a al t)	mg/kg	
Cob lt	mg/kg	
C pp	mg/kg	266
Germa m	mg/kg	
Lead	mg/kg	377
Me ry	mg/kg	5.2
M lybd m	mg/kg	
Nckel	mg/kg	114
S l m	mg/kg	2.8
Van d m	mg/kg	
Zi c	mg/kg	1611

ESSENTIAL ELEMENTS

C l m	mg/kg	
l o	mg/kg	
Mag e m	mg/kg	
M g s	mg/kg	
Potass m	mg/kg	
Sod m	mg/kg	

MONOAROMATICS

Be	mg/kg	
T l ne	mg/kg	
Ethylb zen	mg/kg	
Meta & Pa a Xyle	mg/kg	
Ortho Xyle e	mg/kg	

Total Xyl	mg/kg	
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MTBE	mg/kg	
1,2,4-T m thylb	mg/kg	
1,3,5-Trimethylb z ne	mg/kg	

TOTAL HYDROCARBONS

P trol m Ra g Org cs (C -C)	mg/kg	
D sel Ra g Orga cs (C -C ₂₅)	mg/kg	
Hyd c rb Sc ee (GC-FID)	mg/kg	

VOC

1,1,1-T hi oeth e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1,2,2-Tetrachloroeth e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1,2-T chloro-1,2,2-tri flu oroethane	mg/kg	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05
1,1,2-T chloroethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1-D hloroetha e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1-Dchl ro then	mg/kg	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2,3-T chloropropa e	mg/kg	0.05	0.05	0.05	0.10	0.05	0.05	0.05	0.05
1,2,3-Trim thylbe zene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2,4-T chlorob en	mg/kg	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05
1,2,4-T methylbenze e	mg/kg	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05
1,2-D bromo-3-Chloropropa e	mg/kg	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2-D chlorobe e e	mg/kg	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2-D chlo th e	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2-Dchl ropropa e	mg/kg	<0.05	0.05	0.05	<0.05	0.05	0.05	<0.05	0.05
1,2-D chlo prop	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,3,5-Trim thylbe zene	mg/kg	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	0.05
1,3-D chl robe ze e	mg/kg	<0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05

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R68221 Durham Rd Newport

	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	7/09/03	Not
Lab Ref N	179503	179504	179505	179506	179507	179508	17 509	179510	Re ce d
C t m R f N	3	6	9	3	6	9	3	6	3
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES
T IP t /Bo h l N	TP636C	TP636C	TP636C	TP636D	TP636D	TP636D	TP656C	TP656C	TP656C
D pth (m)	0.35	1.60	2.10	0.90	1.90	2.10	0.20	2.30	0.30
H d tand g t S rf (Y/N)									

1,3-Dichlorobenzene	mg/kg	0.05	0.05	0.05	0.10	0.05	0.05	0.05	0.05
1,4-Dichlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1-Chlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1-Methylpyrene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
2,2-Dichloropropane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
2-Chlorotoluene	mg/kg	0.05	0.05	0.05	0.30	0.05	0.05	0.05	0.05
Benzene	mg/kg	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05
Bromobenzene	mg/kg	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05
Bromochlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Bromodichloromethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05
Bromofluorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Carb. Tetrachloride (PCM)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Chlorobenzene (m)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Chlorobromomethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Chloroform	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2-Dichloroethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
cis-1,3-Dichloropropene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Dibromochloromethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Dibromoethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Dibromomethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Dichlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Dichloromethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Ethylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Heptachlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
meta & para Xylene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Methyl propylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Monochlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Monochlorobenzene (s m)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Butylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05
Propylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
ortho Xyl	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Styrene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
tert Butylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Tetrahalobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05
Tetrachloroethane (PCE)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Trichlorofluoromethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	<0.05
Toluene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05
trans-1,2-Dichloroethene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
trans-1,3-dichloropropene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Trichloroethene (TCE)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Trichlorofluoromethane	mg/kg	0.05	0.05	0.05	0.05	0.05	<0.05	0.05	0.05
Trichloromethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Vinyl Chloride	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05

SVOC

1,2,4-Trichlorobenzene	mg/kg	
1,4-Dichlorobenzene	mg/kg	
2,3,4,6-Tetrachlorophenol (s m)	mg/kg	
2,4,5-Trichlorophenol	mg/kg	
2,4,6-Trichlorophenol	mg/kg	
2,4-Dichlorophenol (m)	mg/kg	
2,4-Dimethylphenol	mg/kg	
2,4-Dinitrophenol	mg/kg	
2,6-Dimethylphenol	mg/kg	
2,6-Dinitrophenol	mg/kg	
2-Chloronaphthalene	mg/kg	
2-Chlorophenol (sum)	mg/kg	
2-Methylphenol	mg/kg	
2-Nitrophenol	mg/kg	
4-Chloro-3-methylphenol	mg/kg	
4-chlorobenzophenone	mg/kg	
4-Methylphenol	mg/kg	
4-Nitrophenol	mg/kg	
Azobenzene	mg/kg	
bis(2-chlorophenyl)ethane	mg/kg	

Norwest Holst Soil Engineering Ltd
R68221 Durham Rd Newport

D te S mpl d	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	N t
Lab R f N	179503	179504	179505	179506	179507	179508	179509	179510	Rece d
C t m R f N	3	6	9	3	6	9	3	6	3
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES
T IPit / B ehof N	TP636C	TP636C	TP636C	TP636D	TP636D	TP636D	TP656C	TP656C	TP656C
D pth (m)	0.35	1.60	2.10	0.90	1.90	2.10	0.20	2.30	0.30
H d t d g t S rf (Y/N)									

b s(2-chlo oethyo y)m tha e	mg/kg
b s(chl p pyl) ih	mg/kg
Bromophe yph ylethe	mg/kg
He achloro-1 3-b tade e	mg/kg
He a hlo b z	mg/kg
He hlo etha	mg/kg
is ph ro e	mg/kg
N trobe ze	mg/kg
tro od p opyl 1 prop am e	mg/kg
Pe tachlorobe ze	mg/kg
Pe tachi ophe ol	mg/kg

B s(2-ethylhe yl)phthalat	mg/kg
Butylbe zylphthal t	mg/kg
D thyphth lat	mg/kg
D m thyphthai te	mg/kg
D butylphth l te	mg/kg
D -n-octyl phthalate	mg/kg

Total Phthalates	mg/kg
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ORGANO CHLORINE PESTICIDES

Aldri	mg/kg
Beta-HCH (Beta BHC)	mg/kg
Chi dan	mg/kg
DDD	mg/kg
D eldn	mg/kg
Dn s (total)	mg/kg
E dos ifa I	mg/kg
Endos ifan II	mg/kg
E dosuff n S iph te	mg/kg
E d	mg/kg
E d n E d Ald hyde	mg/kg
Gamma HCH (Li da)	mg/kg
H pta hl	mg/kg
Heptachi p xde	mg/kg
H pt chi ob ene	mg/kg
M th ychl	mg/kg
pp-DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azi phos m thyl	mg/kg
D m to m thyl	mg/kg
D azi o	mg/kg
D chlorvo	mg/kg
D o ath o	mg/kg
D ifoton	mg/kg
EPN Eth o	mg/kg
Malathion	mg/kg
Methyl P rath	mg/kg
Parathio	mg/kg
Terbufos	mg/kg

CARBAMATE (P tu d)

Carbaryl	mg/kg
Carbofuran	mg/kg
Ma eb	mg/kg

PHENOL UREA HERBICIDES

Chlorotoluron	mg/kg
D ron	mg/kg
Isop turo	mg/kg
L ro	mg/kg

D t S mpl d	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	Not
Lab R f No	179503	179504	179505	179506	179507	179508	179509	179510		R ce ed
C t m R f No	3	6	9	3	6	9	3	6		3
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES		ES
T l P t / B hol No	TP636C	TP636C	TP636C	TP636D	TP636D	TP636D	TP656C	TP656C		TP656C
D pth (m)	0.35	1.60	2.10	0.90	1.90	2.10	0.20	2.30		0.30
H dsta d g t S rf (Y/N)										

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chloro-o-tolylloxy acetic acid	mg/kg
Decamba	mg/kg
Dichloroprop	mg/kg
Mecoprop	mg/kg
Sin	mg/kg

TRIAZINES

Altrazine	mg/kg
Simazine	mg/kg

PCB

PCB Congener 28	mg/kg
PCB Congener 52	mg/kg
PCB Congener 101	mg/kg
PCB Congener 118	mg/kg
PCB Congener 138	mg/kg
PCB Congener 153	mg/kg
PCB Congener 180	mg/kg

Total PCB	mg/kg
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ALCOHOLS

Benzal	mg/kg
Ethanol	mg/kg
Ethylglycol	mg/kg
Methanol	mg/kg
Propyl	mg/kg
Propyl-2-ol	mg/kg

MISCELLANEOUS

Chloroform	mg/kg
Sin	mg/kg
Toluene	mg/kg

1,2-Dichloropropane	mg/kg
1,3-Dichloropropane	mg/kg
2,4-Dichlorophenol	mg/kg
Acetone	mg/kg
Carbazole	mg/kg
Chlorobenzene	mg/kg
Ceoxone (TPH by GCFID)	mg/kg
Cyclohexane	mg/kg
Cyclohexanone	mg/kg
Hexachlorocyclopentadiene	mg/kg
Hydroquinone	mg/kg
N-Nitrophenylamine	mg/kg
p-Chloroaniline	mg/kg
Pyridine	mg/kg
Styrene	mg/kg
Sulfolane	mg/kg
Total Extractable Matter (Historic)	mg/kg
Toluene	mg/kg
Trinitrotoluene	mg/kg
Trichloromethane	mg/kg
Vinyl Acetate	mg/kg

CONCRETE

Chloride BS1377 Part 3 chloride to paste ratio	mg/kg
HAC (Ratio determination of High Alkaline Cement)	mg/kg
Mix Proportions-Cement/Aggregate Ratio-BS188	mg/kg

Organic Matter

4

6.5

Notes

- Benzobifluoranthene & Benzo(k)fluoranthene (reported as sum)
- Di-benzofluoranthene & Indeno(1,2,3-cd)pyrene co-eluted as sum in sufficient sample for analysis
- ** Labelled as 668

Norwest Holst Soil Engineering Ltd
R68221 Durham Rd Newport

Lab Ref No	Not R e d	Not R ce ed	N t R i d	Not R ce ed	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03
C t m R f N	6	9	12	15	3	6	9	3	6
Sample Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tri / Pit / Bo eh / No	TP656C	TP656C	TP656C	TP656C	TP716	TP716	TP716	TP717	TP717
D pth (m)	0.60	1.60	2.60	3.60	0.20	0.40	1.40	0.30	1.40
H d ta d g t S rf e (Y/N)									
pH		Val					8.2		
/ L ss o lgnito		/							
/ Moisture		/							
/ Stones		/							
Asb t s		/					0.001		
PHENOLICS									
B tyl Phe ols		mg/kg							
Cat ch l		mg/kg					0.5		
C ls (s m)		mg/kg					22.2		
Naphthols		mg/kg					0.5		
Ph ol		mg/kg					1.0		
Res c l		mg/kg					0.5		
Tnmethylphe ol		mg/kg					0.5		
Xyle ol & Ethylph ols		mg/kg					0.5		
Total Ph ols		mg/kg					0.5		
US EPA PRIORITY PAH									
Ace aphen		mg/kg					0.5		
Ace phthyle e		mg/kg					0.5		
Anthra n		mg/kg					0.5		
B z ()A thra ne		mg/kg					0.5		
B nzo(a)py ne		mg/kg					0.5		
Be z (b)fl ora th		mg/kg							
Be zo(k)fl o a th ne		mg/kg					0.5		
Benz (g h)p ryle		mg/kg					0.5		
Chry e e		mg/kg					0.5		
D b (a h) thra e ⁺²		mg/kg							
I de o(1 2 3-cd)py e e ⁺²		mg/kg					0.5		
Fl o th		mg/kg					0.5		
Fl ore		mg/kg					0.5		
N phth le e		mg/kg					<0.5		
Ph thre e		mg/kg					0.5		
Pyre e		mg/kg					0.5		
Total US EPA 16 PAH		mg/kg					0.5		
OTHER PAH									
A th nth e e		mg/kg							
Be o(e)pyr e		mg/kg							
Cy lop nta(cd)pyre e		mg/kg							
GENERAL INORGANICS									
Complex Cya de		mg/kg							
E ly L be atable Cy de (fee)		mg/kg							
Th cya ate		mg/kg							
Total Cya d		mg/kg					1		
S lph d		mg/kg					2.1		
S lph (free)		mg/kg					110		
Tot l S lphate		mg/kg					200		
Wate Sol bl S lphate		mg/kg							
Water Sol ble Chlo de		mg/kg							
Ph sphate		mg/kg							
E cha g able Ammon m		mg/kg					5		
N itrate		mg/kg							
N itrite		mg/kg							

Norwest Hoist Soil Engineering Ltd
R68221 Durham Rd Newport

D i S m p l d	N t	N t	N t	N t	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03
L b Ref N	Rece ed	R ce d	Re d	R c d	179516	179517	179518	179519	179520
C t m Ref N	6	9	12	15	3	6	9	3	6
S m p l e Type	ES	ES	ES	ES	ES	ES	ES	ES	ES
T a l P l t / B e h o l e N o	TP656C	TP656C	TP656C	TP656C	TP716	TP716	TP716	TP7 7	TP717
D p t h (m)	0.60	1.60	2.60	3.60	0.20	0.40	1.40	0.30	1.40
Hard t n d g t Surf (Y/N)									

HEAVY METALS/METALLOIDS

Al m m	mg/kg								
A m n y	mg/kg								
A r s c	mg/kg						22.3		
B m	mg/kg								
B e r y l l m	mg/kg								
B o r o n (W a t e r S o l u b l e)	mg/kg						0.8		
C a d m m	mg/kg						1.5		
C h r o m m (T o t a l)	mg/kg						33		
C h r o m m (H e a v y M e t a l)	mg/kg								
C o b a l t	mg/kg								
C o p p e r	mg/kg						96		
G e r m a n i u m	mg/kg								
L e a d	mg/kg						160		
M e c u r y	mg/kg						0.6		
M o l y b d e n u m	mg/kg								
N i c k e l	mg/kg						37		
S i n c e r e	mg/kg						1.6		
V a n a d i u m	mg/kg								
Z i n c	mg/kg						202		

ESSENTIAL ELEMENTS

Calc i u m	mg/kg								
I r o n	mg/kg								
M a g n e s i u m	mg/kg								
M a n g a n e s e	mg/kg								
P h o s p h o r u s	mg/kg								
S o d i u m	mg/kg								

MONOAROMATICS

B e n z e n e	mg/kg								
T o l u e n e	mg/kg								
E t h y l b e n z e n e	mg/kg								
M e t a & P a r a X y l e n e	mg/kg								
O r t h o X y l e n e	mg/kg								

T e r t i a r y X y l e n e	mg/kg								
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M T B E	mg/kg								
1,2,4 T r i m e t h y l b e n z e n e	mg/kg								
1,3,5 T r i m e t h y l b e n z e n e	mg/kg								

TOTAL HYDROCARBONS

P e t r o l e u m R e s i d u e O r g a n i c s (C ₆ -C ₂₆)	mg/kg								
D e s e l R a g O r g a n i c s (C ₆ -C ₂₆)	mg/kg								
H y d r o c a r b o n S c r e e n (GC FID)	mg/kg								

VOC

1,1,1 T r i c h l o e t h a n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1,2 T e t r a c h l o e t h a n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	<0.05
1,1,2 T r i c h l o o-1,2,2 t r i f l u o r o e t h a n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1,2 T r i c h l o t h a n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1 D i c h l o r o e t h a n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1 D i c h l o e t h a n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2,3 T r i c h l o p r o p a n e	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05
1,2,3 T r i m e t h y l b e n z e n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	<0.05
1,2,4 T e t r a c h l o r o b e n z e n e	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2,4 T r i m e t h y l b e n z e n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2 D i b r o m o-3 C h l o r o p r o p a n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2 D i c h l o b e n z e n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2 D i c h l o e t h a n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2 D i c h l o p r o p a n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2 D i c h l o r o p e n e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,3,5 T r i m e t h y l b e n z e n e	mg/kg	<0.05	<0.05	0.05	0.05	0.05	0.05	0.05	<0.05
1,3-D i c h l o r o b e n z e n e	mg/kg	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05

Norwest Holst Soil Engineering Ltd
R68221 Durham Rd Newport

Dat Sampl d	Not	Not	N t	Not	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03
L b R f No	Re d	R c d	Re ed	Rece d	179516	179517	179518	179519	179520
C t m r Ref N	6	9	12	15	3	6	9	3	6
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES
Triaf P t / B ehole No	TP656C	TP656C	TP656C	TP656C	TP716	TP716	TP716	TP717	TP717
D pth (m)	0.60	1.60	2.60	3.60	0.20	0.40	1.40	0.30	1.40
Hard ta d g at Surf ce (Y/N)									

1,3-Dichloropropane	mg/kg				0.05	0.05	0.05	0.05	0.05
1,4-Dichlorobenzene	mg/kg				0.05	0.05	0.05	0.05	0.05
1-Chlorotoluene	mg/kg				0.05	0.05	0.05	0.05	0.05
1-Methylpropylbenzene	mg/kg				0.05	0.05	0.05	0.05	0.05
2,2-Dichloropropane	mg/kg				0.05	0.05	0.05	0.05	0.05
2-Chlorotoluene	mg/kg				0.05	0.05	0.05	0.05	0.05
Benzene	mg/kg				0.05	0.05	0.05	0.05	0.05
Bromobenzene	mg/kg				0.05	0.05	0.05	0.05	0.05
Bromochloromethane	mg/kg				0.05	0.05	0.05	0.05	0.05
Bromodichloromethane	mg/kg				0.05	0.05	0.05	0.05	0.05
Bromofluoromethane	mg/kg				0.05	0.05	0.05	0.05	0.05
Carbontetrachloride (PCM)	mg/kg				0.05	0.05	0.05	0.05	0.05
Chlorobenzene (s.m.)	mg/kg				0.05	0.05	0.05	0.05	0.05
Chlorobromomethane	mg/kg				0.05	0.05	0.05	0.05	0.05
Chloroethane	mg/kg				0.05	<0.05	0.05	0.05	0.05
Chloroform	mg/kg				0.05	0.05	0.05	0.05	0.05
1,1,2-Dichloroethane	mg/kg				0.05	0.05	0.05	0.05	0.05
1,1,1-Trichloroethane	mg/kg				0.05	0.05	0.05	0.05	0.05
Dibromochloromethane	mg/kg				0.05	0.05	0.05	0.05	0.05
Dibromoethane	mg/kg				0.05	0.05	0.05	0.05	0.05
Dibromomethane	mg/kg				0.05	0.05	0.05	0.05	0.05
Dichlorobenzene	mg/kg				0.05	0.05	0.05	0.05	0.05
Dichloromethane	mg/kg				0.05	0.05	0.05	0.05	0.05
Ethylbenzene	mg/kg				0.05	0.05	0.05	0.05	0.05
Heptachlorobenzene	mg/kg				0.05	0.05	0.05	0.05	0.05
meta- and para-Xylene	mg/kg				0.05	0.05	0.05	0.05	0.05
Methylisopropylbenzene	mg/kg				0.05	0.05	0.05	0.05	0.05
Monochlorobenzene	mg/kg				0.05	0.05	0.05	0.05	0.05
Monoisopropylbenzene (s.m.)	mg/kg				0.05	0.05	0.05	0.05	0.05
n-Butylbenzene	mg/kg				0.05	0.05	0.05	0.05	0.05
n-Propylbenzene	mg/kg				0.05	0.05	0.05	0.05	<0.05
o-Xylene	mg/kg				0.05	0.05	0.05	0.05	0.05
Styrene	mg/kg				0.05	0.05	0.05	0.05	0.05
tert-Butylbenzene	mg/kg				0.05	0.05	0.05	0.05	0.05
Tetrachlorobenzene	mg/kg				0.05	0.05	0.05	0.05	0.05
Trichloroethylene (PCE)	mg/kg				0.05	0.05	0.05	0.05	0.05
Tetrahydrofuran	mg/kg				0.05	0.05	0.05	0.05	0.05
Toluene	mg/kg				0.05	0.05	0.05	0.05	0.05
trans-1,2-Dichloroethene	mg/kg				0.05	0.05	0.05	0.05	0.05
trans-1,3-Dichloropropene	mg/kg				0.05	0.05	0.05	0.05	0.05
Trichloroethylene (TCE)	mg/kg				0.05	0.05	0.05	0.05	0.05
Trichloromethane	mg/kg				0.05	0.05	0.05	0.05	0.05
Trichloroethane	mg/kg				0.05	0.05	0.05	0.05	0.05
Vinyl Chloride	mg/kg				0.05	0.05	0.05	0.05	0.05

SVOC

1,2,4-Trichlorobenzene	mg/kg
1,4-Dichlorobenzene	mg/kg
2,3,4,6-Tetrachlorophenol (s.m.)	mg/kg
2,4,5-Trichlorophenol	mg/kg
2,4,6-Trichlorophenol	mg/kg
2,4-Dichlorophenol (s.m.)	mg/kg
2,4-Dimethylphenol	mg/kg
2,4-Dinitrophenol	mg/kg
2,6-Dimethylphenol	mg/kg
2,6-Dinitrophenol	mg/kg
2-Chlorophthalate	mg/kg
2-Chlorophenol (s.m.)	mg/kg
2-Methylphenol	mg/kg
2-Nitrophenol	mg/kg
4-Chloro-3-methylphenol	mg/kg
4-Chlorobenzylphenylether	mg/kg
4-Methylphenol	mg/kg
4-Nitrophenol	mg/kg
Azobenzene	mg/kg
bis(2-chloroethyl)ether	mg/kg

D t e Sampl d	Not	N t	Not	Not	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03
Lab R f No	R ed	R ce d	R ce d	R c d	179516	179517	179518	179519	179520
C tom R f N	6	9	12	15	3	6	9	3	6
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES
T l Pit / B eth le No	TP656C	TP656C	TP656C	TP656C	TP716	TP716	TP716	TP717	TP717
D pth (m)	0 60	1 60	2 60	3 60	0 20	0 40	1 40	0 30	1 40
H dsta d g t Surf c (Y/N)									

bs(2-chloro thyl ylm thane	mg/kg
bs(hl o s p pyl)eth	mg/kg
B omophenylphenyl the	mg/kg
He chloro-1,3-butad n	mg/kg
H x hl obenzene	mg/kg
Hex chlo etha	mg/kg
Isophor ne	mg/kg
Nitro b z e	mg/kg
itrosod p o pyl-1 p panam ne	mg/kg
Pe tachio b en	mg/kg
P tachio oph nol	mg/kg

Bs(2-ethylhexyl)phth late	mg/kg
Butylb zylphth l te	mg/kg
D ethylphthal te	mg/kg
D m thyphth late	mg/kg
D -b typhthalate	mg/kg
D -n-octyl phthal t	mg/kg

T tal Phthalates	mg/kg
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ORGANO CHLORINE PESTICIDES

Ald	mg/kg
Beta-HCH (Beta BHC)	mg/kg
Chlo d ne	mg/kg
DDD	mg/kg
D eld	mg/kg
D nns (tot l)	mg/kg
E d s ifan l	mg/kg
E d ifa ll	mg/kg
End if S lph t	mg/kg
E dn	mg/kg
E d E d Ald hyde	mg/kg
G mma HCH (L da)	mg/kg
H ptachi	mg/kg
Hepta hl or epo de	mg/kg
H ptachi ob z e	mg/kg
Methoxy hl	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azi ph s methyl	mg/kg
Dem to s m thyl	mg/kg
D azi o	mg/kg
D chlorvos	mg/kg
Dio tho	mg/kg
Dis ifot	mg/kg
EPN Ethio	mg/kg
Malath	mg/kg
Methyl Pa ath o	mg/kg
Pa ath	mg/kg
T rbu f s	mg/kg

CARBAMATE (P ti id)

C rbaryl	mg/kg
Carbofura	mg/kg
Ma eb	mg/kg

PHENOL UREA HERBICIDES

Chi otoluron	mg/kg
Di	mg/kg
is p tu on	mg/kg
L uro	mg/kg

Det Sample	Not	Not	Not	Not	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03
Laboratory	Revised	Revised	Revised	Revised	179516	179517	179518	179519	179520
Contract Ref No	6	9	12	15	3	6	9	3	6
Sample Type	ES	ES	ES	ES	ES	ES	ES	ES	ES
Trail Pit / Borehole No	TP656C	TP656C	TP656C	TP656C	TP716	TP716	TP716	TP717	TP717
Depth (m)	0.60	1.60	2.60	3.60	0.20	0.40	1.40	0.30	1.40
Holdfasting at Surface (Y/N)									

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chloroxyfluron	mg/kg
Diaminopropionitrile	mg/kg
Dichlorprop	mg/kg
Mecoprop	mg/kg
Sisoxyn	mg/kg

TRIAZINES

Altriazin	mg/kg
Simazine	mg/kg

PCBs

PCB Congener 28	mg/kg
PCB Congener 52	mg/kg
PCB Congener 101	mg/kg
PCB Congener 118	mg/kg
PCB Congener 138	mg/kg
PCB Congener 153	mg/kg
PCB Congener 180	mg/kg
Total PCB	mg/kg

ALCOHOLS

Butan-1-ol	mg/kg
Ethanol	mg/kg
Ethyl Glycol	mg/kg
Methanol	mg/kg
Propan-1-ol	mg/kg
Propan-2-ol	mg/kg

MISCELLANEOUS

Calcium Valerate	Cal/g
Silica	mg/kg
Titanium	mg/kg

1,2-Dichloropropane	mg/kg
1,3-Dichloropropane	mg/kg
2,4-Dinitrophenol	mg/kg
Acetone	mg/kg
Carbon tetrachloride	mg/kg
Carbon disulphide	mg/kg
Creosote (TPH by GCFID)	mg/kg
Cyclohexane	mg/kg
Cyclohexane	mg/kg
Hexachlorocyclopentadiene	mg/kg
Hydroquinone	mg/kg
N-Nitrosodiphenylamine	mg/kg
p-Chloroaniline	mg/kg
Premethrin/Cypermethrin	mg/kg
Pyridine	mg/kg
Styrene	mg/kg
Sulphur	mg/kg
Total Extractable Matter (Histo)	mg/kg
Toluene	mg/kg
Tinbutyltin	mg/kg
Trichloromethane	mg/kg
Vinyl Acetate	mg/kg

CONCRETE

Chloride BS1377 Part 3 chloride preparation	mg/kg
HAC (Rapport de l'Etat de l'Aliminaire Cerr)	mg/kg
Mix Proportions-Cement/Aggregate Ratio-BS188	mg/kg

Organic Matter	%
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37

Notes

- Be zo(b)fluor
- +2 D-be o(a h)
- insufficie ts
- ** Labelled as 6/

	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03
D te S mpl d	179521	179522	179523	179524	179525	179526	179527	179528	179529	
Lab R f No	9	12	3	6	9	12	15	3	6	
C t m Ref N	ES	ES	ES	ES	ES	ES	ES	ES	ES	
S mpl Type	TP717	TP717	TP700	TP700	TP700	TP700	TP700	**TP699	**TP699	
T i l P t / B eh l N	1.80	2.50	0.30	0.60	1.60	2.60	3.60	0.30	0.70	
D pth (m)										
H d tand g at S rf c (Y/N)										

pH	V I	8.3
/ L ss o lg rtio	/	
Moist re	/	
% St s	/	
Asb t	/	0.001

PHENOLICS

B tyl Phe ols	mg/kg	
Cat h l	mg/kg	0.5
C esols (s m)	mg/kg	0.5
Naphthois	mg/kg	0.5
Phe ol	mg/kg	0.5
R so c ol	mg/kg	0.5
T methylphe l	mg/kg	0.5
Xyle ls & Ethylph ol	mg/kg	<0.5
Total Phe l	mg/kg	0.5

US EPA PRIORITY PAH s

A phth e	mg/kg	0.5
A e phthyle	mg/kg	0.5
A th cene	mg/kg	0.5
Be z (a)Anthrace	mg/kg	0.5
B ()pyr	mg/kg	0.5
B (b)fi the	mg/kg	
Be zo(k)fi ra th	mg/kg	0.5
B z (g h)p ryle e	mg/kg	0.5
Chryse e	mg/kg	0.5
D b o(a h)a th ac	mg/kg	
l de o(1 2 3-cd)py e ⁺²	mg/kg	0.5
Fl thene	mg/kg	0.5
Fl	mg/kg	0.5
N phth le	mg/kg	0.5
Ph th e	mg/kg	0.5
Pyre e	mg/kg	0.5
Total US EPA 16 PAH	mg/kg	0.5

OTHER PAH s

A th th e	mg/kg	
B o(e)pyr	mg/kg	
Cycl p ta(d)pyr	mg/kg	

GENERAL INORGANICS

Complex Cya de	mg/kg	
Eas ly L be atable Cya de (f ee)	mg/kg	
Th ocya ate	mg/kg	
T ial Cya de	mg/kg	1
Sulph d	mg/kg	10.9
S lph (f e)	mg/kg	100
Total S lph t	mg/kg	100
W te S l ble Sulph te	mg/kg	
W t Soluble Chl de	mg/kg	
Phosphate	mg/kg	
Exch ge bl Ammon um	mg/kg	12.1
N tr te	mg/kg	
Nitrite	mg/kg	

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D t Sampl d	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03
L b Ref N	179521	179522	179523	179524	179525	179526	179527	179528	179529	179529
C st m R f N	9	12	3	6	9	12	15	3	6	6
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
T 1P t/B r hol N	TP717	TP717	TP700	TP700	TP700	TP700	TP700	**TP699	**TP699	**TP699
D pth (m)	1.80	2.50	0.30	0.60	1.60	2.60	3.60	0.30	0.70	0.70
H d t d gat S rf (Y/N)										

HEAVY METALS/METALLOIDS

Al m m	mg/kg	
A um y	mg/kg	
Ars	mg/kg	13.4
Barum	mg/kg	
Beryll um	mg/kg	
Boron (Wate S l ble)	mg/kg	1.4
C dm m	mg/kg	0.5
Chrom m (Tot l)	mg/kg	39
Ch m m (He al t)	mg/kg	2
C bait	mg/kg	
Coppe	mg/kg	26
Germ m	mg/kg	
Lead	mg/kg	90
M ry	mg/kg	0.5
Molybde m	mg/kg	
N k l	mg/kg	27
Sele m	mg/kg	0.5
Va ad m	mg/kg	
Zi c	mg/kg	431

ESSENTIAL ELEMENTS

Calc m	mg/kg
i	mg/kg
Mag es um	mg/kg
Ma g es	mg/kg
P ta m	mg/kg
S d m	mg/kg

MONOAROMATICS

Benze e	mg/kg
Toi	mg/kg
Ethylb z e	mg/kg
Meta & Pa Xyl	mg/kg
Orth Xyl e	mg/kg

T tal Xyle s

MTBE	mg/kg
1,2,4 T m thylbe z	mg/kg
1,3,5-Trmethylbe zene	mg/kg

TOTAL HYDROCARBONS

P trol m Ra ge Orgæ cs (C ₆ -C ₁₀)	mg/kg	5
Des l Ra ge Organ cs (C ₆ -C ₂₀)	mg/kg	5
Hyd oc rbo Sc e (GC FID)	mg/kg	5

VOC s

1,1,1 T chloroeth e	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1,2,2 Tetrachl ro tha	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1,2 T chl ro-1,2,2 trifi o etha e	mg/kg	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05
1,1,2 T chloro th	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	<0.05
1,1 D chl ro than	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1 D chloroethe e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2,3-Trchlorop pa e	mg/kg	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2,3-T methylb	mg/kg	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05
1,2,4 Trchlorob n en	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2,4 Trmethylbe	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	<0.05
1,2 Dib omo-3-Chlo opropa e	mg/kg	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05
1,2 D chl or benze e	mg/kg	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05
1,2 D chl o tha e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2-D chl or opa e	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2-D hio p p	mg/kg	0.05	0.05	0.05	<0.05	0.05	0.05	<0.05	0.05	0.05
1,3,5-Trm thylb n	mg/kg	<0.05	<0.05	0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05
1,3-D chl robenze e	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05

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		17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03
D t S mpl d		179521	179522	179523	179524	179525	179526	179527	179528	179529
Lab R f No		9	12	3	6	9	12	15	3	6
C t m R f No		ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ		TP717	TP717	TP700	TP700	TP700	TP700	TP700	**TP699	*TP699
T I P t / B eh ol No		1 80	2 50	0 30	0 60	1 60	2 60	3 60	0 30	0 70
D plth (m)										
Had t d g t S r f (Y/N)										
1 3 D chloro pane	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
1 4 D hlo ob n z e	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
1-Chlorotolu e	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
1-M thyip pyben e	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
2 2-D hlo opa e	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
2 Chl tol	mg/kg	0 05	0 05	0 05	0 05	<0 05	0 05	0 05	0 05	0 05
Be e	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	<0 05	0 05
Bromob n e	mg/kg	0 05	0 05	<0 05	0 05	0 05	0 05	0 05	0 05	0 05
Bromochlo ometha	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
B om d hl meth	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
B mofom	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
C rbo T r chl d (PCM)	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
Chlo be ze e (s m)	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
Chl rod bromom tha	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
Chl oetha	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
Chl roform	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
cs 1 2 D chlo ethyl e	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
cs 1 3-D chl pop	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
Dbromochlo metha e	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
Dbromoetha e	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
Db m m tha e	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
Dchl be ze	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	<0 05	0 05
Dchl m tha e	mg/kg	<0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
Ethylb e e	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
He achi rob tad	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
m ta & p Xyle	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
Methyl s propylb ze	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
M o hlo obe ene	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	<0 05	0 05	0 05
Mo o hlo oph ol (m)	mg/kg	0 05	0 05	0 05	0 05	<0 05	0 05	0 05	0 05	0 05
n B tylb e	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
Pr pybe ze	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
ortho Xyl	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
Styr n	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
t r t B tylb	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
Tetra hlo obe ne	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
T tra hlo th (PCE)	mg/kg	0 05	0 05	0 05	0 05	<0 05	0 05	0 05	0 05	0 05
T trahyd of a	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
Tol e e	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
tra 1 2 D hlo the e	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
tr 1 3-d chl op ope	mg/kg	0 05	0 05	0 05	0 05	<0 05	0 05	0 05	0 05	0 05
T chlo the e (TCE)	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
T chl o l o meth	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
Trn hl om th	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
V nyl Chl de	mg/kg	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05	0 05
SVOC										
1 2 4 T chl b	mg/kg									
1 4 D hlo ob zen	mg/kg									
2 3 4 6-T t chlo ph l (m)	mg/kg									
2 4 5-T chloroph ol	mg/kg									
2 4 6-T chlo ophenol	mg/kg									
2 4 D chl oph ol (m)	mg/kg									
2 4 D methylph nol	mg/kg									
2 4 D itrotol e e	mg/kg									
2 6-D m thyiphe ol	mg/kg									
2 6-D itrotol e	mg/kg									
2-Chl on phthale	mg/kg									
2-Chlo oph nol (s m)	mg/kg									
2 Methylphe ol	mg/kg									
2 Nitrophe ol	mg/kg									
4-Chlo o-3 m thyiph l	mg/kg									
4-chl obe zylphenyl the	mg/kg									
4 Methylph ol	mg/kg									
4 Nitrophe ol	mg/kg									
Azob e e	mg/kg									
bis(2-chlo oethyl)ethe	mg/kg									

	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03
D t e S mpl d	179521	179522	179523	179524	179525	179526	179527	179528	179529
L b Ref No	9	12	3	6	9	12	15	3	6
C stom Ref N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP717	TP717	TP700	TP700	TP700	TP700	TP700	**TP699	**TP699
T al Pit / B hol No	1 80	2 50	0 30	0 60	1 60	2 60	3 60	0 30	0 70
D pth (m)									
H d ta d g at Surf e (Y/N)									

bs(2-chl ethy y)m tha	mg/kg
bs(hlo s propyl)ethe	mg/kg
Br mophe ylphe yl the	mg/kg
H chlo o-1 3-butad e	mg/kg
H achl rob e e	mg/kg
H chl oetha e	mg/kg
ls pho o e	mg/kg
Nt ob nz ne	mg/kg
tr d propyl 1 p op am	mg/kg
Pe ta hlorob z	mg/kg
Pentachl roph ol	mg/kg

B s(2-ethyl y)phthalate	mg/kg
B tylbe zyphthalate	mg/kg
D ethylphthalate	mg/kg
D m thylphthalate	mg/kg
D b tylphthal t	mg/kg
D -octyl phthalate	mg/kg

Total Phthal tes	mg/kg
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ORGANO CHLORINE PESTICIDES

Aldr	mg/kg
Beta HCH (Bet BHC)	mg/kg
Chl rd e	mg/kg
DDD	mg/kg
D ld	mg/kg
D s (total)	mg/kg
E dosulf l	mg/kg
E d s if ll	mg/kg
E d ifa S lphat	mg/kg
E d	mg/kg
E d E d Ald hyd	mg/kg
Gamm HCH (L d)	mg/kg
H pl chl	mg/kg
H ptachlo ep de	mg/kg
Heptachlo b z e	mg/kg
Meth ychlo	mg/kg
pp -DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azi ph methyl	mg/kg
Demet methyl	mg/kg
D azi n	mg/kg
D chlorvos	mg/kg
D oxath on	mg/kg
Dis if t	mg/kg
EPN Eth on	mg/kg
Malath on	mg/kg
Methyl Pa tho	mg/kg
Parath	mg/kg
Terbuf s	mg/kg

CARBAMATE (P ticide)

Carb ryl	mg/kg
Carbof ra	mg/kg
Ma eb	mg/kg

PHENOL UREA HERBICIDES

Chlorotol	mg/kg
Diuro	mg/kg
I cprotu o	mg/kg
L n ro	mg/kg

	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03
D t S mpl d										
L b Ref No	179521	179522	179523	179524	179525	179526	179527	179528	179529	
C t m r R f No	9	12	3	6	9	12	15	3	6	
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES	
T al P t / B h le N	TP717	TP717	TP700	TP700	TP700	TP700	TP700	**TP699	**TP699	
D pth (m)	1 80	2 50	0 30	0 60	1 60	2 60	3 60	0 30	0 70	
H d t d g t Surf c (Y/N)										

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5-T	mg/kg
2 4 D	mg/kg
Chlo o-o-tolyl ya t acd	mg/kg
D c mb	mg/kg
D chl rop p	mg/kg
Mecop p	mg/kg
Sli ex	mg/kg

TRIAZINES

Allnzi	mg/kg
S mazi	mg/kg

PCB

PCB Conge e 28	mg/kg
PCB C g e 52	mg/kg
PCB C g 101	mg/kg
PCB Conge er 118	mg/kg
PCB Co g 138	mg/kg
PCB Co ge 15	mg/kg
PCB C gen 180	mg/kg

T t l PCB s	mg/kg
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ALCOHOLS

B t l	mg/kg
Eth ol	mg/kg
Ethyl ne Glycol	mg/kg
M tha l	mg/kg
Prop 1-ol	mg/kg
P opa 2-ol	mg/kg

MISCELLANEOUS

Calo fc Val e	Cal/g
---------------	-------

S l e	mg/kg
T	mg/kg

1 2 D hl op p e	mg/kg
1 3-D hl p p	mg/kg
2 4 D itr phenol	mg/kg
Acet e	mg/kg
C rbazole	mg/kg
Carbo d lph d	mg/kg
C eosole (TPH by GCFID)	mg/kg
Cycloh a e	mg/kg
Cycloh xa o e	mg/kg
He a hlo ocy l pe tad e	mg/kg
Hydroqu ne	mg/kg
N N tros dphe yl m e	mg/kg
p-Chl roa il e	mg/kg
P em th n/Cyp r methn	mg/kg
Pynd e	mg/kg
Sty e	mg/kg
S lpholane	mg/kg
T l en Extractable Matte (H to c)	mg/kg
To aph e	mg/kg
T butyl T	mg/kg
T chl metha e	mg/kg
V yl Ac tat	mg/kg

CONCRETE

Chlo de BS1377 P rt 3 cl dng prepa ation	mg/kg
HAC (Rap d det m abo f H gh Al m a C r	mg/kg
Mix Proportions-Ceme 1/Agg egate Ratio-BS188	mg/kg

Orga c Matte	%
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Notes

- Benzo(b)fl o
- * Di-benzo(a h)
- l uffie tsa
- ** Labelled as G

	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03
D t Sampled	179530	179531	179532	179533	179534	179535	179536	179537	179538
L b R f N	9	3	6	3	6	10	3	6	10
C t me R f No	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpi Type	**TP699	TP716	TP718	TP719	TP719	TP719	TP720	TP720	TP720
T l Pit/B eh le N	1.70	0.30	1.30	0.40	1.40	2.30	0.50	1.50	2.50
D pth (m)									
H d ta d gat S rf (Y/N)									
pH				8.3					
/ Los o lgn tu	/								
/ Moist e	/								
/ Sto es	/								
Asb stos				0.001					
PHENOLICS									
B tyl Phe ols									
C t ch l				0.5					
C solis (m)				0.5					
Naphthols				0.5					
Phe l				0.5					
Res rc nol				0.5					
T m thylphe ol				0.5					
Xyle ols & Ethylphe ols				0.5					
T t l Ph ls				0.5					
US EPA PRIORITY PAH s									
Ac aphthene				1.4					
A aphthyle				1.3					
A th ce e				1.0					
Be zo(a)A thrace e				5.6					
B n o()pyre e				2.9					
Be z (b)fl o a th									
Be zo(k)fl ora th ne				4.0					
B (g h)p ryl e				0.5					
Chry e				5.3					
D-be (a h) th c									
l de (1 2 3-cd)pyrene +2				0.5					
Fl o the e				7.5					
Fl o				2.9					
Naphth le				2.5					
Phe nth e				4.9					
Py n				16.0					
Tot l US EPA 16 PAH				59.3					
OTHER PAH*									
A tha th e									
B zo(e)pyre e									
Cy l penta(cd)pyre e									
GENERAL INORGANICS									
C mple Cyan d									
Eastly L be tabl Cy d (fr)									
Th cy a te									
Total Cya d				1					
S lph d				2					
Sulph (fe)				130					
T tal S lphate				100					
Wate Sol ble Sulphate									
Water Sol bl Chloride									
Phosphate									
Excha geable Ammo m				5.1					
Nit ate									
Nitrt									

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Date Sampled	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03
Lab Ref No	179530	179531	179532	179533	179534	179535	179536	179537	179538	179538
Client Ref No	9	3	6	3	6	10	3	6	10	
Sample Type	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tr IP1/Borehole No	**TP699	TP718	TP718	TP719	TP719	TP719	TP719	TP720	TP720	TP720
Depth (m)	1.70	0.30	1.30	0.40	1.40	2.30	0.50	1.50	2.50	
Headtag reference (Y/N)										

HEAVY METALS/METALLOIDS

Aluminium	mg/kg	
Antimony	mg/kg	
Arsenic	mg/kg	30.5
Bismuth	mg/kg	
Beryllium	mg/kg	
Boron (Water Soluble)	mg/kg	1.7
Cadmium	mg/kg	0.7
Chromium (Total)	mg/kg	2.9
Chromium (Hexavalent)	mg/kg	2
Cobalt	mg/kg	
Copper	mg/kg	9.7
Gallium	mg/kg	
Lead	mg/kg	30.3
Mercury	mg/kg	1.0
Molybdenum	mg/kg	
Nickel	mg/kg	3.2
Selenium	mg/kg	1.4
Vanadium	mg/kg	
Zinc	mg/kg	26.3

ESSENTIAL ELEMENTS

Calcium	mg/kg
Iron	mg/kg
Magnesium	mg/kg
Manganese	mg/kg
Phosphorus	mg/kg
Sodium	mg/kg

MONOAROMATICS

Benzene	mg/kg
Toluene	mg/kg
Ethylbenzene	mg/kg
Meta & Para Xylene	mg/kg
Ortho Xylene	mg/kg

Total Xyl

MTBE	mg/kg
1,2,4-Triethylbenzene	mg/kg
1,3,5-Triethylbenzene	mg/kg

TOTAL HYDROCARBONS

Petroleum Ranges (C ₆ -C ₁₀)	mg/kg	5
Desirable Organics (C ₁₀ -C ₂₈)	mg/kg	14
Hydrocarbons (GC-FID)	mg/kg	14

VOC

1,1,1-Trichloroethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1,2,2-Tetrachloroethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1,2-Trichloro-1,2,2,2-tetrafluoroethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1,2-Dichloroethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05	0.05
1,1-Dichloroethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1-Dichloroethane	mg/kg	<0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05
1,2,3-Trichloropropane	mg/kg	<0.05	0.05	0.05	0.05	0.05	<0.05	<0.05	0.05	<0.05
1,2,3-Triethylbenzene	mg/kg	<0.05	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05
1,2,4-Triethylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2,4-Triethylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2-Dibromo-3-chloropropane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2-Dichlorobenzene	mg/kg	<0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2-Dichloroethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2-Dichloropropane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2-Dichloropropane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,3,5-Triethylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,3-Dichlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05

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	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	
D t S mpl d	179530	17 531	179532	179533	179534	179535	179536	179537	179538	
L b R f No	9	3	6	3	6	10	3	6	10	
C stom r R f No										
Sample Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	
Trial P t / B eh l No	**TP699	TP718	TP718	TP719	TP719	TP719	TP720	TP720	TP720	
D pth (m)	1.70	0.30	1.30	0.40	1.40	2.30	0.50	1.50	2.50	
Ha d ta d g t S rf (Y/N)										
1,3-Dichlorobenzene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
1,4-Dichlorobenzene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
1-Chlorotoluene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
1-Methylcyclohexane	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
2,2-Dichloropropane	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
2-Chlorotoluene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Benzene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Bromobenzene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Bromochloromethane	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Bromodichloromethane	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Bromotoluene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Chlorobenzene (sum)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Chlorodibromomethane	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Chloroethane	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Chloroform	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
1,2-Dichloroethane	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
1,3-Dichloropropane	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Dibromochloromethane	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Dibromoethane	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Dibromomethane	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Dichlorobenzene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Dichloromethane	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Ethylbenzene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Hexachlorobenzene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
meta & para Xylene	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Methylcyclohexane	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Monochlorobenzene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Monochlorobenzene (sum)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
n-Butylbenzene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
n-Propylbenzene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
ortho Xylene	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Styrene	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
1,1,1-Trichloroethane	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Tetrachloroethene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Tetrahydroethene (PCE)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Tetrahydrofuran	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Toluene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
trans-1,2-Dichloroethene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
trans-1,3-Dichloropropane	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Trichloroethene (TCE)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Trichlorofluoromethane	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Toluene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Vinyl Chloride	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
SVOCs										
1,2,4-Trichlorobenzene										
1,4-Dichlorobenzene										
2,3,4,6-Tetrachlorophenol (sum)										
2,4,5-Trichlorophenol										
2,4,6-Trichlorophenol										
2,4-Dichlorophenol (sum)										
2,4-Dimethylphenol										
2,4-Dinitrophenol										
2,6-Dimethylphenol										
2,6-Dinitrophenol										
2-Chlorophthalene										
2-Chlorophenol (sum)										
2-Methylphenol										
2-Nitrophenol										
4-Chloro-3-methylphenol										
4-chlorobenzophenone										
4-Methylphenol										
4-Nitrophenol										
Azobenzene										
bis(2-chloroethyl)ether										

D t S mpl d	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03
L b R f No	179530	179531	179532	179533	179534	179535	179536	179537	179538
C t m Ref N	9	3	6	3	6	10	3	6	10
S mple Type	ES	ES	ES	ES	ES	ES	ES	ES	ES
T al Pit / B h l No	TP699	TP718	TP718	TP719	TP719	TP719	TP720	TP720	TP720
D pth (m)	1.70	0.30	1.30	0.40	1.40	2.30	0.50	1.50	2.50
H d ta d g t S rf (Y/N)									

bis(2-chloroethyl) metha	mg/kg
bis(chloroisopropyl) eth	mg/kg
Bromophenyl phenyl th	mg/kg
Hechloro-1,3-bis-tadene	mg/kg
Hechlorobenene	mg/kg
Hechlorothaene	mg/kg
Isophorone	mg/kg
Nitrobenene	mg/kg
nitrodimethylpropanam	mg/kg
Pentachlorobenzene	mg/kg
Pentachlorophenol	mg/kg

Bis(2-ethylhexyl) phthalate	mg/kg
Bis(2-ethylhexyl) phthalate	mg/kg
Dibutylphthalate	mg/kg
Dimethylphthalate	mg/kg
Dibutylphthalate	mg/kg
Dioctylphthalate	mg/kg

Total Phthalates mg/kg

ORGANO CHLORINE PESTICIDES

Aldrin	mg/kg
Beta HCH (BHC)	mg/kg
Chlordane	mg/kg
DDD	mg/kg
Dieldrin	mg/kg
Dieldrin (total)	mg/kg
Endosulfan I	mg/kg
Endosulfan II	mg/kg
Endosulfan Siphate	mg/kg
Endosulfan	mg/kg
Endosulfan Aldehyde	mg/kg
Gamma HCH (LdD)	mg/kg
Heptachlor	mg/kg
Heptachlor epoxide	mg/kg
Heptachlor benzene	mg/kg
Methoxychlor	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	mg/kg
Demeton-methyl	mg/kg
Diazinon	mg/kg
Dichlorvos	mg/kg
Diazinon	mg/kg
Difluthion	mg/kg
EPN Ethion	mg/kg
Malathion	mg/kg
Methyl parathion	mg/kg
Parathion	mg/kg
Tebufoz	mg/kg

CARBAMATE (Pesticide)

Carbaryl	mg/kg
Carbofenthiol	mg/kg
Methidathion	mg/kg

PHENOL UREA HERBICIDES

Chlorotoluene	mg/kg
Duron	mg/kg
Isoproturon	mg/kg
Linuron	mg/kg

Date Sample	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03
Lab Ref No	179530	179531	179532	179533	179534	179535	179536	179537	179538
Container Ref No	9	3	6	3	6	10	3	6	10
Sample Type	ES	ES	ES	ES	ES	ES	ES	ES	ES
Triplet/Bottle No	**TP699	TP718	TP718	TP719	TP719	TP719	TP720	TP720	TP720
Depth (m)	1.70	0.30	1.30	0.40	1.40	2.30	0.50	1.50	2.50
Hand Tag Reference (Y/N)									

CHLOROPHENDXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chloro-o-tolyl xyacetic acid	mg/kg
Dacamba	mg/kg
Dichloroprop	mg/kg
Mecoprop	mg/kg
Sinox	mg/kg

TRIAZINES

Altrazin	mg/kg
Simazine	mg/kg

PCB

PCB Conge 28	mg/kg
PCB Conge 52	mg/kg
PCB Conge 101	mg/kg
PCB Conge 118	mg/kg
PCB Conge 138	mg/kg
PCB Conge 153	mg/kg
PCB Conge 180	mg/kg

Total PCBs	mg/kg
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ALCOHOLS

Benzal	mg/kg
Ethanol	mg/kg
Ethylene Glycol	mg/kg
Methanol	mg/kg
Propyl-1-ol	mg/kg
Propyl-2-ol	mg/kg

MISCELLANEOUS

Calcium Chloride	Ca/g
Silica	mg/kg
Titanium	mg/kg

1,2-Dichloropropane	mg/kg
1,3-Dichloropropane	mg/kg
2,4-Dinitrophenol	mg/kg
Acetone	mg/kg
Carbazole	mg/kg
Carbonyl disulphide	mg/kg
Cresol (TPH by GCFID)	mg/kg
Cyclohexane	mg/kg
Cyclohexane	mg/kg
Hexachlorocyclopentadiene	mg/kg
Hydroquinone	mg/kg
N-Nitroodphenylamine	mg/kg
p-Chlorophenol	mg/kg
Premethrin/Cypermethrin	mg/kg
Pyridine	mg/kg
Styrene	mg/kg
Sulphur	mg/kg
Toluene Extractable Matter (Historic)	mg/kg
Tetraphenyl	mg/kg
Tributyl Tin	mg/kg
Trichloromethane	mg/kg
Vinyl Acetate	mg/kg

CONCRETE

Chloride BS1377 Part 3 ncl d g preparation	mg/kg
HAC (Rap d determ natio of High Al m na Carr	mg/kg
Mix Proportions Cement/Aggregate Ratio-BS188	mg/kg

Organic Matter	%
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Notes

- Benzo(b)fluor
- ** Di-benzo(a,h)
- Insufficient sa
- ** Labelled as 6

Date Sampled	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/0 /03
Lab R f N	179539	179540	179541	179542	179543	179544	179545	179546	179547	179547
C t m R f N	3	6	9	13	3	6	9	13	3	3
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tri l Pit / Bor hol No	TP612	TP612	TP612	TP612	TP613	TP613	TP613	TP613	TP613	TP614
D pth (m)	0 30	1 30	2 30	3 00	0 40	1 40	2 40	2 90	2 90	0 30
H rd t ndl g t S r f e (Y/N)										
pH	Value	7 7				7 7				
/ Lc lg ib	%									
% M st	%									
/ St n s	/									
Asb stos	%	0 001				0 001				
PHENOLICS										
B tyl Ph ols	mg/kg					0 5				
C techol	mg/kg	0 5				0 5				
C esols (m)	mg/kg	0 5				0 5				
Naphth l	mg/kg	0 5				0 5				
Phe ol	mg/kg	0 5				0 5				
Res ol	mg/kg	0 5				0 5				
T m thylph ol	mg/kg	0 5				0 5				
Xyl ols & Ethylph ls	mg/kg	0 5				0 5				
T t l Ph ol	mg/kg	0 5				0 5				
US EPA PRIORITY PAH										
A phth	mg/kg	1 6				2 9				
A aphthyle	mg/kg	0 8				3 6				
A thra ene	mg/kg	0 6				9 8				
Benz ()A th e	mg/kg	3 9				45 8				
Be zo(a)pyre	mg/kg	3 7				35 5				
Benzo(b)fl ra the e	mg/kg									38 0
Be o(k)fl ora thene	mg/kg	4 0				27 6				
Be zo(g h)p rylen	mg/kg	0 5				47 2				
Chryse	mg/kg	5 2								
D b nzo(h)a thrace e ⁻²	mg/kg									21 0
l den (1 2 3-cd)pye e ⁻²	mg/kg	0 5				69 1				
Fl ora the	mg/kg	3 2				4 3				
Fl ne	mg/kg	0 9				2 9				
N phth l e	mg/kg	2 5				52 6				
Phe th	mg/kg	2 7				52 3				
Py	mg/kg	15 1								
T tal US EPA 16 PAH	mg/kg	48 8				472 8				
OTHER PAH										
A th nth e e	mg/kg									
Be zo(e)pyr e	mg/kg									
Cyclope i (cd)pyr ne	mg/kg									
GENERAL INORGANICS										
C mplex Cya de	mg/kg									
Eas ly L beratable Cya ide (free)	mg/kg									
Th ocy at	mg/kg									1
Total Cy ide	mg/kg	1								
Sulph de	mg/kg	6 8				2				
S lph (free)	mg/kg	220				720				
Total S lph te	mg/kg	400				300				
Wat Sol bl S lph te	mg/kg									
Wate S l bl Chlonde	mg/kg									
Phosphate	mg/kg									
Exch ngeable Ammon um	mg/kg	5				5				
Nitrate	mg/kg									
Nitrite	mg/kg									

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	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03
D i S m p l d	179539	179540	179541	179542	179543	179544	179545	179546	179547	179547
L b r f N o	3	6	9	13	3	6	9	13		
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
S m p l T y p	TP612	TP612	TP612	TP612	TP613	TP613	TP613	TP613	TP614	TP614
T I P t / B r h o l N	0.30	1.30	2.30	3.00	0.40	1.40	2.40	2.90		0.30
D p t h (m)										
H d t a d g t S u r f a (Y/N)										

HEAVY METALS/METALLOIDS

	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Al m n m									
A t m o y									
A r s e c	90.5					48.3			
B a m									
B r y l l m									
B o (Water Soluble)	1.5					1.4			
C d m m	1.8					1.4			
Ch o m m (Total)	38					50			
Ch o m m (H x a v l e t)	2					2			
C b l t									
C p p	598					560			
G e r m u m									
L e a d	591					500			
M c r y	4.9					4.5			
M l y b d n m									
N c k e l	119					122			
S l e m	4.8					3.7			
V a a d u m									
Z i c	770					961			

ESSENTIAL ELEMENTS

	mg/kg
Calc m	
i n	
M a g n e s i u m	
M a g a s	
P o t a s s i u m	
S d m	

MONOAROMATICS

	mg/kg
B n z e n e	
T o l u e n e	
E t h y l b e n z e n e	
M e t a & P a r a X y l e	
O r t h o X y l e	

T t a l X y l e s	mg/kg

MTBE	mg/kg

1,2,4-T methylbenzene	mg/kg

1,3,5-T methylbenzene	mg/kg

TOTAL HYDROCARBONS

P t o l e m R a n g e O r g a n i c s (C ₆ -C ₁₀)	mg/kg	5
D e l i m i t e d O r g a n i c s (C ₁₀ -C ₂₈)	7	
H y d r o c a r b o n S c r e e n (GC FID)	7	

VOCs

	mg/kg	0.05	0.05	0.05	<0.05	0.05	<0.05	0.05	0.05	0.05
1,1,1-T trichloroethane	0.05									
1,1,2,2-T tetrachloroethane	0.05									
1,1,2-T dichloroethane	0.05									
1,1,2-T chloroethane	0.05									
1,1-Dichloroethane	0.05									
1,1-Dichloroethane	0.05									
1,2-Dichloroethane	0.05									
1,2,3-Trichloropropane	0.05									
1,2,4-Trichlorobenzene	0.05									
1,2,4-T methylbenzene	<0.05									
1,2-Dibromo-3-Chloropropane	0.05									
1,2-Dichlorobenzene	0.05									
1,2-Dichloroethane	<0.05									
1,2-Dichloropropane	0.05									
1,2-Dichloropropane	<0.05									
1,3,5-T methylbenzene	0.05									
1,3-Dichlorobenzene	0.05									

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D t Sampl d		17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03
L b R f N		179539	179540	179541	179542	179543	179544	179545	179546	17 547
C t mer R f N		3	6	9	13	3	6	9	13	3
S mpl Typ		ES	ES	ES	ES	ES	ES	ES	ES	ES
T l P t / B r h l No		TP612	TP612	TP612	TP612	TP613	TP613	TP613	TP613	TP614
D pth (m)		0.30	1.30	2.30	3.00	0.40	1.40	2.40	2.90	0.30
H dst d g t S rf (Y/N)										
1,3-Dichloropropene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,4-Dichlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1-Chlorotoluene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1-Methylpyrene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
2,2-Dichloropropane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
2-Chlorotoluene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Benzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Bromobenzene	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Bromochloromethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Bromodichloromethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Bromoform	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Carbontetrachloride (PCM)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Chlorobenzene (m)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Chlorodibromomethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Chloroethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Chloroform	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
cis-1,2-Dichloroethene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
cis-1,3-Dichloropropene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Dimethylmethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Dibromomethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05	0.05
Dibromomethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Dichlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Dichloromethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Ethylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Hexachlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	<0.05
meta- & p-Xylene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Methylisopropylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Monoisobutylene	mg/kg	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05
Monoisobutylene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
n-Butylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05	0.05
Nonylphenol	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05
ortho-Xylene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Styrene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
tert-Butylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Tetrachloroethene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Tetrachloroethene (PCE)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Trichloroethene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Trichloroethene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05	0.05
Trichloroethene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
trans-1,2-Dichloroethene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
trans-1,3-Dichloropropene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Trichloroethene (TCE)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Trichloroethene	mg/kg	0.05	0.05	0.05	<0.05	0.05	<0.05	0.05	0.05	0.05
Trichloroethene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Vinyl Chloride	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
SVOCs										
1,2,4-Trichlorobenzene	mg/kg									
1,4-Dichlorobenzene	mg/kg									
2,3,4,6-Tetrachlorophenol (m)	mg/kg									
2,4,5-Trichlorophenol	mg/kg									
2,4,6-Trichlorophenol	mg/kg									
2,4-Dichlorophenol (s m)	mg/kg									
2,4-Dimethylphenol	mg/kg									
2,4-Dinitrophenol	mg/kg									
2,6-Dimethylphenol	mg/kg									
2,6-Dinitrophenol	mg/kg									
2-Chlorophenol	mg/kg									
2-Chlorophenol (s m)	mg/kg									
2-Methylphenol	mg/kg									
2-Nitrophenol	mg/kg									
4-Chloro-3-methylphenol	mg/kg									
4-chlorobenzylphenylethylene	mg/kg									
4-Methylphenol	mg/kg									
4-Nitrophenol	mg/kg									
Azobenzene	mg/kg									
bis(2-chloroethyl)ether	mg/kg									

D t Sampled	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03
L b Ref No	179539	179540	179541	179542	179543	179544	179545	179546	179547
C st m R f N	3	6	9	13	3	6	9	13	3
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES
T i Pit / B hole N	TP612	TP612	TP612	TP612	TP613	TP613	TP613	TP613	TP614
D pth (m)	0.30	1.30	2.30	3.00	0.40	1.40	2.40	2.90	0.30
H dst d g t S r f c (Y/N)									

bs(2-chloro thyo y)m tha e	mg/kg
bs(chlo o sop opyl)eth	mg/kg
Br mophe yiph nylethe	mg/kg
He achl ro-1 3-b tad e	mg/kg
He chlo obe ze e	mg/kg
He achl oeth e	mg/kg
Isophoro e	mg/kg
Nitrob e	mg/kg
-n trosod p pyl-1 p opa amne	mg/kg
Pe tachl be ze	mg/kg
P ta hi ph ol	mg/kg

B (2-ethyl yl)phth i te	mg/kg
B tylb yphth late	mg/kg
D ethylphth lat	mg/kg
Drn thylphth l te	mg/kg
D -b tylphth late	mg/kg
D o tyl phth late	mg/kg

Total Phthalates mg/kg

ORGANO CHLORINE PESTICIDES

Ald n	mg/kg
B t HCH (B ta BHC)	mg/kg
Chloro d e	mg/kg
DDD	mg/kg
D eld n	mg/kg
D s (t tal)	mg/kg
E dos ifa t	mg/kg
E dos if ll	mg/kg
E dos ifa S lphat	mg/kg
E dn	mg/kg
E dn E d Aldehyde	mg/kg
Gamm HCH (L da)	mg/kg
H ptachl r	mg/kg
H ptachlo ep d	mg/kg
Hepta hlo benze e	mg/kg
Metho ychi	mg/kg
pp-DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azi ph s methyl	mg/kg
Dem t s-m thyl	mg/kg
D azi o	mg/kg
D chl rvo	mg/kg
D th	mg/kg
Disulf t	mg/kg
EPN Eth o	mg/kg
Mal th o	mg/kg
Methyl P rath n	mg/kg
P athon	mg/kg
Terbuf s	mg/kg

CARBAMATE (Pesticide)

Carbaryl	mg/kg
Carbofuran	mg/kg
Ma eb	mg/kg

PHENOL UREA HERBICIDES

Chlorotol ro	mg/kg
Du	mg/kg
I pot	mg/kg
Lun o	mg/kg

	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03	17/09/03
D te S mpl d	179539	179540	179541	179542	179543	179544	179545	179546	179547
L b R f No	3	6	9	13	3	6	9	13	3
C t m R f No	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP612	TP612	TP612	TP612	TP613	TP6 3	TP613	TP613	TP614
T l Pit / B h l N	0 30	1 30	2 30	3 00	0 40	1 40	2 40	2 90	0 30
D pth (m)									
H d t d g t S r f e (Y/N)									

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5 T	mg/kg
2 4 D	mg/kg
Chlo o-o-tolylo ya etl c d	mg/kg
D camba	mg/kg
D chlor p op	mg/kg
M op op	mg/kg
S f ex	mg/kg

TRIAZINES

Altrz e	mg/kg
S mazi e	mg/kg

PCB

PCB Co ge e 28	mg/kg
PCB C ge 52	mg/kg
PCB C ge 101	mg/kg
PCB Co g 118	mg/kg
PCB Co g 138	mg/kg
PCB C g e 153	mg/kg
PCB C ge 180	mg/kg

T tal PCB s	mg/kg
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ALCOHOLS

Buta ol	mg/kg
Eth l	mg/kg
Ethyl e Glycol	mg/kg
Metha l	mg/kg
Propa 1-ol	mg/kg
P p 2 l	mg/kg

MISCELLANEOUS

Calonfc Val	C l/g
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S l e	mg/kg
T	mg/kg

1,2 D hlo op pa	mg/kg
1 3 D chlo op ope e	mg/kg
2 4 D troph nol	mg/kg
Acetone	mg/kg
Carba ole	mg/kg
Carbo ds lph de	mg/kg
C eo ote (TPH by GCFID)	mg/kg
Cyclohexane	mg/kg
Cycloh o	mg/kg
H chl o cyclop tade e	mg/kg
Hydroq n	mg/kg
N N tr d phe yl m e	mg/kg
p-Chl l	mg/kg
P meth l/Cypermeth	mg/kg
Py d	mg/kg
Styre e	mg/kg
S lphol	mg/kg
Toi e Extractable Matt r (Histo c)	mg/kg
T aph e	mg/kg
Trl b tyl Tn	mg/kg
Trlchlo ometha e	mg/kg
V nyl Acetate	mg/kg

CONCRETE

Chlo de BS1377 P r t 3 ncl d g p ep ratio	mg/kg
HAC (Rap d determ to of H gh Al m a C rr	mg/kg
Ml P oports n -Ceme t/Agg eg te Ratio-BS188	mg/kg

Org n c Matt	%
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8 1

Notes

- Be zo(b)fl or
- 2 D benzo(a h)
- l suffi e is
- ** L beil d as 6

	17/09/03	17/09/03	R68221
D t S mpled	179548	179549	AQC
L b Ref No	7	10	Lab Std
C t m R f N	ES	ES	
S mpl Typ	TP614	TP614	
T i P t / B o h le No	1 30	2 30	
D pth (m)			
H d ta d g t S rfac (Y/N)			
pH	Val	8 0	8 0
/ L o ign tu n	%		
% M st	%		
/ St es	%		
Abestos	%	0 001	
PHENOLICS			
B tyl Phe ols	mg/kg		
C tech l	mg/kg	0 5	
C esols (sum)	mg/kg	0 5	
Naphthol	mg/kg	0 5	
Ph l	mg/kg	0 5	
Re o c nol	mg/kg	0 5	
Trm thylph l	mg/kg	0 5	
Xyl ols & Ethylph l	mg/kg	0 5	
T t l Ph ol	mg/kg	0 5	0.211
US EPA PRIORITY PAH			
Ace phth	mg/kg	0 5	
A phthyl e	mg/kg	0 5	
A thrac	mg/kg	0 5	
Be z () A thra ene	mg/kg	0 5	
B o(a)py e	mg/kg	0 5	
B z (b)fl a th	mg/kg		
Be z (k)fl ora th	mg/kg	0 5	
B zo(g h)peryle	mg/kg	0 5	
Chrysene	mg/kg	0 5	
D b nz (h) th a e e ⁻²	mg/kg		
l d o(1 2 3-cd)py ⁻²	mg/kg	0 5	
Fl a the e	mg/kg	0 5	
Fl o n	mg/kg	0 5	
N phthal	mg/kg	0 5	
Ph th e	mg/kg	0 5	
Pyr e	mg/kg	0 5	
T t l US EPA 16 PAH	mg/kg	0 5	3460 2
OTHER PAH			
A th th e	mg/kg		
B zo()py	mg/kg		
Cyclop ta(d)py e	mg/kg		
GENERAL INORGANICS			
Comple Cya de	mg/kg		
Easly L be atable Cyan d (f e)	mg/kg		
Th ya at	mg/kg		
Total Cy de	mg/kg	1	1 6
S lph d	mg/kg	2 4	0 7
S lph (f ee)	mg/kg	130	550
Total S lph t	mg/kg	1900	6700
Wate S luble S lphat	mg/kg		
Wate S i ble Chlo de	mg/kg		
Ph sphate	mg/kg		
E ch g able Ammon m	mg/kg	5	134 8
Nitrate	mg/kg		
Nitrite	mg/kg		

D t S mpl d	17/09/03	17/09/03	R68221
L b R f N	179548	179549	AQC
C t m R f N	7	10	L b Std
S mpl Typ	ES	ES	
T i l Pit / B h l No	TP614	TP614	
D pth (m)	1.30	2.30	
H d ta d g t S r f (Y/N)			

HEAVY METALS/METALLOIDS

Al m m	mg/kg		
A t m o n y	mg/kg		
A r s c	mg/kg	16.4	24.0
B m	mg/kg		
B r y l l m	mg/kg		
B o r o (W a t e S o l b l e)	mg/kg	0.5	2.4
C d m m	mg/kg	0.5	2.0
C h o m m (T o t a l)	mg/kg	64	246
C h m m (H e x i t)	mg/kg	2	11
C o b l t	mg/kg		
C r p p e	mg/kg	76	76
G r m n u m	mg/kg		
L a d	mg/kg	326	167
M e c r y	mg/kg	0.6	2.1
M l y b d m	mg/kg		
N i k e l	mg/kg	75	39
S i m	mg/kg	1.7	1.9
V a n a d m	mg/kg		
Z i c	mg/kg	1685	131

ESSENTIAL ELEMENTS

Cal m	mg/kg		
I o	mg/kg		
M a g n e s i u m	mg/kg		
P t m	mg/kg		
S o d i u m	mg/kg		

MONOAROMATICS

B z e n e	mg/kg		
T o l u e n e	mg/kg		
E t h y l b e n z e n e	mg/kg		
M e t h y l & P a r a X y l e	mg/kg		
O r t h o X y l e	mg/kg		

T a l X y l e	mg/kg		
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MTBE	mg/kg		
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1,2,4-T methylbenzene	mg/kg		
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1,3,5-T methylbenzene	mg/kg		
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TOTAL HYDROCARBONS

Petroleum Range Organics (C ₆ -C ₁₀)	mg/kg		5
Diesel Range Organics (C ₁₀ -C ₂₈)	mg/kg		5
Hydrocarbon Screen (GC-FID)	mg/kg		5

VOCs			
1,1,1-T trichloroethane	mg/kg	0.05	0.05
1,1,2,2-Tetrachloroethane	mg/kg	<0.05	0.05
1,1,2-T trichloro-1,2,2-trifluoroethane	mg/kg	0.05	0.05
1,1,2-T chloroethane	mg/kg	0.05	0.05
1,1-Dichloroethane	mg/kg	0.05	0.05
1,1-Dichloroethene	mg/kg	0.05	0.05
1,2,3-T chloropropane	mg/kg	0.05	0.05
1,2,3-T methylbenzene	mg/kg	0.05	0.05
1,2,4-T trichlorobenzene	mg/kg	0.05	0.05
1,2,4-T dimethylbenzene	mg/kg	0.05	0.05
1,2-Dibromo-3-chloropropane	mg/kg	0.05	0.05
1,2-Dichlorobenzene	mg/kg	0.05	0.05
1,2-Dichloroethane	mg/kg	0.05	0.05
1,2-Dichloropropane	mg/kg	0.05	0.05
1,2-Dichloroethene	mg/kg	0.05	0.05
1,3,5-T methylbenzene	mg/kg	0.05	<0.05
1,3-Dichlorobenzene	mg/kg	0.05	0.05

Di Sample	17/09/03	17/09/03	R68221
L b R f N	179548	179549	AQC
C l m R f No	7	10	L b Std
S mpl Typ	ES	ES	
T I P t / B o h l N	TP614	TP614	
D pth (m)	1.30	2.30	
H d t d g at Surf ce (Y/N)			

1,3-Dichloropropane	mg/kg	0.05	0.05
1,4-Dichlorobenzene	mg/kg	0.05	0.05
1-Chloroethene	mg/kg	0.05	0.05
1-Methylpropylbenzene	mg/kg	0.05	0.05
2,2-Dichloropropane	mg/kg	0.05	0.05
2-Chloroethene	mg/kg	0.05	0.05
Benzene	mg/kg	0.05	0.05
Bromobenzene	mg/kg	0.05	0.05
Bromochloroethane	mg/kg	0.05	0.05
Bromodichloroethane	mg/kg	0.05	0.05
Bromoform	mg/kg	0.05	0.05
Carbo Tetrachloride (PCM)	mg/kg	0.05	0.05
Chlorobenzene (s m)	mg/kg	0.05	0.05
Chlorodibromoethane	mg/kg	0.05	0.05
Chloroethane	mg/kg	0.05	0.05
Chloroform	mg/kg	0.05	0.05
cis-1,2-Dichloroethylene	mg/kg	0.05	0.05
1,3-Dichloropropane	mg/kg	0.05	0.05
Dibromochloromethane	mg/kg	0.05	0.05
Dibromoethane	mg/kg	0.05	0.05
Dibromomethane	mg/kg	0.05	0.05
Dichlorobenzene	mg/kg	0.05	0.05
Dichloromethane	mg/kg	0.05	0.05
Ethylbenzene	mg/kg	0.05	0.05
Hexachlorobutadiene	mg/kg	0.05	0.05
meta & para Xylene	mg/kg	0.05	0.05
Methylisopropylbenzene	mg/kg	0.05	0.05
Methylchlorobenzene	mg/kg	0.05	0.05
Mono chlorophenols (s m)	mg/kg	0.05	0.05
Benzylbenzene	mg/kg	0.05	0.05
n-Propylbenzene	mg/kg	0.05	0.05
ortho Xylene	mg/kg	0.05	0.05
Styrene	mg/kg	0.05	0.05
tert-Butylbenzene	mg/kg	0.05	0.05
Tetrachlorobenzene	mg/kg	0.05	0.05
Trichloroethene (PCE)	mg/kg	0.05	0.05
Tetrahydrofuran	mg/kg	0.05	0.05
Toluene	mg/kg	0.05	0.05
trans-1,2-Dichloroethene	mg/kg	0.05	0.05
trans-1,3-dichloropropane	mg/kg	0.05	0.05
Trichloroethene (TCE)	mg/kg	0.05	0.05
Trichloroethane	mg/kg	0.05	0.05
Trichloromethane	mg/kg	0.05	0.05
Vinyl Chloride	mg/kg	0.05	0.05

SVOCs

1,2,4-Trichlorobenzene	mg/kg		
1,4-Dichlorobenzene	mg/kg		
2,3,4,6-Tetrachlorophenol (sum)	mg/kg		
2,4,5-Trichlorophenol	mg/kg		
2,4,6-Trichlorophenol	mg/kg		
2,4-Dichlorophenol (s m)	mg/kg		
2,4-Dimethylphenol	mg/kg		
2,4-Dinitrophenol	mg/kg		
2,6-Dimethylphenol	mg/kg		
2,6-Dinitrophenol	mg/kg		
2-Chlorophthalene	mg/kg		
2-Chlorophenol (s m)	mg/kg		
2-Methylphenol	mg/kg		
2-Nitrophenol	mg/kg		
4-Chloro-3-methylphenol	mg/kg		
4-chlorobenzophenylethyl	mg/kg		
4-Methylphenol	mg/kg		
4-Nitrophenol	mg/kg		
Azobenzene	mg/kg		
bis(2-chloroethyl)ether	mg/kg		

D t S mpled	17/09/03	17/09/03	R68221
L b R f No	179548	179548	AQC
C st mer R f N	7	10	Lab Std
S mpl Typ	ES	ES	
Tri l P t / Bo eh le N	TP614	TP614	
D pth (m)	1 30	2 30	
H dsta d ng t Surf (Y/N)			

b (2-chloro thyo y)metha e	mg/kg
b (hi sop py)etne	mg/kg
B omophenylphenyleth	mg/kg
He hl o-1 3 but de	mg/kg
Hex chlo b nz ne	mg/kg
H hl eth	mg/kg
Isoph o	mg/kg
Nt b n e	mg/kg
n tosod propyl-1-p p am	mg/kg
Pe tachl rob ne	mg/kg
Pe tachl ophe ol	mg/kg

Es(2-ethyl y)phthal te	mg/kg
B tylbe zylphthalate	mg/kg
D ethylphthal te	mg/kg
D m thylphth late	mg/kg
D n b tylphthalate	mg/kg
D-n tyl phth l te	mg/kg

Total Phthalates	mg/kg
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ORGANO CHLORINE PESTICIDES

Ald	mg/kg
Beta HCH (B ta BHC)	mg/kg
Chi rda	mg/kg
DDD	mg/kg
D ld	mg/kg
D s (tot l)	mg/kg
E d lf l	mg/kg
E dos lf n ll	mg/kg
E dos lfa S lph t	mg/kg
E d	mg/kg
E d E d Ald hyde	mg/kg
Gamm HCH (L nd e)	mg/kg
H pt chlo	mg/kg
H ptachl p de	mg/kg
H pt chlorob ze	mg/kg
Meth xychl	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azi ph m thyl	mg/kg
Demet s-methyl	mg/kg
Dazi o	mg/kg
D chlorvos	mg/kg
Do ath o	mg/kg
Ds lf to	mg/kg
EPN Eth on	mg/kg
Malath on	mg/kg
Methyl Parathl n	mg/kg
P th o	mg/kg
Terbufos	mg/kg

CARBAMATE (Pe tu de)

C rbaryl	mg/kg
Carbof	mg/kg
Ma eb	mg/kg

PHENOL UREA HERBICIDES

Chi otolu on	mg/kg
D ron	mg/kg
Isoproturon	mg/kg
L ro	mg/kg

D t S mpl d	17/09/03	17/09/03	R68221
Lab Ref N	179548	179549	AQC
C t m Ref N	7	10	L b Std
S mpl Typ	ES	ES	
T al P t / B hol N	TP614	TP614	
D pth (m)	1.30	2.30	
H d ta d ng at S rf (Y/N)			

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chloro-o-tolyl acetic acid	mg/kg
Dacamba	mg/kg
Dichloprop	mg/kg
Mecprop	mg/kg
Si	mg/kg

TRIAZINES

Atrazine	mg/kg
Simazine	mg/kg

PCB

PCB Conge 28	mg/kg
PCB Conge 52	mg/kg
PCB Conge 101	mg/kg
PCB Conge 118	mg/kg
PCB Conge 138	mg/kg
PCB Conge 153	mg/kg
PCB Conge 160	mg/kg

Total PCBs	mg/kg
------------	-------

ALCOHOLS

Benzal	mg/kg
Ethanol	mg/kg
Ethyl Glycol	mg/kg
Methanol	mg/kg
Propyl-1-ol	mg/kg
Propyl-2-ol	mg/kg

MISCELLANEOUS

Chloroform	Cal/g
------------	-------

Si	mg/kg
T	mg/kg

1,2-Dichloropropane	mg/kg
1,3-Dichloropropane	mg/kg
2,4-Dinitrophenol	mg/kg
Acetone	mg/kg
Carbazole	mg/kg
Carbonylphosphide	mg/kg
Ceasol (TPH by GCFID)	mg/kg
Cyclohexane	mg/kg
Cyclohexane	mg/kg
Hexachlorocyclopentadiene	mg/kg
Hydroquinone	mg/kg
N,N-Dimethylamine	mg/kg
p-Chloroaniline	mg/kg
Permethrin/Cypermethrin	mg/kg
Pyridine	mg/kg
Styrene	mg/kg
Sulpholane	mg/kg
Total Extractable Matter (Histo)	mg/kg
Toxaphene	mg/kg
Tributyltin	mg/kg
Trichloroethylene	mg/kg
Vinylacetate	mg/kg

CONCRETE

Chloride BS1377 Part 3 chloride preparation	mg/kg
HAC (Reported maximum of High Alkali Content)	mg/kg
Mix Proportion Cement/Aggregate Ratio-BS188	mg/kg

Organic Matter	%	8.6
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Notes

- Be zo(b)fl o
- 2 D benzo(a h)
- Insuffic t sa
- ** Labelled s 6i

ENVIRONMENTAL ANALYSIS LABORATORIES

15 Burgess Road Ivyhouse Lane Industrial Estate Hastings East Sussex TN35 4NR

Tel 01424 444433 Fax 01424 442299 info@environmentalanalysis.com

ANALYTICAL REPORT No R68221

Location Durham Rd Newport

Your Project No F13041

Reporting Date 07/10/03

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
Leeds LS11 5SX

	Date Sampled	17/09/03	17/09/03	17/09/03
	Lab Ref No	179507	179518	179544
	Customer Ref No	6	9	6
	Sample Type	ES	ES	ES
<u>Soils</u>	Trial Pit / Borehole No	TP636D	TP718	TP613
	Depth (m)	1.90	1.40	1.40

Aromatic

C ₅ C ₇	(mg/kg) N	<5	<5	<5
>C ₇ C ₈	(mg/kg) N	<5	<5	<5
>C ₈ C ₁₀	(mg/kg) N	<5	<5	<5
>C ₁₀ C ₁₂	(mg/kg) N	<5	<5	<5
>C ₁₂ C ₁₆	(mg/kg) N	5	<5	<5
>C ₁₆ C ₂₁	(mg/kg) N	176	<5	<5
>C ₂₁ C ₂₅	(mg/kg) N	121	<5	<5

Aliphatic

C ₅ C ₆	(mg/kg) N	<5	<5	<5
>C ₆ C ₈	(mg/kg) N	<5	<5	<5
>C ₈ C ₁₀	(mg/kg) N	<5	<5	<5
>C ₁₀ C ₁₂	(mg/kg) N	<5	<5	<5
>C ₁₂ C ₁₆	(mg/kg) N	<5	<5	<5
>C ₁₆ C ₂₁	(mg/kg) N	64	6	<5
>C ₂₁ C ₂₅	(mg/kg) N	35	2	<5

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t not tested

www.environmentalanalysis.com

Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 13/10/03

ANALYTICAL REPORT No R68096

Location Durham Rd Newport

Your Project No F13041

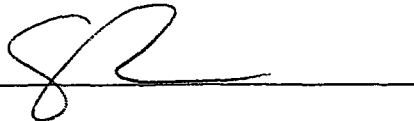
The attached analytical results relate to samples received on 17 Sep 2003

The report is only valid if it contains the total number of pages indicated at the bottom of this page

Checked by



Authorised by



If you have any queries regarding this report please contact Steve Chapman or Steve Knight

■ ENVIRONMENTAL ANALYSIS LABORATORIES
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A Division of Norwest Holst Soil Engineering Ltd
Registered in England No 980795
Registered Office Parkside Lane Dewsbury Road Leeds LS11 5SX

Page 1 of 39

	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03
D t S mpl d	178550	178551	178552	178553	178554	178555	178557	178558	178559	178560
L b R f N	3	7	11	8	11	14	3	3	7	11
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Type	TP706	TP708	TP708	TP709	TP709	TP709	TP710	TP709	TP710	TP710
T l Pit / B reh l N	0.15	1.20	2.30	1.30	2.30	2.50	0.19	0.22	1.20	2.18
D pth (m)										
H d ta d g t S rf ce (Y/N)										
pH									7.5	
/ L lg t										
/ M t re										
% St es										
Asbe t									0.001	
PHENOLICS										
Butyl Ph l										0.5
Catech l										0.5
Cres l (m)										0.5
N phth l										0.5
Ph l										0.5
R rc nol										0.5
T m thylphe l										0.5
Xyl nol & Ethylphe l										0.5
T tal Ph l										0.5
US EPA PRIORITY PAH										
A naphthene										4.1
A naphthylene										1.2
A thrace										1.4
B nzo()Anthrac ne										4.8
B nzo()pyrene										6.6
B nzo(b)fl ra th ne										5.0
B nzo(k)fl ranthene										4.6
B nzo(g h)peryl										4.6
Chrys ne										5.0
D -benzo(h) a thrace ²										10.7
l d o(1,2,3-cd)pyrene ²										10.7
Fl ranthe										2.7
Fl rene										12.7
N phthal ne										8.9
Phen thre										9.1
Pyr										81.4
T tal US EPA 16 PAH										81.4
OTHER PAH										
Anth threne										
B nzo()pyrene										
Cycl pent (cd)pyre										
GENERAL INORGANICS										
Compl Cya d										
E ly Liberatable Cya d (free)										
Th ocyanat										1
Total Cya d										2
S lph d										160
S lphur (free)										700
T tal S lph l										
W t S l bi S lphate										
Wate S l bi Chl de										
Phosphate										57.7
E h nge bi Amm m										
Nitrate										
Nitrt										

	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03
D t S mpl d	178550	178551	178552	178553	178554	178555	178557	178558	178559	178560	
Lab R f N	3	7	11	8	11	14	3	3	7	11	
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES	
S mpl Typ	TP708	TP708	TP708	TP709	TP709	TP709	TP710	TP709	TP710	TP710	
T i P t / B reh i N	0.15	1.20	2.30	1.30	2.30	2.50	0.19	0.22	1.20	2.18	
D pth (m)											
H rd t d g t S rf (Y/N)											

HEAVY METALS/METALLOIDS

	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Al m m										
Ant m ny									92.6	
Ars										
B m										
B ryl m										0.6
B ro (W t S i bl)										1.8
Cadm m										36
Chrom m (T tal)										<2
Chrom m (H l nt)										
C b ti										311
C ppe										
G rma um										576
Lead										15
M rcury										
M lybd m										86
N kel										16
S j /s m										
V nad m										824
Znc										

ESSENTIAL ELEMENTS

	mg/kg
Calci m	
Iro	
M gnes m	
M ganes	
Potass m	
Sod m	

MONOAROMATICS

	mg/kg
B nzene	
T l ne	
Ethylbenz ne	
M ta & P ra Xyl ne	
Ortho Xyl ne	
T tal Xyl es	
MTBE	
1 2 4 T methylbenz	
1 3 5-T m thylbenzene	

TOTAL HYDROCARBONS

	mg/kg	mg/kg	mg/kg
P trole m Range Orga cs (C -C)			5
D l Ra g Org cs (C -C ₂₈)			127
Hydrocarbon Scree (GC-FID)			170

VOC

	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
1 1 1 T chloroetha	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1 1 2 2 T trachloroethane	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1 1 2 Trchloro-1 2 2 inluoroethane	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1 1 2 T chl roetha	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1 1 Dichl roethane	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1 1 Dichloroethene	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2 3-T chl rop propane	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1 2 3-T methylbenz ne	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1 2 4-T chl robenz ne	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2 4-Trimethylbenz ne	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05	0.05
1 2 D bromo-3-Chloroprop ne	0.05	0.05	0.05	<0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05
1 2 Dichl robenzene	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1 2 D chl roethane	0.05	0.05	0.05	<0.05	<0.05	<0.05	<0.05	0.05	0.05	0.05	0.05
1 2-Di hl rop propane	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05
1 2 Dichl ropropene	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1 3 5-T methylbenzene	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1 3-D chlorobenzene	<0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05

Norwest Holst Soil Engineering Ltd
R68096 Durham Rd Newport

	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03
D t S mpled											
L b R f N	178550	178551	178552	178553	178554	178555	178557	178558	178559	178560	
Cust m R f N	3	7	11	8	11	14	3	3	7	11	
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES	
T I P t / B h l N	TP708	TP708	TP708	TP709	TP709	TP709	TP710	TP709	TP710	TP710	
D pth (m)	0.15	1.20	2.30	1.30	2.30	2.50	0.19	0.22	1.20	2.18	
H dsta d g t S rf (Y/N)											
1,3-D hlor propa	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,4-D hl robenz ne	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1-Chl rol l	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1 M thylpropylbenz ne	mg/kg	0.05	0.05	0.05	<0.05	<0.05	0.05	0.05	0.05	0.05	0.05
2,2 Di hl roprop ne	mg/kg	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
2 Chl rot luene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
B nz ne	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Brom benz ne	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
B mo hl rom thane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Brom d hl rom tha	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Bromof rm	mg/kg	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05
C rb Tetra hl d (PCM)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Chl benz (m)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Chl rodbrom m thane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Chl roeth	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Chl rof rm	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2 D hl roethyl	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
ca 1,3-D hl ropropene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
D brom chl rom thane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
D bromoetha	mg/kg	0.05	0.05	0.05	0.05	<0.05	0.05	<0.05	0.05	0.05	0.05
D brom m th ne	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
D hl robenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Dchl m thane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Ethylbenze	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
H hl robutad ne	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
m ta & para Xyle	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
M thyl is propylbenz ne	mg/kg	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05
Monochl robenz ne /	mg/kg	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	<0.05
M nochl roph noi (m)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Butylbenzen	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Propylbenzene	mg/kg	0.05	0.05	0.05	0.05	<0.05	0.05	<0.05	<0.05	0.05	0.05
rtho Xyl	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Styre	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
t r t Butylbenz ne	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	<0.05
T trachl robenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
T tra hl roethe (PCE)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
T trahyd of ra	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Tol	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
tra 1,2 D hloroethene	mg/kg	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
tra 1,3-dichl ropropene	mg/kg	0.05	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05
T chloroethene (TCE)	mg/kg	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	<0.05	0.05	0.05
T hlorofluorom thane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
T hlorom thane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
V yl Chl d	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
SVOC											
1,2,4 T hl benzene	mg/kg										
1,4-Dchl rob nz ne	mg/kg										
2,3,4,6-T trachlo phenol (m)	mg/kg										
2,4,5 T hl roph noi	mg/kg										
2,4,6-T hl rophe l	mg/kg										
2,4 Dichloroph noi (m)	mg/kg										
2,4-D m thylph noi	mg/kg										
2,4 D nitrat luene	mg/kg										
2,6-D m thylph noi	mg/kg										
2,6-D nitrat luene	mg/kg										
2-Chl ronaphthal ne	mg/kg										
2-Chl rophe l (m)	mg/kg										
2 M thylphenol	mg/kg										
2 Nitrophenol	mg/kg										
4-Chl ro-3-methylphenol	mg/kg										
4-chl robenzylphenylethe	mg/kg										
4-M thylph noi	mg/kg										
4 Nitrophenol	mg/kg										
Az benz ne	mg/kg										
bs(2-chl roethyl)ethe	mg/kg										

D t S mpl d	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03
Lab R f N	178550	178551	178552	178553	178554	178555	178557	178558	178559	178560
C t m Ref N	3	7	11	8	11	14	3	3	7	11
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
T i Plt / B h l N	TP708	TP708	TP708	TP709	TP709	TP709	TP710	TP709	TP710	TP710
D pth (m)	0.15	1.20	2.30	1.30	2.30	2.50	0.19	0.22	1.20	2.18
H d ta d g t S rf ce (Y/N)										

bis(2-chl roethoxy)m thane	mg/kg
b (hl ro propyl)ethe	mg/kg
B m ph yiph nylethe	mg/kg
H hl ro-1 3-but d	mg/kg
H hl be ne	mg/kg
H hl ro th ne	mg/kg
i ph rone	mg/kg
Nitrobenz	mg/kg
n-nitro d n-p pyi-1 propa m	mg/kg
P ta hl robenz	mg/kg
P ta hl rophenol	mg/kg

Bis(2-ethylh y)phth l te	mg/kg
Butylbenzylphthal t	mg/kg
D thylphth lat	mg/kg
D m thylphthal t	mg/kg
D-n butylphthalat	mg/kg
D-n-octyl phth l t	mg/kg

T tal Phthal t	mg/kg
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ORGANO CHLORINE PESTICIDES

Ald	mg/kg
B ta HCH (B t BHC)	mg/kg
Chi rd ne	mg/kg
DDD	mg/kg
D ld	mg/kg
D (t tal)	mg/kg
End lf l	mg/kg
E d lf ll	mg/kg
E d lf S lphat	mg/kg
E d	mg/kg
E d E d Ald hyd	mg/kg
G mm HCH (L nda)	mg/kg
H pt hl	mg/kg
H pla hl po d	mg/kg
H pla hl benz	mg/kg
M th xychl	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinph m thyl	mg/kg
Dem t -s methyl	mg/kg
D azinon	mg/kg
D hl rv	mg/kg
D th	mg/kg
Dis lf t	mg/kg
EPN Ethio	mg/kg
M l th on	mg/kg
M thyl P rathio	mg/kg
P rath	mg/kg
T rbu f	mg/kg

CARBAMATE (P ticide)

Carbaryl	mg/kg
Carbofura	mg/kg
M b	mg/kg

PHENOL UREA HERBICIDES

Chi t luron	mg/kg
D uro	mg/kg
i proturo	mg/kg
Lmuro	mg/kg

Norwest Holst Soil Engineering Ltd
R68096 Durham Rd Newport

	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03
D t S mpl d										
Lab R f N	178550	178551	178552	178553	178554	178555	178557	178558	178559	178560
Cust m R f N	3	7	11	8	11	14	3	3	7	11
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
T l Plt / B h i N	TP708	TP708	TP708	TP709	TP709	TP709	TP710	TP709	TP710	TP710
D pth (m)	0.15	1.20	2.30	1.30	2.30	2.50	0.19	0.22	1.20	2.18
H rd ta d g t S rf ce (Y/N)										

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chl ro-o-t lyl xy cel cid	mg/kg
D camba	mg/kg
D hl roprop	mg/kg
M prop	mg/kg
SI	mg/kg

TRIAZINES

Altnz	mg/kg
S m zine	mg/kg

PCB

PCB C g ne 28	mg/kg
PCB C g 52	mg/kg
PCB Cong ne 101	mg/kg
PCB C g ne 118	mg/kg
PCB C ng 138	mg/kg
PCB Cong ne 153	mg/kg
PCB Co g ne 180	mg/kg

T tal PCB	mg/kg
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ALCOHOLS

But nol	mg/kg
Ethanol	mg/kg
Ethyl ne Glycol	mg/kg
M th nol	mg/kg
Propan-1-ol	mg/kg
Propan-2-ol	mg/kg

MISCELLANEOUS

C l fic V l	C /g
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S lv	mg/kg
T	mg/kg

1,2-D hl ropropane	mg/kg
1,3-D hl ropropene	mg/kg
2,4-D nitrophenol	mg/kg
A t ne	mg/kg
C rbaz l	mg/kg
C rbo dis lph d	mg/kg
Cre sot (TPH by GCFID)	mg/kg
Cyclohe ne	mg/kg
Cycl he ne	mg/kg
H chl rocycl pe t diene	mg/kg
Hyd oquinone	mg/kg
N Nitro od phe ylam ne	mg/kg
p-Chloro il ne	mg/kg
Premethnn/Cypermeth	mg/kg
Pynd ne	mg/kg
Styrene	mg/kg
Sulphola	mg/kg
T luene Extractabl Matter (Hist)	mg/kg
T xaphene	mg/kg
T butyl T	mg/kg
T chloromethane	mg/kg
V nyl Acetat	mg/kg

CONCRETE

Chl nde BS1377 P rt 3 nclud ng preparation	mg/kg
HAC (Rapid d t m natio of H gh Alum na Cemx	mg/kg
Mix Proporu ns-Cem nt/Aggregate Ratio-BS1881	mg/kg

Org ic M tt	%
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Total Chl nated S lvents (AOX)	mg/kg
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F ecal Streptococci	(no/100g)
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F ecal Colif rm	(no/100g)
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Notes

- Benzo(b)fluoranthene & Benzo(k)fluoranthene co-elut (reported as um)
- ² Di-benzo(h)anthracene & Ind no(1,2,3-cd)pyrene co-elut (reported as um)
- Labelled 2.40m
- ** Insufficient sample fo nalysis

Norwest Holst Soil Engineering Ltd
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D t S mpl d	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03
Lab R f N	178561	178562	178563	178564	178565	178567	178568	178569	178570	178571
C t m Ref N	3	6	9	13	14	3	6	10	13	16
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
T i P t / B reh l N	TP725	TP725	TP725	TP725	TP725	TP726	TP726	TP726	TP726	TP726
D pth (m)	0.13	0.29	1.29	2.10	2.20	0.10	0.28	1.28	2.28	2.30
H rdsta d g t S rface (Y/N)										
pH										8.1
/ L ss lg rti										%
% M ture										%
% Stones										%
A be tos										0.001
PHENOLICS										
Butyl Phe l										mg/kg
C techol										0.5
Cresol (m) /										0.5
Naphthol										0.5
Phe l										0.5
R sorci l										<0.5
T m thylphe l										0.5
Xyl l & Ethylphenols										0.5
T tal Ph l										0.5
US EPA PRIORITY PAH										
Ac naphthene										mg/kg
Acenaphthyl ne										0.5
Anthracene										0.5
B nzo()Anthracene										0.5
Benzo()pyrene										<0.5
B nzo(b)fl ra thene										0.5
B nzo(k)fluoranthene										0.5
B nzo(g,h)peryl ne										0.5
Chrysene										0.5
D be zo(h)anthracen ⁻²										0.5
Ind no(1,2,3-cd)pyre ⁻²										0.5
Fluoranthene										<0.5
Fluorene										0.5
N phthalene										0.5
Ph nanthre										0.5
Pyrene										0.5
T tal US EPA 16 PAH										0.5
OTHER PAH										
Anthra threne										mg/kg
Benzo()pyrene										mg/kg
Cy l penta(cd)pyrene										mg/kg
GENERAL INORGANICS										
Comple Cyanid										mg/kg
Easily Liberatabl Cyanid (fre)										mg/kg
Th ocyanat										mg/kg
T tal Cyan d										1
S lphide										mg/kg
S lphur (free)										2
Tot l S lphat										mg/kg
W ter Sol ble S lphat										20
W t S lubl Chl de										mg/kg
Pho phate										mg/kg
Exchangeabl Ammon um										mg/kg
Nitrat										19.2
Nitrit										mg/kg

Norwest Hoist Soil Engineering Ltd
R68096 Durham Rd Newport

	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03
D t S mpled										
Lab R f N	178561	178562	178563	178564	178565	178567	178568	178569	178570	178571
Cust m Ref N	3	6	9	13	14	3	6	10	13	16
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tri l Pit / B reh I N	TP725	TP725	TP725	TP725	TP725	TP726	TP726	TP726	TP726	TP726
D pth (m)	0.13	0.29	1.29	2.10	2.20	0.10	0.28	1.28	2.28	2.30
H dsta d g t S rf ace (Y/N)										

HEAVY METALS/METALLOIDS

Al m m	mg/kg	
Antim ny	mg/kg	
Arse	mg/kg	54.6
B m	mg/kg	
B ryl m	mg/kg	
B ro (W te S l bl)	mg/kg	2.2
Cadm m	mg/kg	2.4
Chrom um (T tal)	mg/kg	48
Chrom m (H val nt)	mg/kg	**
Cobalt	mg/kg	
C ppe	mg/kg	333
G rm um	mg/kg	
Lead	mg/kg	861
M rc ry	mg/kg	0.6
M lybd m	mg/kg	
N k l	mg/kg	125
S le um	mg/kg	3.8
V nad m	mg/kg	
Zinc	mg/kg	1192

ESSENTIAL ELEMENTS

Calcium	mg/kg
Iro	mg/kg
M gnes um	mg/kg
M ng nese	mg/kg
Potassium	mg/kg
Sod um	mg/kg

MONOAROMATICS

Benzene	mg/kg
T l ne	mg/kg
Ethylbenzene	mg/kg
M ta & P ra Xylene	mg/kg
Ortho Xylene	mg/kg
T tal Xyl es	mg/kg
MTBE	mg/kg
1,2,4-T m thylbenzene	mg/kg
1,3,5-T m thylbenzene	mg/kg

TOTAL HYDROCARBONS

P trol um Rang Orga ics (C ₆ -C ₁₀)	mg/kg	<5
Die el Rang Organ cs (C ₆ -C ₂₆)	mg/kg	5
Hydrocarbo Scree (GC-FID)	mg/kg	<5

VOC

1,1,1-Trichloroethane	mg/kg	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1,2,2-Tetrachloroethane	mg/kg	0.05	<0.05	<0.05	<0.05	0.05	<0.05	0.05	0.05	0.05	0.05
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	<0.05	0.05	<0.05	<0.05	<0.05	0.05	0.05	0.05	0.05	0.05
1,1,2-Trichloroethane	mg/kg	0.05	<0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05
1,1-Dichloroethane	mg/kg	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1-Dichloroethene	mg/kg	0.05	<0.05	<0.05	<0.05	0.05	0.05	0.05	<0.05	0.05	0.05
1,2,3-Trichloropropane	mg/kg	0.05	<0.05	<0.05	0.05	0.05	0.05	<0.05	0.05	<0.05	<0.05
1,2,3-Trimethylbenzene	mg/kg	0.05	0.05	<0.05	<0.05	0.05	0.05	<0.05	0.05	0.05	0.05
1,2,4-Trichlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	<0.05	<0.05	0.05	0.05	0.05
1,2,4-T m thylbenzene	mg/kg	0.05	<0.05	<0.05	<0.05	0.05	0.05	<0.05	0.05	0.05	0.05
1,2-Dibromo-3-Chloropropane	mg/kg	0.05	<0.05	<0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05
1,2-Dichlorobenzene	mg/kg	0.05	<0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2-Dichloroethane	mg/kg	0.05	<0.05	<0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05
1,2-Dichloropropane	mg/kg	<0.05	0.05	0.05	<0.05	<0.05	0.05	0.05	<0.05	0.05	0.05
1,2-Dichloropropene	mg/kg	0.05	<0.05	<0.05	<0.05	0.05	0.05	<0.05	0.05	0.05	0.05
1,3,5-T m thylbenzene	mg/kg	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,3-Dichlorobenzene	mg/kg	0.05	<0.05	<0.05	0.05	0.05	0.05	<0.05	<0.05	0.05	0.05

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	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03
D t S mpl d	178561	178562	178563	178564	178565	178567	178568	178569	178570	178571
Lab R f N	3	6	9	13	14	3	6	10	13	16
C m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Type	TP725	TP725	TP725	TP725	TP725	TP726	TP726	TP726	TP726	TP726
T i Pit / B reh l N	0.13	0.29	1.29	2.10	2.20	0.10	0.28	1.28	2.28	2.30
D pth (m)										
H rdsta d g tS rfacs (Y/N)										
1,3-D chlorop pane	mg/kg	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,4-D hlorobenz	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1-Chl rot luene	mg/kg	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05
1-M thylpropylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
2,2-D chl roprop ne	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
2-Chl rot i ne	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
B nzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Brom benz ne	mg/kg	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05
Brom hl rom th ne	mg/kg	0.05	0.05	0.05	<0.05	<0.05	0.05	0.05	0.05	0.05
Bromod hl rom thane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Brom f rm	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Carbo T tra hl nd (PCM)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Chl robenz ne (m)	mg/kg	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05
Chl rod brom m th ne	mg/kg	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05
Chl roethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Chl rof rm	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2-D hl roethyl	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
ci 1,3-D hl propene	mg/kg	0.05	0.05	<0.05	0.05	0.05	0.05	<0.05	0.05	0.05
D bromochl rom th	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
D brom thane	mg/kg	0.05	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05
D brom m tha	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05	0.05
D hl robenz ne	mg/kg	0.05	0.05	<0.05	<0.05	<0.05	0.05	<0.05	0.05	0.05
D chl romeltha	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Ethylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
H chl robutad ne	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
m ta & p ra Xyl ne	mg/kg	<0.05	0.05	<0.05	0.05	0.05	<0.05	<0.05	0.05	0.05
M thyl- propylbenz ne	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
M nochl robenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
M nochl rophenol (m)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Butylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Propylbenzene	mg/kg	0.05	0.05	<0.05	0.05	0.05	<0.05	<0.05	0.05	0.05
rtho Xyl ne	mg/kg	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05
Styrene	mg/kg	0.05	0.05	<0.05	0.05	0.05	<0.05	0.05	0.05	0.05
t r t Butylbenz ne	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
T trachl robenzene	mg/kg	0.05	0.05	0.05	<0.05	0.05	0.05	<0.05	0.05	0.05
T tra hl ro thene (PCE)	mg/kg	<0.05	0.05	<0.05	0.05	<0.05	0.05	0.05	0.05	0.05
T trahydrofura	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
T i ne	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
trans-1,2-Dichloroethene	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
trans-1,3-dchl ropropene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
T chl roethene (TCE)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
T chlrofl rom thane	mg/kg	0.05	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05
T chl rom thane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Vi yl Chl de	mg/kg	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05
SVOC:										
1,2,4-T hl robenzene	mg/kg									
1,4-D chl robenz ne	mg/kg									
2,3,4,6-T trachloroph nol (m)	mg/kg									
2,4,5-T hlorophenol	mg/kg									
2,4,6-T chl rophe l	mg/kg									
2,4-D chl rophenol (um)	mg/kg									
2,4 Dim thylphenol	mg/kg									
2,4 Dinstroliuene	mg/kg									
2,6-D m thylphenol	mg/kg									
2,6-D trof l ne	mg/kg									
2-Chl ronaphthalene	mg/kg									
2-Chl rophenol (m)	mg/kg									
2-M thylphenol	mg/kg									
2-Nitrophenol	mg/kg									
4-Chloro-3-methylphenol	mg/kg									
4-chlorobenzylphenyletho	mg/kg									
4-M thylphenol	mg/kg									
4-Nitrophenol	mg/kg									
Azobenzene	mg/kg									
bs(2-chl roethyl)ether	mg/kg									

D t S mpl d	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03
Lab Ref N	178561	178562	178563	178564	178565	178567	178568	178569	178570	178571
C t m Ref N	3	6	8	13	14	3	6	10	13	16
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
T i Pit / B h l N	TP725	TP725	TP725	TP725	TP725	TP726	TP726	TP726	TP726	TP726
D pth (m)	0.13	0.29	1.29	2.10	2.20	0.10	0.28	1.28	2.28	2.30
H rd ta d g t S rfa (Y/N)										

b (2-chloroethyl) methane	mg/kg
bis(hydroxypropyl) ether	mg/kg
Bromophenyl ether	mg/kg
Hexachlorocyclopentadiene	mg/kg
Hexachlorobenzene	mg/kg
Hexachloroethane	mg/kg
Isophorone	mg/kg
Nitrobenzene	mg/kg
n-nitro-1,2-dichloroethane	mg/kg
Parachlorobenzene	mg/kg
Parachlorophenol	mg/kg

Bis(2-ethylhexyl)phthalate	mg/kg
Bis(benzyl)phthalate	mg/kg
Dibutylphthalate	mg/kg
Dimethylphthalate	mg/kg
Dodecylphthalate	mg/kg
Dodecylphthalate	mg/kg

Tolylphthalate	mg/kg
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ORGANO CHLORINE PESTICIDES

Aldrin	mg/kg
Beta-HCH (Beta BHC)	mg/kg
Chlordane	mg/kg
DDE	mg/kg
Dieldrin	mg/kg
Dibutyltin	mg/kg
Endosulfan I	mg/kg
Endosulfan II	mg/kg
Endosulfan S	mg/kg
Endosulfan	mg/kg
Endosulfan Aldrin	mg/kg
Gamma HCH (Lindane)	mg/kg
Heptachlor	mg/kg
Heptachlor epoxide	mg/kg
Heptachlorobenzene	mg/kg
Methoxychlor	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	mg/kg
Dimethoate	mg/kg
Diazinon	mg/kg
Dichlorvos	mg/kg
Disulfoton	mg/kg
DFP	mg/kg
EPN	mg/kg
Methidathion	mg/kg
Methylphosphorothionate	mg/kg
Phorathion	mg/kg
Tebuconazole	mg/kg

CARBAMATE (Pesticide)

Carbaryl	mg/kg
Carbofuran	mg/kg
Methidathion	mg/kg

PHENOL UREA HERBICIDES

Chlorotoluron	mg/kg
Diuron	mg/kg
Isoproturon	mg/kg
Linuron	mg/kg

	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03	09/09/03
D t S mpl d										
Lab Ref N	178561	178562	178563	178564	178565	178567	178568	178569	178570	178571
C st m R f N	3	6	9	13	14	3	6	10	13	16
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
T IPit/B h i N	TP725	TP725	TP725	TP725	TP725	TP726	TP726	TP726	TP726	TP726
D pth (m)	0.13	0.29	1.29	2.10	2.20	0.10	0.28	1.28	2.28	2.30
H rd ta d g t S r f ce (Y/N)										

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chloro-o-t lyl xy cetic cid	mg/kg
D camba	mg/kg
D chl roprop	mg/kg
M coprop	mg/kg
S lv	mg/kg

TRIAZINES

Altrazine	mg/kg
S mazine	mg/kg

PCB

PCB Cong 28	mg/kg
PCB C ng ne 52	mg/kg
PCB Cong ne 101	mg/kg
PCB C ng ne 118	mg/kg
PCB C gen 138	mg/kg
PCB C ngen 153	mg/kg
PCB C g ne 180	mg/kg

Total PCB mg/kg

0.162

ALCOHOLS

Buta l	mg/kg
Ethanol	mg/kg
Ethyl ne Glycol	mg/kg
M thanol	mg/kg
Prop n-1-ol	mg/kg
Propan-2-ol	mg/kg

MISCELLANEOUS

C l f V lue	Cal/g
Silve	mg/kg
Tin	mg/kg

1,2-Dichl roprop	mg/kg
1,3-D chl roprope	mg/kg
2,4-D itrophenol	mg/kg
A tone	mg/kg
C rbazol	mg/kg
C rbo d lph d	mg/kg
Cre sot (TPH by GCFID)	mg/kg
Cycl hexane	mg/kg
Cycl he none	mg/kg
H hl rocycl pentad ne	mg/kg
Hydroq none	mg/kg
N Nitrosod phenyl mine	mg/kg
p-Chl roa lne	mg/kg
Prem th n/Cyperm thn	mg/kg
Pynd ne	mg/kg
Styrene	mg/kg
Sulpholane	mg/kg
T luene Extractable M tt (H st nc)	mg/kg
T phene	mg/kg
T butyl T	mg/kg
Tnchl rom thane	mg/kg
V nyl Acetate	mg/kg

CONCRETE

CHI nd BS1377 P rt 3 ncluding preparation	mg/kg
HAC (Rapid d t rminatu f H gh Al mma C m	mg/kg
M Proportions-Cem nt/Aggreg t Ratio-BS1881	mg/kg

Orga ic Matt %

T tal Chlo nated S lv nts (AOX) mg/kg

0.1

F ecal Streptococci (no/100g)

Faecal Colif rms (no/100g)

Notes

- B nzo(b)fluo
- ↔ Di-benzo(h)k
- Labelled as 2
- ↔ Insufficient sa

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D t S mpl d	09/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03
Lab Ref N	178572	178573	178574	178575	178576	178577	178578	178579	178581	178582
C t me Ref N	7	3	6	7	10	11	14	16	2	6
S mpl Type	B	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tri l Plt / B reh l N	TP726	TP694	TP694	TP694	TP694	TP694	TP694	TP694	TP711	TP711
D pth (m)	1.10	0.10	0.20	1.00	1.20	1.60	2.20	2.60	0.10	0.22
H dsta d g t S rf (Y/N)										
pH				7.7				7.6		
% Loss lg t										
% Moisture										
% Sol es										
Asbestos		10-20		0.001				0.001		
PHENOLICS										
Butyl Phenol										
Catechol				**				<0.5		
Cre ls (um)				**				0.5		
N phthol								0.5		
Phenol				**				0.5		
Resorcinol				**				0.5		
T m thylphenol				**				0.5		
Xyl nol & Ethylph nol				**				0.5		
Total Phe l								0.5		
US EPA PRIORITY PAH*										
Acce phthene				8.7				4.7		
A phthyl ne				2.9				1.3		
A thracene				1.4				1.7		
B nzo(JA thracene				1.0				0.8		
B nzo(jpyrene				0.6				4.4		
B nzo(b)fluora th										
B nzo(k)fluora the				1.0				7.0		
B nzo(g h)perylene				0.5				1.5		
Chrys ne				3.3				16.9		
D benzo(h)a thra en **										
Ind o(1,2,3-cd)pyr ne				0.5				0.5		
Fluoranthene				2.4				4.6		
Fl rene				4.9				3.0		
N phthalene				22.2				5.5		
Phena threne				5.5				5.8		
Pyrene				1.7				3.3		
T tal US EPA 16 PAH				55.6				61.0		
OTHER PAH										
Anthranthrene										
B nzo(jpyrene										
Cycl penta(cd)pyrene										
GENERAL INORGANICS										
Compl Cya d										
E ily Liberatabl Cya d (fre)										
Th ocyanate										
T tal Cya d				**				1		
Sulph d								99.5		
S lph (free)				90				2030		
T tal S lph t				24900				4600		
W t Sol bl S lphat				**						
W t Sol bl Chlond										
Ph sphat										
E changeable Amm um				**				25.6		
Nitrat										
Nitrt										

D t Sampl d	09/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03
L b Ref N	178572	178573	178574	178575	178576	178577	178578	178579	178581	178582
C tom R f N	7	3	6	7	10	11	14	16	2	6
S mpl Type	B	ES	ES	ES	ES	ES	ES	ES	ES	ES
T l Pit / Borehol N	TP726	TP694	TP694	TP694	TP694	TP694	TP694	TP694	TP711	TP711
D pth (m)	1.10	0.10	0.20	1.00	1.20	1.60	2.20	2.60	0.10	0.22
H d ta di g t S rf ce (Y/N)										

HEAVY METALS/METALLOIDS

Al minm	mg/kg									
Antim y	mg/kg									
Ars	mg/kg				15.9			96.6		
B m	mg/kg									
B ryl um	mg/kg									
B ro (W t S lubl)	mg/kg			1.0				2.3		
C dm m	mg/kg			2.2				2.4		
Chrom m (Total)	mg/kg			41				178		
Chrom um (H lent)	mg/kg							**		
C ball	mg/kg									
Coppe	mg/kg			10400				4340		
G m m	mg/kg									
L d	mg/kg			112				1910		
M rc ry	mg/kg			0.5				1.0		
M lybd m	mg/kg									
N k l	mg/kg			426				226		
Sel nr m	mg/kg			0.6				1.9		
V nad m	mg/kg									
Znc	mg/kg			305				821		

ESSENTIAL ELEMENTS

C l m	mg/kg									
lro	mg/kg									
M gre m	mg/kg									
M ganese	mg/kg									
P tassium	mg/kg									
Sod m	mg/kg									

MONOAROMATICS

B nzene	mg/kg							0.2		
T l ne	mg/kg							0.2		
Ethylbenzene	mg/kg							0.2		
Meta & P ra Xyl ne	mg/kg							0.2		
Ortho Xylene	mg/kg							0.2		
Total Xyl	mg/kg							0.2		
MTBE	mg/kg									
1,2,4-T m thylbenzene	mg/kg									
1,3,5-T methylbenz	mg/kg									

TOTAL HYDROCARBONS

P trole m Range Org ics (C ₆ -C ₁₀)	mg/kg			**						
Diesel R g Org nics (C ₁₀ -C ₂₈)	mg/kg			**						
Hydrocarbo Scree (GC-FID)	mg/kg			**						

VOC

1,1,1 Trchl roethane	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
1,1,2 Tetrachloroethane	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
1,1,2 Trchl ro-1,2,2 trifluoroethane	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
1,1,2 T chloroethane	mg/kg	**	0.05	0.05	**	<0.05	0.05	<0.05	**	0.05	0.05
1,1-D hloroethane	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
1,1 D chloroethene	mg/kg	**	0.05	<0.05	**	<0.05	<0.05	0.05	**	0.05	0.05
1,2,3-T chloroprop ne	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
1,2,3-T methylbenzene	mg/kg	**	<0.05	0.05	**	0.05	0.05	<0.05	**	0.05	0.05
1,2,4-Trichlorobenzene	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
1,2,4-Trmethylbenzene	mg/kg	**	<0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
1,2 Dibromo-3-Chl rop propane	mg/kg	**	<0.05	0.05	**	<0.05	0.05	0.05	**	0.05	0.05
1,2 D chlorobenzene	mg/kg	**	0.05	0.05	**	<0.05	0.05	0.05	**	0.05	0.05
1,2-Dichloroethane	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
1,2 D chl rop propane	mg/kg	**	0.05	<0.05	**	0.05	0.05	0.05	**	0.05	<0.05
1,2-Dichloropropene	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
1,3,5-T m thylbenzene	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
1,3-Dichl robenzene	mg/kg	**	<0.05	<0.05	**	0.05	0.05	0.05	**	0.05	0.05

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D t S mpl d	09/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03
L b R f N	178572	178573	178574	178575	178576	178577	178578	178579	178581	178582	
C i me R f N	7	3	6	7	10	11	14	16	2	6	
S mpl Typ	B	ES	ES	ES	ES	ES	ES	ES	ES	ES	
Tr i Pit / B h i N	TP726	TP694	TP694	TP694	TP694	TP694	TP694	TP694	TP711	TP711	
D pth (m)	1.10	0.10	0.20	1.00	1.20	1.60	2.20	2.60	0.10	0.22	
H dsta d g t S rta (Y/N)											
1,3-D hl ropropane	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
1,4-D hl robenz ne	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
1-Chl rot luene	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
1-M thylpropylbenz ne	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
2,2-D hl ropropane	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
2-Chl rot l	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
B nzene	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
Brom benze	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
B m hl rom thane	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
Bromochl rom tha	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
Bromof m	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
C rbon T tra hlo d (PCM)	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
Chl robenz ne (m)	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
Chl rod brom metha	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
Chl roethane	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
Chl rot m	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
ci 1,2-D hl roethylene	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
is 1,3-D chl ropropene	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
D bromochl rom thane	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
D bromoetha	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
D bromom thane	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
D hl rob nz ne	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
D hl rom thane	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
Ethylbenz ne	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
H hl robutadie	mg/kg	**	0.05	0.05	**	0.05	<0.05	<0.05	**	0.05	0.05
m ta & p ra Xylene	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
M thyl sopropylbenz ne	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
M ochl robenzene	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
M nochl rophe l (um)	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
B tybenzene	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
Propylbenzene	mg/kg	**	0.05	0.05	**	<0.05	0.05	0.05	**	0.05	<0.05
rtho Xyl ne	mg/kg	**	0.05	0.05	**	0.05	0.05	<0.05	**	0.05	0.05
Styrene	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
t rt Butylbenzene	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
T trachl robenze	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
T trachl roethene (PCE)	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
T trahydrofura	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
T luene	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
tra s-1,2 Dichl roethene	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
trans-1,3-d chl ropropene	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
T hl ro thene (TCE)	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
T chlrofl rom thane	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
T Nlorometha	mg/kg	**	0.05	0.05	**	0.05	0.05	0.05	**	0.05	0.05
V yl Chlo d	mg/kg	**	<0.05	0.05	**	0.05	<0.05	0.05	**	0.05	0.05
SVOC											
1,2,4-Trchl robenzen	mg/kg										
1,4-D chl robenzene	mg/kg										
2,3,4,6-Tetra hl orophenol (um)	mg/kg										
2,4,5-T chl orophenol	mg/kg										
2,4,6-T chl orophenol	mg/kg										
2,4-Dichl rophenol (um)	mg/kg										
2,4-Dim thylphenol	mg/kg										
2,4-D nitrot luene	mg/kg										
2,6-D methylphenol	mg/kg										
2,6-Dinitrot luene	mg/kg										
2-Chloronaphthalene	mg/kg										
2-Chlorophenol (m)	mg/kg										
2-M thylphen l	mg/kg										
2-Nitroph nol	mg/kg										
4-Chl ro-3-m thylphenol	mg/kg										
4-chlorobenzylph nyl the	mg/kg										
4-M thylphe l	mg/kg										
4-Nitrophenol	mg/kg										
Azobenz ne	mg/kg										
bis(2-chloroethyl)ethe	mg/kg										

	09/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03
D t S mpl d										
Lab Ref N	178572	178573	178574	178575	178576	178577	178578	178579	178581	178582
C tom Ref N	7	3	6	7	10	11	14	16	2	6
S mpl Type	B	ES	ES	ES	ES	ES	ES	ES	ES	ES
T ial PH / B reh l No	TP726	TP694	TP694	TP694	TP694	TP694	TP694	TP694	TP711	TP711
D pth (m)	1.10	0.10	0.20	1.00	1.20	1.60	2.20	2.60	0.10	0.22
H rd ta d g t S rf ce (Y/N)										

b (2-chloroethoxy)methane	mg/kg
b (chloropropyl)ethane	mg/kg
Bromophenyl ether	mg/kg
Hexachloro-1,3-butadiene	mg/kg
Hexachlorobenzene	mg/kg
Hexachloroethane	mg/kg
Isophorone	mg/kg
Nitrobenzene	mg/kg
n-butyl di-n-propyl-1-propanamine	mg/kg
Parachlorobenzene	mg/kg
Parachlorophenol	mg/kg

Bis(2-ethylhexyl)phthalate	mg/kg
Butylbenzylphthalate	mg/kg
Dibutylphthalate	mg/kg
Dimethylphthalate	mg/kg
D-n-butylphthalate	mg/kg
D-n-octylphthalate	mg/kg

Total Phthalate	mg/kg
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ORGANO CHLORINE PESTICIDES

Aldrin	mg/kg
Beta-HCH (Beta-BHC)	mg/kg
Chlordane	mg/kg
DDD	mg/kg
DDT	mg/kg
Dieldrin	mg/kg
Dieldrin (total)	mg/kg
Endosulfan I	mg/kg
Endosulfan II	mg/kg
Endosulfan S-phate	mg/kg
Endrin	mg/kg
Endrin Alderhyd	mg/kg
Gamma HCH (Lindane)	mg/kg
Heptachlor	mg/kg
Heptachlor epoxide	mg/kg
Heptachlorobenzene	mg/kg
Methoxychlor	mg/kg
ppDDE	mg/kg
ppDDT	mg/kg
ppTDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	mg/kg
Demeton-methyl	mg/kg
Diazinon	mg/kg
Dichlorvo	mg/kg
Diazathion	mg/kg
Disulfoton	mg/kg
EPN Ethion	mg/kg
Methidathion	mg/kg
Methylphosphorothion	mg/kg
Phosphorothion	mg/kg
Terbufos	mg/kg

CARBAMATE (Pesticide)

Carbaryl	mg/kg
Carbofuran	mg/kg
Methidathion	mg/kg

PHENOL UREA HERBICIDES

Chlorotoluron	mg/kg
Diuron	mg/kg
Isoproturon	mg/kg
Linuro	mg/kg

	09/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03
D t S mpl d										
Lab Ref N	178572	178573	178574	178575	178576	178577	178578	178579	178581	178582
Cust m R f N	7	3	6	7	10	11	14	16	2	6
S mpl Typ	B	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tri l Pit / B reh l N	TP726	TP694	TP694	TP694	TP694	TP694	TP694	TP694	TP711	TP711
Depth (m)	1.10	0.10	0.20	1.00	1.20	1.60	2.20	2.60	0.10	0.22
H d ta di g t S rf ace (Y/N)										

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chl ro-o-t lyl xyacet cid	mg/kg
Dicamba	mg/kg
Dichl roprop	mg/kg
Mecoprop	mg/kg
Si	mg/kg

TRIAZINES

Alt zine	mg/kg
S mazine	mg/kg

PCB

PCB Co g er 28	mg/kg
PCB Co g ne 52	mg/kg
PCB Cong ne 101	mg/kg
PCB Cong ne 118	mg/kg
PCB Congene 138	mg/kg
PCB C ngene 153	mg/kg
PCB Congene 180	mg/kg

T tal PCB	mg/kg
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ALCOHOLS

Butanol	mg/kg
Ethanol	mg/kg
Ethyl ne Glycol	mg/kg
M th nol	mg/kg
Prop n-1-ol	mg/kg
Propan-2-ol	mg/kg

MISCELLANEOUS

Cal mfi V lue	Cal/g
Slve	mg/kg
T	mg/kg

1,2 D chloropropane	mg/kg
1,3-D chloropropene	mg/kg
2,4-Dinitrophenol	mg/kg
Acetone	mg/kg
Carbazole	mg/kg
Carbo d lphide	mg/kg
Cre ot (TPH by GCFID)	mg/kg
Cycl he ne	mg/kg
Cyclohexanone	mg/kg
H chlorocyclopentadi ne	mg/kg
Hydroquinone	mg/kg
N-Nitrosod phenylamine	mg/kg
p-Chloroa Tne	mg/kg
Permethrin/Cypermethrin	mg/kg
Pynd ne	mg/kg
Styrene	mg/kg
S lpholane	mg/kg
T luene Extractable M tte (Hist)	mg/kg
T xaphene	mg/kg
T butyl T	mg/kg
T hloromethane	mg/kg
Vinyl Acetate	mg/kg

CONCRETE

Chiond BS1377 P r t 3 includ ng preparate	mg/kg
HAC (Rapid determ nation of High Alum na Cemt	mg/kg
Mix Proportions-Cement/Aggregate Ratio-BS1881	mg/kg

Organic Matter 7 50

Total Chlorinated Solvents (AOX) mg/kg

F ecal Streptococci (no/100g)

F ecal Colif rms (no/100g)

Notes

Benzo(b)fluor
² D-benzo(h)
 Labelled as 2.
 ** Insufficient sai

D t S mpl d	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	N 1
Lab Ref N	178583	178584	178586	178587	178588	178589	178590	178591	178592	178592	Scheduled
C t m R f N	10	14	3	4	7	11	3	6	9	9	3
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tri l Pit / B hol N	TP711	TP711	TP712	TP713	TP713	TP713	TP714	TP714	TP714	TP714	TP648
D pth (m)	1.30	2.30	0.30	0.20	1.20	2.60	0.28	1.30	2.30	2.30	0.20
H rdsta dl g t S rfa (Y/N)											
pH				8.0							
/ L lg it				%							
/ M t re				%							
/ St ne				%							
Asbe t				%	0.001						
PHENOLICS											
Butyl Phe l				mg/kg							
Catech l				mg/kg	--						
Cre l (m)				mg/kg	--						
N phthol				mg/kg	--						
Phe l				mg/kg	--						
R rcinol				mg/kg							
T methylphe l				mg/kg	--						
Xyl nol & Ethylph nols				mg/kg	--						
T tal Ph l				mg/kg	--						
US EPA PRIORITY PAH											
Ace phthene				mg/kg	7.7						
Acenaphthyl ne				mg/kg	2.2						
Anthracene				mg/kg	5.1						
B nzol)Anthracene				mg/kg	8.9						
B nzol)pyrene				mg/kg	6.8						
Benzo(b)fluoranthene				mg/kg							
B nzol(k)fluoranth ne				mg/kg	7.0						
Benzo(g,h,i)perylene				mg/kg	3.1						
Chrys ne				mg/kg	8.7						
Di-benzo(h)anthracene ⁻²				mg/kg							
l d no(1,2,3-cd)pyrene ⁻²				mg/kg	2.0						
Fluoranthene				mg/kg	16.3						
Fl rene				mg/kg	5.4						
N phthal ne				mg/kg	15.3						
Phenanthrene				mg/kg	16.4						
Pyrene				mg/kg	14.7						
Total US EPA 16 PAH				mg/kg	119.4						
OTHER PAH											
Anthathrene				mg/kg							
B nzol)pyrene				mg/kg							
Cycl penta(cd)pyrene				mg/kg							
GENERAL INORGANICS											
Compl Cyanide				mg/kg							
E lly Liberatable Cya de (free)				mg/kg							
Th ocyanat				mg/kg							
T tal Cya de				mg/kg							
S lphid				mg/kg	18.7						
S lph (free)				mg/kg	120						
Total Sulphat				mg/kg	3600						
W t S l ble Sulphat				mg/kg	20						
Water S l bl Chloride				mg/kg							
Ph phate				mg/kg							
Exchangeabl Ammonu m				mg/kg	16.0						
Nitrat				mg/kg							
Nitrite				mg/kg							

	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	N 1
D t S mpled											S hed i d
L b Ref N	178583	178584	178586	178587	178588	178589	178590	178591	178592	178593	3
C t m Ref N	10	14	3	4	7	11	3	6	9	3	ES
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tri l P t / B reh l N	TP711	TP711	TP712	TP713	TP713	TP713	TP714	TP714	TP714	TP714	TP648
D pth (m)	1.30	2.30	0.30	0.20	1.20	2.60	0.28	1.30	2.30	0.20	
H d ta d g t S rf (Y/N)											

HEAVY METALS/METALLOIDS

Al m m	mg/kg	
A l m ny	mg/kg	
Ars	mg/kg	21.7
B m	mg/kg	
B ryl m	mg/kg	
B ro (W t S l bl)	mg/kg	<0.5
C dm m	mg/kg	62.9
Chromi m (T tal)	mg/kg	100
Chrom um (H av lent)	mg/kg	<2
C b lt	mg/kg	
Coppe	mg/kg	17800
Germ m	mg/kg	
L d	mg/kg	959
M rcury	mg/kg	0.6
Molybd m	mg/kg	
N k l	mg/kg	150
S l m	mg/kg	0.5
V d m	mg/kg	
Zi	mg/kg	1042

ESSENTIAL ELEMENTS

C lci m	mg/kg	
Iro	mg/kg	
M gne um	mg/kg	
M g nese	mg/kg	
P tss m	mg/kg	
S d m	mg/kg	

MONOAROMATICS

Benzene	mg/kg	
T lue	mg/kg	
Ethylbenzene	mg/kg	
M ta & P ra Xyl ne	mg/kg	
Ortho Xylene	mg/kg	
T tal Xyl es	mg/kg	
MTBE	mg/kg	
1,2,4-T m thylbenzene	mg/kg	
1,3,5-T methylbenz ne	mg/kg	

TOTAL HYDROCARBONS

P trol m Rang Org cs (C ₆ -C ₁₀)	mg/kg	5
Die l R g Org ic (C ₆ -C ₂₆)	mg/kg	5
Hydrocarbo Scree (GC-FID)	mg/kg	<5

VOC

1,1,1-Trichl roethane	mg/kg	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1,2,2-Tetrachloroethane	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1,2,2-chloro-1,2,2-trifluoroethane	mg/kg	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05
1,1,2,2-chloroethane	mg/kg	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05
1,1-D hloroethane	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1-D hloroethene	mg/kg	0.05	0.05	0.05	<0.05	<0.05	<0.05	0.05	0.05	0.05
1,2,3-Trichl ropropane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05	0.05
1,2,3-T m thylbenzene	mg/kg	0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	0.05
1,2,4-Trichl robenzene	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05
1,2,4-Tmmethylbenz ne	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05
1,2,4-Tmmethylbenz ne	mg/kg	0.05	0.05	0.05	<0.05	<0.05	<0.05	0.05	0.05	0.05
1,2-D bromo-3-Chloropropane	mg/kg	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2-D chl robenz ne	mg/kg	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2-D chl roethane	mg/kg	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	<0.05	0.05
1,2-D chloropropane	mg/kg	0.05	<0.05	0.05	<0.05	<0.05	<0.05	0.05	0.05	0.05
1,2-D hloropropane	mg/kg	0.05	<0.05	0.05	<0.05	<0.05	<0.05	0.05	0.05	0.05
1,3,5-Tmm thylbenz e	mg/kg	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05
1,3-D h robenzene	mg/kg	<0.05	<0.05	0.05	<0.05	<0.05	0.05	0.05	0.05	0.05

Norwest Holst Soil Engineering Ltd
R68096 Durham Rd Newport

D i S m p l d	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	Not
Lab R f N	178583	178584	178586	178587	178588	178589	178590	178591	178592	178592	S hed i d
C m R f N	10	14	3	4	7	11	3	6	9	3	
S m p l T y p	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES	
Tri p t / B h l N	TP711	TP711	TP712	TP713	TP713	TP713	TP714	TP714	TP714	TP648	
D p t h (m)	1.30	2.30	0.30	0.20	1.20	2.60	0.28	1.30	2.30	0.20	
H d t d g i S r f a c e (Y/N)											
1,3-Dihloroprop	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
1,4-Dichlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
1-Chlorotoluene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
1-Methylpropylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
2,2-Dihloropropene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
2-Chlorotoluene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Benzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Bromobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Bromochlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Bromodichlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Bromofluorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Carbonylthiobenzene (PCM)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Chlorobenzene (m)	mg/kg	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	
Chlorobromobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Chloroethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	
Chloroform	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	
1,2-Dichloroethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
1,3-Dichloropropene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
1,1-Dibromoethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Dibromomethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Dibromobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	
Dichlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Dichloromethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Ethylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Hexachlorocyclopentadiene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
meta-para-Xylene	mg/kg	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	
Methylpropylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05	<0.05	
Methylchlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Methylchlorobenzene (m)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	<0.05	0.05	
Butylbenzene	mg/kg	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Propylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
ortho-Xylene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Styrene	mg/kg	0.05	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	
tert-Butylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Toluene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Tetrahydroethene (PCE)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Tetrahydrofuran	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Toluene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
trans-1,2-Dichloroethene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
trans-1,3-dichloropropene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Trichloroethene (TCE)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Trichloroethene (TCE)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Trichlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Trichlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
Vinyl Chloride	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	
SVOC:											
1,2,4-Trichlorobenzene	mg/kg										
1,4-Dichlorobenzene	mg/kg										
2,3,4,6-Tetrachlorophenol (m)	mg/kg										
2,4,5-Trichlorophenol	mg/kg										
2,4,6-Trichlorophenol	mg/kg										
2,4-Dichlorophenol (um)	mg/kg										
2,4-Dimethylphenol	mg/kg										
2,4-Dinitrotoluene	mg/kg										
2,6-Dimethylphenol	mg/kg										
2,6-Dinitrotoluene	mg/kg										
2-Chlorophthalene	mg/kg										
2-Chlorophenol (m)	mg/kg										
2-Methylphenol	mg/kg										
2-Nitrophenol	mg/kg										
4-Chloro-3-methylphenol	mg/kg										
4-chlorobenzylphenylether	mg/kg										
4-Methylphenol	mg/kg										
4-Nitrophenol	mg/kg										
Azobenzene	mg/kg										
bis(2-chloroethyl)ether	mg/kg										

D t S mpl d	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	Not
Lab Ref N	178583	178584	178586	178587	178588	178589	178590	178591	178592	178592	S hed l d
C t m R f N	10	14	3	4	7	11	3	6	9	9	3
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
T l Pit / B h l N	TP711	TP711	TP712	TP713	TP713	TP713	TP714	TP714	TP714	TP714	TP648
D pth (m)	1.30	2.30	0.30	0.20	1.20	*2.60	0.28	1.30	2.30	2.30	0.20
H d ta d g t S rface (Y/N)											

b (2-chl roethy xy)m thane	mg/kg
b (chl ro propyl)eth	mg/kg
Brom ph ylphe yl th	mg/kg
H hloro-1,3-but d ne	mg/kg
H hl robenz	mg/kg
H xa hl ro thane	mg/kg
I ph rone	mg/kg
Nitrobenz	mg/kg
rosod n-propyl 1-propa m	mg/kg
P nta hl robenzene	mg/kg
P ta hl rophe l	mg/kg

B (2-ethyl xy)phthal t	mg/kg
Butylbenzylphth l t	mg/kg
D thylphthal t	mg/kg
D m thylphth lat	mg/kg
D-n-butylphthal t	mg/kg
D-n-octyl phth l t	mg/kg

Tot l Phth l t	mg/kg
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ORGANO CHLORINE PESTICIDES

Ald	mg/kg
B ta-HCH (B ta BHC)	mg/kg
Chlord	mg/kg
DDD	mg/kg
D ld	mg/kg
Dn (t tal)	mg/kg
End lf l	mg/kg
E d lf ll	mg/kg
E dos lfa S iphat	mg/kg
E drn	mg/kg
E d E d Ald hyd	mg/kg
G mm HCH (L nd ne)	mg/kg
H pta hl	mg/kg
H ptachl po d	mg/kg
H pta hl robenzene	mg/kg
M thoxychlor	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Az pho m thyl	mg/kg
Dem t n-s-m thyl	mg/kg
Diazino	mg/kg
Di hlorves	mg/kg
D th	mg/kg
D lf to	mg/kg
EPN Ethion	mg/kg
M lath on	mg/kg
M thyl P rath	mg/kg
P rathuon	mg/kg
T rbuf	mg/kg

CARBAMATE (P ticid)

Carbaryl	mg/kg
Carbofura	mg/kg
M neb	mg/kg

PHENOL UREA HERBICIDES

Chlorotoluro	mg/kg
D uro	mg/kg
Isoproturo	mg/kg
Lu ura	mg/kg

D t S mpl d	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	Not
Lab Ref N	178583	178584	178586	178587	178588	178589	178590	178591	178592	178592	Schedul d
C t m Ref N	10	14	3	4	7	11	3	6	9	9	3
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
T I P t / B reh i N	TP711	TP711	TP712	TP713	TP713	TP713	TP714	TP714	TP714	TP714	TP648
D pth (m)	1.30	2.30	0.30	0.20	1.20	2.60	0.28	1.30	2.30	2.30	0.20
H rd ta d g t S rf ce (Y/N)											

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chl ro-o-tolyl xyacet h cid	mg/kg
Dicamb	mg/kg
D hl roprop	mg/kg
M prop	mg/kg
SI	mg/kg

TRIAZINES

Alt zine	mg/kg
S mazi	mg/kg

PCB

PCB Cong ne 28	mg/kg
PCB C ng ner 52	mg/kg
PCB C g ne 101	mg/kg
PCB C g ne 118	mg/kg
PCB C ngene 138	mg/kg
PCB Cong ne 153	mg/kg
PCB C g ne 180	mg/kg

T tal PCB	mg/kg
-----------	-------

ALCOHOLS

B tanol	mg/kg
Etha l	mg/kg
Ethyl Glyc l	mg/kg
M thanol	mg/kg
Propan-1-ol	mg/kg
Propa 2-ol	mg/kg

MISCELLANEOUS

C l nfi V l	C l/g
-------------	-------

S lver	mg/kg
T	mg/kg

1,2-D hl ropropane	mg/kg
1,3-Di hloropropane	mg/kg
2,4-D itrophenol	mg/kg
Acet ne	mg/kg
C rbaz le	mg/kg
C rbo d ulphid	mg/kg
Creosot (TPH by GCFID)	mg/kg
Cycl hex ne	mg/kg
Cycl hex none	mg/kg
H achlorocycl pentad ne	mg/kg
Hydroquinone	mg/kg
N-Nitrosod phenylam ne	mg/kg
p-Chl ro lne	mg/kg
Premeth n/Cyperm thn	mg/kg
Pynd ne	mg/kg
Styrene	mg/kg
S lphol ne	mg/kg
T luene Extractable M tter (Historic)	mg/kg
Tox phene	mg/kg
T butyl T	mg/kg
Trnchlorom thane	mg/kg
Vinyl Acetate	mg/kg

* 178586 samples
report no 68096

TP712 @ 0.3m

ES

10/9/03

Faecal Streptococci <10
Faecal Coliforms <10

(13)

CONCRETE

Chlonde BS1377 P rt 3 nclud ng preparati	mg/kg
HAC (Rapid d term natio of H gh Al m na Cem	mg/kg
Mox Proportions-Cem nt/Aggregate Ratio-BS1881	mg/kg

Orga Matter	%
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Total Chl nated S lvents (AOX)	mg/kg
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Faecal Streptococci	(no/100g)	1000
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Faecal Coliform	(no/100g)	10
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Notes

- Benzo(b)fluore
- Di-benzo(h)k
- Labelled as 2.
- Insufficient sa

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D t S mpl d	Not	N t	N t	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03
Lab Ref N	S hed i d	S hed led	Sch d led	178597	178599	178600	178601	178602	178603	178604
C t m R f N	6	9	12	16	3	6	9	12	3	6
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
T i Pit / B reh i N	TP648	TP648	TP648	TP648	TP668	TP668	TP668	TP668	TP688	TP688
D pth (m)	0.30	1.20	2.30	2.70	0.20	0.30	1.30	2.30	0.20	0.40
H rd ta di g i S rface (Y/N)										

pH	V lue	8.2
% L ig ritio	%	
% Moi t re	%	
/ St ne	%	
Asb t	%	0.001

PHENOLICS

Butyl Ph nol	mg/kg	
C t h l	mg/kg	0.5
Cresol (m)	mg/kg	0.5
N phth i	mg/kg	0.5
Ph e ol	mg/kg	0.5
R rcinol	mg/kg	0.5
T m thylphe l	mg/kg	0.5
Xyle i & Ethylph nol	mg/kg	0.5
Total Ph i	mg/kg	0.5

US EPA PRIORITY PAH

Ace phthene	mg/kg	6.8
Ac naphthyl ne	mg/kg	2.2
Anthrac ne	mg/kg	0.6
B nzo()anthracene	mg/kg	1.4
B nzo()pyrene	mg/kg	2.6
B nzo(b)fluoranth ne	mg/kg	
B nzo(k)fluora th ne	mg/kg	2.0
B nzo(g,h)perylene	mg/kg	1.1
Chrysene	mg/kg	3.3
Di benzo(h)anthracene ²	mg/kg	
Indeno(1,2,3-cd)pyrene ²	mg/kg	1.0
Fluoranth ne	mg/kg	3.3
Fluorene	mg/kg	4.0
N phth i ne	mg/kg	20.6
Phenanthrene	mg/kg	5.1
Pyrene	mg/kg	2.0
T tal US EPA 16 PAH	mg/kg	55.9

OTHER PAH

Anthanthrene	mg/kg	
B nzo()pyrene	mg/kg	
Cycl pe ta(cd)pyrene	mg/kg	

GENERAL INORGANICS

C mpl Cy d	mg/kg	
E ly L beratable Cyanide (free)	mg/kg	
Th ocya t	mg/kg	
T tal Cyanid	mg/kg	1
Sulphid	mg/kg	2
S lph (free)	mg/kg	150
T tal S lphat	mg/kg	600
Water S i bl Sulphat	mg/kg	
W t S luble Chloride	mg/kg	
Pho phat	mg/kg	
E ha g ble Ammoni m	mg/kg	22.4
Nitrate	mg/kg	
Nitri	mg/kg	

D t S mpl d	N t	N t	N t	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03
Lab Ref N	S hed led	S hed led	Sched led	178597	178599	178600	178601	178602	178603	178604
Cust m R f N	6	9	12	16	3	6	9	12	3	6
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
T i P t / Boreh l N	TP648	TP648	TP648	TP648	TP668	TP668	TP668	TP668	TP668	TP668
D pth (m)	0.30	1.20	2.30	2.70	0.20	0.30	1.30	2.30	0.20	0.40
H rd t di g t S rf (Y/N)										

HEAVY METALS/METALLOIDS

Al min m	mg/kg									
A tim ny	mg/kg									
Ars	mg/kg						91.0			
B um	mg/kg									
B ryl um	mg/kg									
B ro (Wat S i bl)	mg/kg						0.5			
C dmi m	mg/kg						1.3			
Chrom m(T t l)	mg/kg						39			
Chrom m(H xa l nt)	mg/kg						2			
C balt	mg/kg									
Coppe	mg/kg						1010			
G m um	mg/kg									
Lead	mg/kg						363			
M rcury	mg/kg						0.5			
M lybd um	mg/kg									
N kel	mg/kg						147			
S i ni m	mg/kg						3.0			
V nad m	mg/kg									
Zinc	mg/kg						619			

ESSENTIAL ELEMENTS

Calci m	mg/kg									
Iro	mg/kg									
M gnes m	mg/kg									
M g ne	mg/kg									
Pota i m	mg/kg									
Sod um	mg/kg									

MONOAROMATICS

B nzene	mg/kg									
T l	mg/kg									
Ethylbenzene	mg/kg									
Met & P ra Xyl ne	mg/kg									
Ortho Xyl	mg/kg									
T tal Xyl es	mg/kg									
MTBE	mg/kg									
1,2,4-T m thylbenzene	mg/kg									
1,3,5-T m thylbenz ne	mg/kg									

TOTAL HYDROCARBONS

P troleum Range Orga ics (C ₆ -C ₁₀)	mg/kg						5			
Die l Range Organics (C ₆ -C ₂₆)	mg/kg						<5			
Hydrocarbo Scree (GC-FID)	mg/kg						5			

VOC

1,1,1 Trichloroethane	mg/kg	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05
1,1,2,2 Tetrachl roethane	mg/kg	0.05	<0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05
1,1,2 Trichloro-1,2,2-trifluoroethane	mg/kg	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05
1,1,2 Trichl roethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,1 Dichloroethane	mg/kg	<0.05	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05
1,1-Dichloroethene	mg/kg	0.05	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2,3-Trichloroprop ne	mg/kg	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05	0.05
1,2,3-Trimethylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2,4-T chl robenzene	mg/kg	0.05	0.05	0.05	<0.05	<0.05	0.05	<0.05	0.05	<0.05
1,2,4-T methylbenzene	mg/kg	0.05	0.05	0.05	0.05	<0.05	0.05	0.05	0.05	0.05
1,2 Dibromo-3-Chl rop propane	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2 D hlorobenzene	mg/kg	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	0.05
1,2 D chl roethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,2-Dichloropropane	mg/kg	0.05	<0.05	<0.05	<0.05	0.05	0.05	0.05	0.05	0.05
1,2 Dichloropropene	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,3,5-T methylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
1,3-Dichlorobenz ne	mg/kg	0.05	0.05	0.05	<0.05	<0.05	0.05	<0.05	0.05	<0.05

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D t S mpled Lab R f N	N t S hed l d	N t S h d l d	Not S h d led	10/09/03 178597	10/09/03 178599	10/09/03 178600	10/09/03 178601	10/09/03 178602	10/09/03 178603	10/09/03 178604
C t m Ref N	6	9	12	16	3	6	9	12	3	6
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
T l Pit / B reh l N	TP648	TP648	TP648	TP648	TP668	TP668	TP668	TP668	TP688	TP688
D pth (m)	0.30	1.20	2.30	2.70	0.20	0.30	1.30	2.30	0.20	0.40
H rd ta d gat S rf (Y/N)										
1.3-D hl roprop ne	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
1.4-D hl robenz ne	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
1-Chl rot lue	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
1-Methylpropylbenzene	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
2.2 D hl ropropane	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
2-Chl rotolue	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
B nze	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
Brom benzene	mg/kg			<0.05	0.05	0.05	0.05	0.05	0.05	0.05
Bromochl rom thane	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
Brom d chl romethane	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
Brom f m	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
Carbo T trachl de (PCM)	mg/kg			<0.05	0.05	0.05	0.05	0.05	0.05	0.05
Chl robenz ne (um)	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
Chl rodibrom methane	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
Chl roethane	mg/kg			0.05	<0.05	0.05	0.05	0.05	0.05	0.05
Chl roform	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
ci 1,2 Dchl roethyl ne	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
cis 1.3-Dichl ropropene	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
Dibromochl rom thane	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
Dibromoetha	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
D brom m thane	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
Di hl robenzene	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
D hl rom thane	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
Ethylbenzene	mg/kg			0.05	0.05	<0.05	0.05	0.05	0.05	<0.05
H chl robut diene	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
m ta & para Xylene	mg/kg			0.05	<0.05	0.05	0.05	0.05	0.05	0.05
Methyl-s propylbenzene	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
Monochl robenzene	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
M nochlorophenols (um)	mg/kg			0.05	<0.05	0.05	0.05	0.05	0.05	0.05
Butylbenzene	mg/kg			0.05	<0.05	0.05	0.05	0.05	0.05	0.05
P pylbenzene	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
rth Xyl ne	mg/kg			0.05	<0.05	0.05	0.05	0.05	0.05	0.05
Styrene	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
t rt Butylbenz ne	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
T trachl robenze	mg/kg			0.05	<0.05	0.05	0.05	0.05	0.05	0.05
T tra hl roethene (PCE)	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
Tetrahydrof ra	mg/kg			0.05	<0.05	0.05	0.05	0.05	0.05	0.05
T l ne	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
trans 1.2 D hloroethene	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
trans 1.3-d chl ropropene	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	<0.05
T chl roethene (TCE)	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
T hlrof rom thane	mg/kg			0.05	<0.05	0.05	0.05	0.05	0.05	0.05
Trnchl romethane	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
Vnyl Chl d	mg/kg			0.05	0.05	0.05	0.05	0.05	0.05	0.05
SVOC										
1,2.4-T chlorobenzene	mg/kg									
1.4-Dichl robenzene	mg/kg									
2.3.4.6-Tetrachl rophenol (sum)	mg/kg									
2.4.5-T chl rophenol	mg/kg									
2.4.6-T hl rophenol	mg/kg									
2.4 D hlorophenol (um)	mg/kg									
2.4-D methylphenol	mg/kg									
2.4-D ltrol l ne	mg/kg									
2.6-Dimethylphenol	mg/kg									
2.6-D ltrol luene	mg/kg									
2-Chl ronaphthalene	mg/kg									
2-Chl rophenol (um)	mg/kg									
2-M thylphenol	mg/kg									
2 Nitrophenol	mg/kg									
4-Chloro-3-methylphenol	mg/kg									
4-chl robenzylphenylether	mg/kg									
4-Methylphenol	mg/kg									
4-Nitrophenol	mg/kg									
Azobenzene	mg/kg									
bis(2-chloroethyl)ether	mg/kg									

	Not	Not	Not	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03
Sched id	Sched id	Sched id	178597	178599	178600	178601	178602	178603	178604	178604
D t S m p l d	6	9	12	16	3	6	9	12	3	6
L b R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
C t m R f N	TP648	TP648	TP648	TP648	TP668	TP668	TP668	TP668	TP668	TP668
S m p l e T y p e	0 30	1 20	2 30	2 70	0 20	0 30	1 30	2 30	0 20	0 40
T i P 1 / B r e h o l N										
D e p t h (m)										
H d t a d g t S r f c e (Y / N)										

b (2-chloroethyl) methanone	mg/kg
bis(hydroxypropyl) ether	mg/kg
Bromophenyl methyl ether	mg/kg
Hexachloro-1,3-butadiene	mg/kg
Hexachlorobenzene	mg/kg
Hexachloroethane	mg/kg
Isophorone	mg/kg
Nitrobenzene	mg/kg
n-nitrosodipropylamine	mg/kg
Perchlorobenzene	mg/kg
Perchloronol	mg/kg

Bis(2-ethylhexyl)phthalate	mg/kg
Butylbenzylphthalate	mg/kg
Diethylphthalate	mg/kg
Dimethylphthalate	mg/kg
Dipropylphthalate	mg/kg
Diphenylphthalate	mg/kg

Total Phthalates	mg/kg
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ORGANO CHLORINE PESTICIDES

Aldrin	mg/kg
Beta-HCH (Beta-BHC)	mg/kg
Chlordane	mg/kg
DDD	mg/kg
Dieldrin	mg/kg
Endosulfan	mg/kg
Endosulfan II	mg/kg
Endosulfan Sulphate	mg/kg
Endosulfan	mg/kg
Endosulfan Hydroxide	mg/kg
Gamma HCH (Lindane)	mg/kg
Heptachlor	mg/kg
Heptachlor epoxide	mg/kg
Hexachlorobenzene	mg/kg
Methoxychlor	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	mg/kg
Demeton-methyl	mg/kg
Diazinon	mg/kg
Dichlorvos	mg/kg
Dithionon	mg/kg
Disulfoton	mg/kg
EPN Ethion	mg/kg
Methidathion	mg/kg
Methyl Parathion	mg/kg
Parathion	mg/kg
Tebufofos	mg/kg

CARBAMATE (Pesticide)

Carbaryl	mg/kg
Carbofuran	mg/kg
Methidathion	mg/kg

PHENOL UREA HERBICIDES

Chlorotoluron	mg/kg
Diuron	mg/kg
Fluroxypyr	mg/kg
Linuron	mg/kg

D t S mpl d	N t	Not	Not	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03
Lab Ref N	S hed led	Sched l d	Sched l d	178597	178599	178600	178601	178602	178603	178604
C t me R f N	6	9	12	16	3	6	9	12	3	6
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tri l Plt / B reh l N	TP648	TP648	TP648	TP648	TP668	TP668	TP668	TP668	TP688	TP688
D pth (m)	0.30	1.20	2.30	2.70	0.20	0.30	1.30	2.30	0.20	0.40
H rd ta d g t S rface (Y/N)										

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chl ro-o-t yl xy t cid	mg/kg
Dicamba	mg/kg
D hloroprop	mg/kg
Mec prop	mg/kg
Silv	mg/kg

TRIAZINES

Almzine	mg/kg
S mazi	mg/kg

PCB

PCB Co gene 28	mg/kg
PCB C ng 52	mg/kg
PCB C ng ner 101	mg/kg
PCB C ng ne 118	mg/kg
PCB Co gene 138	mg/kg
PCB C gene 153	mg/kg
PCB Cong ne 180	mg/kg

T tal PCB

T tal PCB	mg/kg
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ALCOHOLS

Butanol	mg/kg
Ethanol	mg/kg
Ethylene Glycol	mg/kg
Methanol	mg/kg
Propan-1-ol	mg/kg
Prop n-2-ol	mg/kg

MISCELLANEOUS

C l rfi V lue	C l/g
Sil	mg/kg
T	mg/kg
1,2-Dichloropropane	mg/kg
1,3-Dichloropropene	mg/kg
2,4-Dinitrophenol	mg/kg
Acetone	mg/kg
Carbazol	mg/kg
Carbo dis lphid	mg/kg
Cre sot (TPH by GCFID)	mg/kg
Cyclohexane	mg/kg
Cycl h none	mg/kg
Hexa hl rocyclope ted ne	mg/kg
Hydroq none	mg/kg
N-Nitrosod phe yl m ne	mg/kg
p-Chl roanil ne	mg/kg
Prem thinn/Cypem th	mg/kg
Pyrid	mg/kg
Styre	mg/kg
Sulpholane	mg/kg
Toluene Extractable M tt (Histo)	mg/kg
Tox phene	mg/kg
Tributyl T	mg/kg
Tnchloromethane	mg/kg
V nyl Acetate	mg/kg

CONCRETE

Chlo de BS1377 P n 3 including preparato	mg/kg
HAC (Rapid determ net of H gh Alum na Cemt	mg/kg
Mix Proportu ns-Cem nt/Aggregate Ratio-BS1881	mg/kg

Org ic Matter	%
T tal Chlorinated Solvents (AOX)	mg/kg
F ecal Streptococci	(no/100g)
Faecal Colif rms	(no/100g)

N tes
 Benzo(b)fluor
 * Di-benzo(h)k
 Labelled as 2
 ** Insufficient sa

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D t S mpl d	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	R68096
Lab R f N	178605	178606	178607	178608	178609	178610	AQC
C st m R f N	10	13	3	6	9	13	Lab Std
S mpl Typ	ES	ES	ES	ES	ES	ES	
T i Pit / B h l N	TP688	TP688	TP689	TP689	TP689	TP689	
Depth (m)	1.40	2.40	0.35	1.40	2.40	2.50	
H d ta d g t S rface (Y/N)							
pH							7.6
Loss of Volatiles	%						
Moisture	%						
Stress	%						
Asbestos	%						
PHENOLICS							
Butyl Phenol	mg/kg						
Catechol	mg/kg						
Cresol (m)	mg/kg						
Naphthol	mg/kg						
Phenol	mg/kg						
Resorcinol	mg/kg						
2,4-dimethylphenol	mg/kg						
Xylenol & Ethylphenol	mg/kg						
Total Phenol	mg/kg						0.317
US EPA PRIORITY PAH							
Acenaphthene	mg/kg						
Acenaphthylene	mg/kg						
Anthracene	mg/kg						
Benz(a)anthracene	mg/kg						
Benzo(a)pyrene	mg/kg						
Benzofluoranthene	mg/kg						
Benz(k)fluoranthene	mg/kg						
Benz(g,h,i)perylene	mg/kg						
Chrysene	mg/kg						
Dibenz(a,h)anthracene	mg/kg						
Indeno(1,2,3-cd)pyrene	mg/kg						
Fluoranthene	mg/kg						
Fluorene	mg/kg						
Naphthalene	mg/kg						
Phenanthrene	mg/kg						
Pyrene	mg/kg						
Total US EPA 16 PAH	mg/kg						3802.1
OTHER PAH							
Anthanthrene	mg/kg						
Benzo(b)pyrene	mg/kg						
Cycl penta(cd)pyrene	mg/kg						
GENERAL INORGANICS							
Complex Cyanide	mg/kg						
Elemental Cyanide (free)	mg/kg						
Thiocyanate	mg/kg						
Total Cyanide	mg/kg						2.1
Sulphide	mg/kg						2
Sulphate (free)	mg/kg						560
Total Sulphate	mg/kg						5000
Water Soluble Sulphate	mg/kg						
Water Soluble Chloride	mg/kg						
Phosphate	mg/kg						
Exchangeable Ammonium	mg/kg						139.6
Nitrate	mg/kg						
Nitrite	mg/kg						

Norwest Hoist Soil Engineering Ltd
R68096 Durham Rd Newport

	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	R68096
D t S mpl d	178605	178605	178607	178608	178609	178610	AQC
Lab R f N	10	13	3	6	9	13	Lab Std
C i m R f N	ES	ES	ES	ES	ES	ES	
S mpl Type	TP688	TP688	TP689	TP689	TP689	TP689	
Tri l Pit / B reh i N	1.40	2.40	0.35	1.40	2.40	2.50	
D pth (m)							
H rd ta di g t S rfa (Y/N)							

HEAVY METALS/METALLOIDS

	mg/kg	
Al m m		
A t m ny		
Ars ni		21.0
B m		
B ryl m		
B ro (W l S i bl)		2.0
Cadm m		2.3
Chrom m (T i l)		257
Chrom m (H i nt)		10
C baht		
C ppe		78
G rma m		
L d		180
M rcury		1.5
M lyds m		
N k i		39
S l ium		1.3
V nad m		
Zinc		139

ESSENTIAL ELEMENTS

	mg/kg
Calcium	
Iro	
M gnes m	
M ga se	
P ta m	
S d um	

MONOAROMATICS

	mg/kg
B nze	
T l re	
Ethylbenz ne	
M i & P ra Xyl	
Orth Xylene	

T tal Xyl es	mg/kg

MTBE	mg/kg
1,2,4-T m thylbenzene	
1,3,5-T methylbenzene	

TOTAL HYDROCARBONS

P trol m Ra ge Orga cs (C -C)	mg/kg
D sel R nge Org cs (C ₄ -C ₂₆)	
Hydrocarbo S ree (GC-FID)	

VOC

	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
1,1,1-Trichloroethane							
1,1,2-Tetrachloroethane							
1,1,2-Trichloro-1,2,2-tetrafluoroethane							
1,1,2-Trichloroethane							
1,1-Dichloroethane							
1,1-Dichloroethene							
1,2,3-Trichloropropane							
1,2,3-T methylbenzene							
1,2,4-T chlorobenzene							
1,2,4-T methylbenzene							
1,2-Dibromo-3-Chloropropane							
1,2-Dichlorobenzene							
1,2-Dichloroethane							
1,2-Dichloropropane							
1,2-Dichloropropene							
1,3,5-T methylbenzene							
1,3-D chlorobenzene							

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R68096 Durham Rd Newport

D t S mpl d	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	R68096
Lab R f N	178605	178605	178607	178608	178609	178610	AQC
C t m Ref N	10	13	3	6	9	13	L b Std
S mpl Typ	ES	ES	ES	ES	ES	ES	
T ; P11 / B h l N	TP688	TP688	TP689	TP689	TP689	TP689	
D pth (m)	1.40	2.40	0.35	1.40	2.40	2.50	
H d ta d g t S rf (Y/N)							

1,3-Dichloropropane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
1,4-Dichlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
1-Chloroluene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
1-Methylpropylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
2,2-Dichloropropane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
2-Chloroluene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Benzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Bromobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Bromodichloromethane	mg/kg	0.05	0.05	0.05	0.05	0.05	<0.05
Bromofluoromethane	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05
Chlorobenzene (m)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Chlorodibromomethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Chloroethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Chloroform	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05
1,2-Dichloroethane	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05
1,3-Dichloropropane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Dibromochloromethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Dibromoethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Dibromomethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Dichlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Dichloromethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Ethylbenzene	mg/kg	0.05	0.05	0.05	0.05	<0.05	0.05
Hexachlorobutadiene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
m,p-Dichloro-Xylene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
m,p-Dichloro-Xylene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Methylpropylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Monochlorobenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Monochlorobenzene (m)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Butylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Propylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
p-Xylene	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05
Styrene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
tert-Butylbenzene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Toluene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Toluene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Toluene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
trans-1,2-Dichloroethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
trans-1,3-Dichloropropane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Trichloroethene (TCE)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Tetrahydrofuran	mg/kg	<0.05	0.05	0.05	0.05	0.05	0.05
Toluene	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
trans-1,2-Dichloroethane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
trans-1,3-Dichloropropane	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Trichloroethene (TCE)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Trichloroethene (TCE)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Trichloroethene (TCE)	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05
Vinyl Chloride	mg/kg	0.05	0.05	0.05	0.05	0.05	<0.05

SVOC

1,2,4-Trichlorobenzene	mg/kg	
1,4-Dichlorobenzene	mg/kg	
2,3,4,6-Tetrachlorophenol (m)	mg/kg	
2,4,5-Trichlorophenol	mg/kg	
2,4,6-Trichlorophenol	mg/kg	
2,4-Dichlorophenol (m)	mg/kg	
2,4-Dimethylphenol	mg/kg	
2,4-Dinitrotoluene	mg/kg	
2,6-Dimethylphenol	mg/kg	
2,6-Dinitrotoluene	mg/kg	
2-Chloronaphthalene	mg/kg	
2-Chlorophenol (m)	mg/kg	
2-Methylphenol	mg/kg	
2-Nitrophenol	mg/kg	
4-Chloro-3-methylphenol	mg/kg	
4-chlorobenzylphenylether	mg/kg	
4-Methylphenol	mg/kg	
4-Nitrophenol	mg/kg	
Azobenzene	mg/kg	
bis(2-chloroethyl)ether	mg/kg	

	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	R68096
D S mpl d	178605	178605	178607	178608	178609	178610	AQC
Lab R f N	10	13	3	6	9	13	L b Std
C tom R f N	ES	ES	ES	ES	ES	ES	
S mpl Type	TP688	TP688	TP689	TP689	TP689	TP689	
T 1 Pit / B reh l N	1.40	2.40	0.35	1.40	2.40	2.50	
D pth (m)							
H rd ta di g t S r f (Y/N)							

bis(2-chloroethoxy)methane	mg/kg
b (hl ro propyl)ethane	mg/kg
Bromophenylphenylmethane	mg/kg
H hl ro-1-3-butadiene	mg/kg
H chl robenzene	mg/kg
H hl roethane	mg/kg
I phorone	mg/kg
Nitrobenzene	mg/kg
n-nitro-d-n-propyl-1-propanamine	mg/kg
P ta hl robenzene	mg/kg
P ta hl rophe l	mg/kg

B (2-ethylhexyl)phthalate	mg/kg
Butylbenzylphthalate	mg/kg
D thylphthalate	mg/kg
Dimethylphthalate	mg/kg
D n-b typhthalate	mg/kg
D octyl phthalate	mg/kg

T tal Phthalates	mg/kg
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ORGANO CHLORINE PESTICIDES

Aldrin	mg/kg
Beta HCH (Beta BHC)	mg/kg
Chlordane	mg/kg
DDD	mg/kg
Dieldrin	mg/kg
Drins (tal)	mg/kg
Endosulfan	mg/kg
Endosulfan II	mg/kg
Endosulfan Siphate	mg/kg
Endrin	mg/kg
Endrin Aldrin hydride	mg/kg
Gamma HCH (Lindane)	mg/kg
Heptachlor	mg/kg
Heptachlor epoxide	mg/kg
Heptachlorobenzene	mg/kg
Methoxychlor	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	mg/kg
Demeton-methyl	mg/kg
Diazinon	mg/kg
Dichlorvos	mg/kg
Disulfoton	mg/kg
EPN Ethion	mg/kg
Methidathion	mg/kg
Methylphosphorothioate	mg/kg
Phorate	mg/kg
Tebuuthion	mg/kg

CARBAMATE (Pesticide)

Carbaryl	mg/kg
Carbofuran	mg/kg
Methidathion	mg/kg

PHENOL UREA HERBICIDES

Chlorotoluron	mg/kg
Duro	mg/kg
Isoproturon	mg/kg
Linuron	mg/kg

	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	10/09/03	R68096
D t S mpl d	178605	178606	178607	178608	178609	178610	AQC
Lab R f N	10	13	3	6	9	13	L b Std
C i m R f N	ES	ES	ES	ES	ES	ES	
S mpl Type	TP688	TP688	TP689	TP689	TP689	TP689	
Tri P H / B reh l N	1.40	2.40	0.35	1.40	2.40	2.50	
D pth (m)							
H d ta d g t S rf ce (Y/N)							

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5-T	mg/kg
2 4-D	mg/kg
Chl ro-o-tolyl yaceti cid	mg/kg
Dicamba	mg/kg
D hloroprop	mg/kg
M prop	mg/kg
SI	mg/kg

TRIAZINES

Altnzine	mg/kg
Simazine	mg/kg

PCB

PCB C ng ne 28	mg/kg
PCB C g 52	mg/kg
PCB Co ge 101	mg/kg
PCB C g ne 118	mg/kg
PCB Cong ne 138	mg/kg
PCB Co g 153	mg/kg
PCB C ng 180	mg/kg

T tal PCB	mg/kg
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ALCOHOLS

But nol	mg/kg
Eth l	mg/kg
Ethyl ne Glycol	mg/kg
M thanol	mg/kg
Propan-1-ol	mg/kg
Propan-2-ol	mg/kg

MISCELLANEOUS

Cal nific V lu	Cal/g
S iver	mg/kg
T	mg/kg

1 2 Di hi ropropane	mg/kg
1 3-D chloropropene	mg/kg
2 4-Di itrophenol	mg/kg
A tone	mg/kg
Carbazol	mg/kg
Carbo d ulphide	mg/kg
Creosot (TPH by GCFID)	mg/kg
Cyclohexane	mg/kg
Cyclohex none	mg/kg
Hex hi t cyclopentadiene	mg/kg
Hydroq none	mg/kg
N-Nitrosodiphe yl mine	mg/kg
p-Chl roanil ne	mg/kg
Premethnn/Cyperm th	mg/kg
Pyndine	mg/kg
Styrene	mg/kg
S lpholane	mg/kg
T luene Extractable M tte (Historic)	mg/kg
T xaphene	mg/kg
Tributyl Tin	mg/kg
T chlorom thane	mg/kg
Vinyl Acetat	mg/kg

CONCRETE

Chl d BS1377 Part 3 including preparatio	mg/kg
HAC (Rapid detarm nation of High Al muna Cem	mg/kg
Mix Proportions-Cement/Aggregat Ratio-BS1881	mg/kg

Org ni M tter	%	85
T tal Chlorinated Solv nts (AOX)	mg/kg	
Faecal Streptococci	(no/100g)	
F ecal Coliforms	(no/100g)	

Notes

- Benzo(b)fluor
- ** Di-benzo(h)k
- Labelled as 2.
- ** Insufficient sa

Norwest Holst Soil Engineering Ltd
R68096 Durham Rd Newport

Dat Sampl d	Not	Not	10/09/03	Not	Not	Not	R68096
Lab Ref No	Sch duled	Sched led	178580	Scheduled	Scheduled	Scheduled	AQC
C tom Ref No	15	16	18	19	7	10	Lab Std
S mpl Typ	WS	WS	WS	WS	WS	WS	
Trnl Pit / Borehole No	TP709	TP725	TP694	TP711	TP648	TP689	
pH			6.8				7.9
TOC							
Suspended Solids							
Electncal Cond (µS/cm)							
PHENOLICS							
B tyl Phenols							
Catechol			0.5				
Cresols (s m)			0.5				
Naphthols			0.5				
Phenol			0.5				
Resorcinol			0.5				
T methylphenol			0.5				
Xylenols & Ethylphenols			0.5				
Total Phenols			0.5				205
US EPA PRIORITY PAH s							
Acenaphthene			0.2				
Acenaphthylene			0.2				
Anthracene			0.2				
Benzo(a)Anthracene			0.2				
Benzo(a)pyrene			0.2				
Benzo(b)fluoranthene			0.2				
Benzo(k)fluoranthene			0.2				
Benzo(g,h,i)perylene			0.2				
Chrysene			0.2				
Di benzo(a,h)anthracene			0.2				
Indeno(1,2,3-cd)pyrene ²			0.2				
Fluorene			0.2				
Fluorene			0.2				
Naphthalene			0.2				
Phenanthrene			0.2				
Pyrene			0.2				
Total US EPA 16 PAH							
OTHER PAH s							
Anthracene							
Benzo(e)pyrene							
Cyclopenta(cd)pyrene							
GENERAL INORGANICS							
Complex Cyanide							
Easily Liberatable Cyanide (free)							
Thiocyanate							
Total Cyanide			<5				2099
Sulphide			100				741
Sulphur (free)							
Sulphate			97381				103633
Alkalinity			**				
Chloride							
Phosphate							
Exchangeable Ammonium			550				99930
Nitrate							
Nitrite							

Norwest Holst Soil Engineering Ltd
R68096 Durham Rd Newport

Date Sampled	Not Scheduled	Not Scheduled	10/09/03 178580	Not Scheduled	Not Scheduled	Not Scheduled	R68096 AQC Lab Std
Lab Ref No	15	16	18	19	7	10	
Contam Ref No	WS	WS	WS	WS	WS	WS	
Sample Type	TP709	TP725	TP694	TP711	TP648	TP689	
Trial Pit / Borehole No							

HEAVY METALS/METALLOIDS

Element	Unit	Value	Limit
Aluminium	ug/l		
Antimony	ug/l		
Arsenic	ug/l	10	58
Barium	ug/l		
Beryllium	ug/l		
Boron	ug/l	664	162
Cadmium	ug/l	1	11
Chromium (Dissolved)	ug/l	20	50
Chromium (Hexavalent)	g/l		
Cobalt	ug/l		
Copper	ug/l	5	130
Germanium	ug/l		
Lead	ug/l	20	33
Mercury	ug/l	0.1	6.3
Molybdenum	g/l		
Nickel	ug/l	20	46
Selenium	ug/l	10	37
Vanadium	ug/l		
Zinc	g/l	217	385

ESSENTIAL ELEMENTS

Element	Unit
Calcium	ug/l
Iron	ug/l
Magnesium	ug/l
Manganese	ug/l
Potassium	ug/l
Sodium	ug/l

MONOAROMATICS

Compound	Unit	Value	Limit
Benzene	g/l		**
Toluene	g/l		**
Ethylbenzene	ug/l		**
Meta & Para Xylene	g/l		**
Ortho Xylene	ug/l		**
Total Xylenes	ug/l		**

MTBE

Compound	Unit
1,2,4-Triethylbenzene	ug/l
1,3,5-Triethylbenzene	g/l

TOTAL HYDROCARBONS

Category	Unit
Petroleum Range Organics (C ₆ -C ₁₀)	ug/l
Diesel Range Organics (C ₈ -C ₂₈)	ug/l
Hydrocarbon Screen (GC FID)	ug/l

VOCs

Compound	Unit
1,1,1-Trichloroethane	ug/l
1,1,2,2-Tetrachloroethane	g/l
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l
1,1,2-Trichloroethane	ug/l
1,1-Dichloroethane	ug/l
1,1-Dichloroethene	ug/l
1,2,3-Trichloropropane	ug/l
1,2,3-Triethylbenzene	ug/l
1,2,4-Trichlorobenzene	ug/l
1,2,4-Triethylbenzene	ug/l
1,2-Dibromo-3-Chloropropane	ug/l
1,2-Dichlorobenzene	ug/l
1,2-Dichloroethane	ug/l
1,2-Dichloropropane	ug/l
1,2-Dichloropropene	ug/l
1,3,5-Triethylbenzene	ug/l
1,3-Dichlorobenzene	ug/l
1,3-Dichloropropane	ug/l
1,4-Dichlorobenzene	ug/l
1-Chlorotoluene	ug/l
1-Methylpropylbenzene	ug/l

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Date Sampled	Not Scheduled	Not Scheduled	10/09/03 178580	Not Scheduled	Not Scheduled	Not Scheduled	R68096 AQC Lab Std
Lab Ref No	15	16	18	19	7	10	
Customer Ref No	WS	WS	WS	WS	WS	WS	
Sample Type	TP709	TP725	TP694	TP711	TP648	TP689	

2,2-Dichloropropane	g/l
2-Chlorotoluene	ug/l
Benzene	ug/l
Bromobenzene	ug/l
Bromochloromethane	ug/l
Bromodichloromethane	ug/l
Bromoform	ug/l
Carbon Tetrachloride (PCM)	ug/l
Chlorobenzene (sum)	ug/l
Chlorobromomethane	g/l
Chloroethane	ug/l
Chloroform	g/l
cis-1,2-Dichloroethylene	ug/l
cis-1,3-Dichloropropane	g/l
Dibromochloromethane	g/l
Dibromoethane	ug/l
Dibromomethane	g/l
Dichlorobenzene	ug/l
Dichloromethane	ug/l
Ethylbenzene	ug/l
Heachlorobutadiene	ug/l
meta & para Xylene	ug/l
Methyl-n-propylbenzene	ug/l
Monochlorobenzene	ug/l
Monochlorophenols (sum)	g/l
Butylbenzene	g/l
Propylbenzene	ug/l
ortho Xylene	g/l
Styrene	g/l
tert Butylbenzene	g/l
Tetrachlorobenzene	ug/l
Tetrachloroethene (PCE)	ug/l
Tetrahydrofuran	ug/l
Toluene	ug/l
trans-1,2-Dichloroethene	g/l
trans-1,3-dichloropropane	ug/l
Trichloroethene (TCE)	g/l
Trichloromethane	ug/l
Trichloromethane	ug/l
Vinyl Chloride	ug/l

SVOCs

1,2,4-Trichlorobenzene	ug/l
1,4-Dichlorobenzene	ug/l
2,3,4,6-Tetrachlorophenol (sum)	ug/l
2,4,5-Trichlorophenol	ug/l
2,4,6-Trichlorophenol	ug/l
2,4-Dichlorophenol (sum)	ug/l
2,4-Dimethylphenol	g/l
2,4-Dinitrotoluene	ug/l
2,6-Dimethylphenol	ug/l
2,6-Dinitrotoluene	ug/l
2-Chloronaphthalene	ug/l
2-Chlorophenol (sum)	ug/l
2-Methylphenol	ug/l
2-Nitrophenol	ug/l
4-Chloro-o-3-methylphenol	ug/l
4-chlorobenzophenylether	ug/l
4-Methylphenol	ug/l
4-Nitrophenol	ug/l
Azobenzene	ug/l
bis(2-chloroethyl)ether	g/l
bis(2-chloroethoxy)methane	ug/l
bis(chloroisopropyl)ether	ug/l
Bromophenylphenylether	ug/l
Heachloro-1,3-butadiene	g/l
Hexachlorobenzene	ug/l
Hexachloroethane	ug/l
Isophorone	g/l
Nitrobenzene	ug/l

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Date Sampled	Not Sched	Not Scheduled	10/09/03 178580	Not Scheduled	Not Sched	Not Scheduled	R68096
Lab Ref No	15	16	18	19	7	10	AQC
Customer Ref No	WS	WS	WS	WS	WS	WS	Lab Std
Sample Type	TP709	TP725	TP694	TP711	TP648	TP689	
Trial Pit / Borehole No							

Di-n-propyl 1-propanamine g/l
Pentachlorobenzene ug/l
Pentachlorophenol ug/l

Bis(2-ethylhexyl)phthalate ug/l
Butylbenzylphthalate ug/l
Diethylphthalate ug/l
Dimethylphthalate g/l
Din-butylphthalate ug/l
Din-octyl phthalate ug/l

Total Phthalates g/l

ORGANO CHLORINE PESTICIDES

Aldrin ug/l
Beta HCH (Beta BHC) ug/l
Chlordane g/l
DDD g/l
Dieldrin ug/l
Dinoseb (total) g/l
Endosulfan I ug/l
Endosulfan II ug/l
Endosulfan Sulphate ug/l
Erdin g/l
Endosulfan Aldehyde ug/l
Gamma HCH (Lindane) ug/l
Heptachl g/l
Heptachlo epoxide ug/l
Heptachlorobenzene ug/l
Methoxychlor ug/l
pp DDE ug/l
pp DDT g/l
pp TDE ug/l

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl ug/l
Demeton methyl ug/l
Diazinon ug/l
Dichlorvos ug/l
Disulfoton ug/l
Disulfoton g/l
EPN Ethion ug/l
Malathion ug/l
Methyl Parathion ug/l
Paathion ug/l
Terbufos ug/l

CARBAMATE (Pesticide)

Carbaryl g/l
Carbofura g/l
Maneb ug/l

Norwest Holst Soil Engineering Ltd
R68096 Durham Rd Newport

D t Sampl d	Not	Not	10/09/03	Not	Not	Not	R68096
Lab R f N	Sch duled	Sched id	178580	Scheduled	Sched led	Scheduled	AQC
C t m r Ref No	15	16	18	19	7	10	Lab Std
Sample Type	WS	WS	WS	WS	WS	WS	
Tn I P t / B ehole No	TP709	TP725	TP694	TP711	TP648	TP689	

PHENOL UREA HERBICIDES

Chlorotol on	ug/l
Duron	ug/l
Isop turon	g/l
Ln on	g/l

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 S-T	g/l
2 4 D	ug/l
Chloro-o tolylo yacet c ac d	ug/l
D camba	ug/l
D chl op op	ug/l
Mecoprop	ug/l
S i ex	ug/l

TRIAZINES

Alinzone	ug/l
S mazine	ug/l

PCB s

PCB Congene 28	g/l
PCB Conge er 52	ug/l
PCB Congener 101	ug/l
PCB Conge er 118	ug/l
PCB Conge er 138	ug/l
PCB Co gener 153	ug/l
PCB C ngene 180	g/l

T t I PCB s	g/l
-------------	-----

ALCOHOLS

Bula ol	ug/l
Ethanol	g/l
Ethyl ne Glycol	g/l
Methanol	ug/l
Propan 1-ol	ug/l
Propa 2-ol	g/l

MISCELLANEOUS

Sil er	ug/l
T n	ug/l

1 2-D chlo opropane	ug/l
1 3-Dichloropropene	g/l
2 4-Din trophenol	g/l
Acetone	g/l
C rbazole	g/l
Carbon d s lph de	ug/l
C eosote (TPH by GCFID)	ug/l
Cyclohexane	ug/l
Cyclohexanone	ug/l
Hexachlorocyclopentad ene	ug/l
Hydroqu none	ug/l
N Nitrosod phenylamine	g/l
p-Chloroani ne	ug/l
Premethnn/Cypermethnn	ug/l
Pynd ne	ug/l
Styrene	ug/l
Sulphola e	ug/l
Toluene Extractable Matte (Historc)	ug/l
Toxaphe e	ug/l
T b tyi Tin	ug/l
T chloromethane	ug/l
Vnyl Acetate	ug/l
Vnyl Acetate	ug/l

Notes

- Benzo(b)fluoranthene & Benzo(k)fluoranthene co-elute (reported as sum)
- ² Di benzo(a h)anthracene & Indeno(1 2 3-cd)pyrene co-elute (reported as sum)
- ** Insufficient sample

ENVIRONMENTAL ANALYSIS LABORATORIES

15 Burgess Road Ivyhouse Lane Industrial Estate Hastings East Sussex TN35 4NR
Tel 01424 444433 Fax 01424 442299 info@environmentalanalysis.com

ANALYTICAL REPORT No R68096

Location Durham Rd Newport

CLIENT **Norwest Holst Soil Engineering Ltd**

Parkside Lane Dewsbury Road
Leeds LS11 5SX

Your Project No F13041

Reporting Date 13/10/03

Asbestos Identification

Date Sampled	09/09/03
Lab Ref No	178572
Customer Ref No	7
Sample Type	B
Trial Pit / Borehole No	TP726
Depth (m)	1.10
Description of Sample Matrix	Asbestos Tile
Overall Percentage of Asbestos Identified	10.20 /
Type of Asbestos identified	Chrysotile (white)

Descriptions of methods available on request (V8)
Asbestos identification = UKAS accredited method
Quantification of asbestos and tentative identification
of non asbestos materials is not covered by
UKAS accreditation

www.environmentalanalysis.com

ENVIRONMENTAL ANALYSIS LABORATORIES

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Tel 01424 444433 Fax 01424 442299 info@environmentalanalysis.com

ANALYTICAL REPORT No R68096

Location Durham Rd Newport

Your Project No F13041

Reporting Date 13/10/03

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
Leeds LS11 5SX

Water

Date Sampled	09/09/03
Lab Ref No	178579
Customer Ref No	16
Sample Type	ES
Trial Pit / Borehole No	TP694
Depth (m)	2.60

Aromatic

C ₅ C ₇	(µg/l) N	<100
>C ₇ C ₈	(µg/l) N	<100
>C ₈ C ₁₀	(µg/l) N	<100
>C ₁₀ C ₁₂	(µg/l) N	<100
>C ₁₂ C ₁₆	(µg/l) N	<100
>C ₁₆ C ₂₁	(µg/l) N	<100
>C ₂₁ C ₃₅	(µg/l) N	<100

Aliphatic

C ₅ C ₆	(µg/l) N	<100
>C ₆ C ₈	(µg/l) N	<100
>C ₈ C ₁₀	(µg/l) N	<100
>C ₁₀ C ₁₂	(µg/l) N	<100
>C ₁₂ C ₁₆	(µg/l) N	<100
>C ₁₆ C ₂₁	(µg/l) N	<100
>C ₂₁ C ₃₄	(µg/l) N	<100

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t - not tested

MJB

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ENVIRONMENTAL ANALYSIS LABORATORIES

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ANALYTICAL REPORT No R68096

Location Durham Rd Newport

Your Project No F13041

Reporting Date 13/10/03

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
Leeds LS11 5SX

Soils

Date Sampled	09/09/03
Lab Ref No	178579
Customer Ref No	16
Sample Type	ES
Trial Pit / Borehole No	TP694
Depth (m)	2.60

Aromatic

C ₅ C ₇	(mg/kg) N	<5
>C ₇ C ₈	(mg/kg) N	<5
>C ₈ C ₁₀	(mg/kg) N	<5
>C ₁₀ C ₁₂	(mg/kg) N	<5
>C ₁₂ C ₁₆	(mg/kg) N	<5
>C ₁₆ C ₂₁	(mg/kg) N	<5
>C ₂₁ C ₃₅	(mg/kg) N	<5

Aliphatic

C ₅ C ₆	(mg/kg) N	<5
>C ₆ C ₈	(mg/kg) N	<5
>C ₈ C ₁₀	(mg/kg) N	<5
>C ₁₀ C ₁₂	(mg/kg) N	<5
>C ₁₂ C ₁₆	(mg/kg) N	<5
>C ₁₆ C ₂₁	(mg/kg) N	<5
>C ₂₁ C ₃₄	(mg/kg) N	<5

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t not tested

MJR

www.environmentalanalysis.com



Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 09/10/03

ANALYTICAL REPORT No R68260

Location Durham Rd Newport

Your Project No F13041

The attached analytical results relate to samples received on 22 Sep 2003

The report is only valid if it contains the total number of pages indicated at the bottom of this page

Checked by

Authorised by

If you have any queries regarding this report please contact Steve Chapman or Steve Knight

■ ENVIRONMENTAL ANALYSIS LABORATORIES
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A Division of Norwest Holst Soil Engineering Ltd
Registered in England No 980795
Registered Office Parkside Lane Dewsbury Road Leeds LS11 5SX

Page 1 of 33



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Norwest Holst Soil Engineering Ltd
R68260 Durham Rd Newport

	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
D t S mpl d									
L b Ref No	179964	179965	179966	179967	179968	179969	179970	179971	179972
Cu tom R f N	3	6	10	3	6	10	3	7	3
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES
T l Pit / Boreh l N	TP687	TP687	TP687	TP707	TP707	TP707	TP663	TP663	TP703
D pth (m)	0.10	1.10	2.30	0.20	1.20	2.40	0.20	0.80	0.20
H rd ta d g t S rface (Y/N)									
pH			6.2		7.9				
% L s on lg bon									
/ M ture									
/ St									
A besto			<0.001		0.001				
PHENOLICS									
Butyl Ph ol									
Cat chl			0.5		0.5				
Cre l (m)			0.5		0.5				
N phth l			0.5		0.5				
Ph ol			0.5		0.5				
R orci l			0.5		0.5				
T m thylphe l			0.5		0.5				
Xylenols & Ethylph nol			0.5		0.5				
Total Ph ol			0.5		0.5				
US EPA PRIORITY PAH									
Ace phth			0.5		<0.5				
Acen phthylene			0.5		0.5				
Anthrace			0.5		0.5				
B nzo()Anthrace e			0.5		1.2				
Benzo()pyre			0.5		4.2				
B o(b)fl ra th									
Benzo(k)fl ra the			0.5		1.5				
B zo(g h)p rylene			0.5		1.5				
Chrysene			0.5		1.2				
D b nzo(h)anthracene *2									
Ind o(1 2 3-cd)pyr *2			0.5		0.5				
Fl ra th					2.4				
Fl rene			<0.5		0.5				
N phth l			0.5		<0.5				
Ph th ne			0.5		1.6				
Pyre			0.5		3.0				
Total US EPA 16 PAH			0.5		17.1				
OTHER PAH									
Antha thrane									
Be zo()pyrene									
Cycl penta(cd)pyre e									
GENERAL INORGANICS									
Compl Cy de									
Eas ly L beratabl Cya de (free)									
Thi cya t									
T tal Cya id				1	1				
S lphid				2	2				
S lph (f e)				1620	540				
T tal S lph t				100	200				
W t S l bl S lphate									
W te Sol ble Chl d									
Pho phat									
Exchangeabl Ammonu m				34.7	30.7				
Nitrate									
Nitrite									

Norwest Holst Soil Engineering Ltd
R68260 Durham Rd Newport

	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
D t S mpl d	179964	179965	179966	179967	179968	179969	179970	179971	179972
Lab R f N	3	6	10	3	6	10	3	7	3
C t m R f No	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP687	TP687	TP687	TP707	TP707	TP707	TP663	TP663	TP703
T Pit / B h l N	0.10	1.10	2.30	0.20	1.20	2.40	0.20	0.80	0.20
D pth (m)									
H d ta d g t S r f ce (Y/N)									

HEAVY METALS/METALLOIDS

Al m m	mg/kg								
A t m o y	mg/kg								
Ars	mg/kg		22.6			33.6			
B m	mg/kg								
B r y l l m	mg/kg								
Bo (Wat S l ble)	mg/kg		7.4			9.4			
C d m m	mg/kg		0.8			0.9			
Chrom m (Total)	mg/kg		50			47			
Chrom m (H xa l t)	mg/kg		<2			<2			
C b l t	mg/kg								
C p p	mg/kg		36			59			
G m m um	mg/kg								
L d	mg/kg		85			156			
M r y	mg/kg		<0.5			0.7			
M l y b d m	mg/kg								
N c k e l	mg/kg		38			38			
S l m	mg/kg		0.7			1.2			
V d m	mg/kg								
Zi	mg/kg		157			210			

ESSENTIAL ELEMENTS

C l c i m	mg/kg								
Iron	mg/kg								
M g m	mg/kg								
M g	mg/kg								
P t m	mg/kg								
S d m	mg/kg								

MONOAROMATICS

B n e	mg/kg					<0.2			
T l	mg/kg					0.2			
Ethylb nz	mg/kg					<0.2			
M ta & Para Xyl	mg/kg					0.2			
Orth Xyl	mg/kg					0.2			
Total Xyl	mg/kg					0.2			

MTBE

1,2,4-T m thylb e n e	mg/kg								
1,3,5-T methylb z e e	mg/kg								

TOTAL HYDROCARBONS

P t i l m R g e Org cs (C ₆ -C ₁₀)	mg/kg					5			
De l R g Org cs (C ₁₀ -C ₂₆)	mg/kg					5			
Hydrocarb n Sc ee (GC-FID)	mg/kg					5			

VOC

1,1,1-T chl roetha	mg/kg								
1,1,2,2-T trachl roeth e	mg/kg								
1,1,2-T chl ro-1,2,2 trifuoro th ne	mg/kg								
1,1,2-Trichl roeth	mg/kg								
1,1-D chl oeth ne	mg/kg								
1,1-D hl roeth	mg/kg								
1,2,3-T chl oprop ne	mg/kg								
1,2,3-T m thylbenzen	mg/kg								
1,2,4-T chl robenzene	mg/kg								
1,2,4-T m thylbenzene	mg/kg								
1,2-D bromo-3-Chl roprop e	mg/kg								
1,2-D chl robe zene	mg/kg								
1,2-D hl roethan	mg/kg								
1,2-D chl ropropan	mg/kg								
1,2-D chl ropene	mg/kg								
1,3,5-T methylbenze	mg/kg								
1,3-D chlorobe ne	mg/kg								

Norwest Holst Soil Engineering Ltd
R66260 Durham Rd Newport

	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
D t S mpl d	179964	179965	179966	179967	179968	179969	179970	179971	179972
Lab R f N	3	6	10	3	6	10	3	7	3
C i m r R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP687	TP687	TP687	TP707	TP707	TP707	TP663	TP663	TP703
Tn l Pit/Bo h l N	0 10	1 10	2 30	0 20	1 20	2 40	0 20	0 80	0 20
D pth (m)									
H d ta di g t S rf (Y/N)									

1 3 D hl roprop	mg/kg
1 4-D hl rob	mg/kg
1-Chl l l	mg/kg
1 M thylpropylb nze	mg/kg
2 2 D hl roprop	mg/kg
2 Chl l l	mg/kg
B ze	mg/kg
Bromobe	mg/kg
Brom hlrom th	mg/kg
Brom d hl rom th	mg/kg
Brom f rm	mg/kg
C rb T tra hl d (PCM)	mg/kg
Chlo be z (m)	mg/kg
Chl rod brom m th	mg/kg
Chl ro th	mg/kg
Chl rof rm	mg/kg
cas-1 2 D hl roethyl	mg/kg
s-1 3 Di hlroprope	mg/kg
D brom hl rom th	mg/kg
Db m th ne	mg/kg
D brom m th	mg/kg
D chl be	mg/kg
D hl rom th	mg/kg
Ethylbe ze	mg/kg
H hl b iad	mg/kg
m t & p ra Xyl	mg/kg
M thyl sopropylb	mg/kg
M o hl rob nz	mg/kg
M ochl roph l (m)	mg/kg
B tylb nze	mg/kg
Propylb nz	mg/kg
rth Xyl	mg/kg
Styr	mg/kg
t rt B tylb	mg/kg
T tr hl b nz	mg/kg
T tra hl roeth (PCE)	mg/kg
T trahydrof ra	mg/kg
T l	mg/kg
tra s-1 2 D hl roeth	mg/kg
tra 1 3-d hl roprope	mg/kg
T hl oethe (TCE)	mg/kg
T hlrofl rom th	mg/kg
T chl rom tha	mg/kg
V yl Chl d	mg/kg

SVOC s	
1 2 4 T hlrobenz ne	mg/kg
1 4-D hlrobe	mg/kg
2 3 4 6-T trachlorophe ol (m)	mg/kg
2 4 5 T hlroroph l	mg/kg
2 4 6-T chl roph ol	mg/kg
2 4-D chl roph l (m)	mg/kg
2 4 D m thylph l	mg/kg
2 4-D trot l	mg/kg
2 6-D m thylph l	mg/kg
2 6 D trot l	mg/kg
2 Chl ro phth l	mg/kg
2-Chl roph l (s m)	mg/kg
2 M thylph ol	mg/kg
2 Nit ophe ol	mg/kg
4 Chl ro-3-methylph l	mg/kg
4-chlorobenzylph ylae	mg/kg
4-Methylph ol	mg/kg
4-N trophe ol	mg/kg
Az benz	mg/kg
b (2-chl roethyl)ether	mg/kg

	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
D t S m p l d	179964	179965	179966	179967	179968	179969	179970	179971	179972
L b R f N	3	6	10	3	6	10	3	7	3
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S m p l T y p	TP687	TP687	TP687	TP707	TP707	TP707	TP663	TP663	TP703
T I Pit / B h o l N	0.10	1.10	2.30	0.20	1.20	2.40	0.20	0.80	0.20
D p t h (m)									
H d t a d g t S r f a (Y/N)									

b (2-hydroxyethyl)amine	mg/kg
bis(2-hydroxyethyl)ether	mg/kg
Bromophenylamine	mg/kg
Hexahydro-1,3-butadiene	mg/kg
Hexahydrobenzidine	mg/kg
Hexamethylenediamine	mg/kg
Isophorone	mg/kg
Nitrobenzene	mg/kg
1,1-dimethyl-2-propylpiperazine	mg/kg
Piperazine	mg/kg
Piperidine	mg/kg

Bis(2-ethylhexyl)phthalate	mg/kg
Bis(2-ethylhexyl)phthalate	mg/kg
Dibutylphthalate	mg/kg
Dimethylphthalate	mg/kg
Dibutylphthalate	mg/kg
Dioctylphthalate	mg/kg

Total Phthalates mg/kg

ORGANO CHLORINE PESTICIDES

Aldrin	mg/kg
Beta HCH (Beta BHC)	mg/kg
Chlordane	mg/kg
DDD	mg/kg
Dieldrin	mg/kg
Deltamethrin	mg/kg
Endosulfan	mg/kg
Endosulfan	mg/kg
Endosulfan	mg/kg
Endosulfan	mg/kg
Endosulfan	mg/kg
Gamma HCH (Lindane)	mg/kg
Heptachlor	mg/kg
Heptachlor epoxide	mg/kg
Heptachlor epoxide	mg/kg
Methoxychlor	mg/kg
ppDDE	mg/kg
ppDDT	mg/kg
ppTDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	mg/kg
Dimethoate	mg/kg
Diazinon	mg/kg
Dichlorvos	mg/kg
Disulfoton	mg/kg
Disulfoton	mg/kg
EPN Ethion	mg/kg
Methidathion	mg/kg
Methylphosphorothioic acid	mg/kg
Phosphorothioic acid	mg/kg
Terbufos	mg/kg

CARBAMATE (Pesticides)

Carbaryl	mg/kg
Carbofuran	mg/kg
Methidathion	mg/kg

PHENOL UREA HERBICIDES

Chlorotoluron	mg/kg
Diflufenican	mg/kg
Fluroxypyr	mg/kg
Linuron	mg/kg

	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
D t S mpl d	179964	179965	179966	179967	179968	179969	179970	179971	179972	179973
Lab R f No	3	6	10	3	6	10	3	7	3	
C t m R f No	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP687	TP687	TP687	TP707	TP707	TP707	TP707	TP663	TP663	TP703
T l Pit / Bo h l N	0.10	1.10	2.30	0.20	1.20	2.40	0.20	0.80	0.20	
D pth (m)										
H d ta d g t S r f ce (Y/N)										

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chl ro-o-tolyl xyacetid	mg/kg
Dcamb	mg/kg
D hl p p	mg/kg
M coprop	mg/kg
Sl	mg/kg

TRIAZINES

Alt zine	mg/kg
Sim zi	mg/kg

PCB

PCB C g 28	mg/kg
PCB Co g r 52	mg/kg
PCB Co g 101	mg/kg
PCB C g 118	mg/kg
PCB Co g 138	mg/kg
PCB C ng 153	mg/kg
PCB Co g ne 180	mg/kg

T tal PCB	mg/kg
-----------	-------

ALCOHOLS

B ta ol	mg/kg
Eth i	mg/kg
Ethyl Glycol	mg/kg
M tha l	mg/kg
Prop n-1-ol	mg/kg
Propa 2-ol	mg/kg

MISCELLANEOUS

Cal nr V l	Cal/g
Silver	mg/kg
T	mg/kg

1,2-D hl ropropa	mg/kg
1,3-Dichl roprope	mg/kg
2,4-D it ph nol	mg/kg
Aceto	mg/kg
C rbazol	mg/kg
C rb d lph d	mg/kg
C t (TPH by GCFID)	mg/kg
Cycl hexa	mg/kg
Cycl hex ne	mg/kg
H xachl rocycl pentadiene	mg/kg
Hydroq	mg/kg
N N tr sod phe yl m ne	mg/kg
p-Chl ro i	mg/kg
Premeth n/Cyperm th	mg/kg
Pynd	mg/kg
Styrene	mg/kg
S lph i ne	mg/kg
T luene Extractable M tt (Hist)	mg/kg
Toxaphen	mg/kg
T butyl T	mg/kg
T hl rom th	mg/kg
V yl Acetate	mg/kg

CONCRETE

Chlond BS1377 Part 3 includ ng prep raton	mg/kg
HAC (Rapid det m natio of H gh Alum Cem	mg/kg
Mix Proportn -C me t/Aggreg te Ratio-BS188	mg/kg

Org M tt %

96

Notes

- Benzo(b)fl ra there & Be zo(k)fl ra th ne co-elut (reported as sum)
- ⁻² Di-benzo(h)ja thrace & Indeno(1,2,3-cd)pyre co-elut (reported sum)
- Labelled 0.20m
- ** Insufficent mple f nalysis

	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
D t e S m p l d	179973	179974	179975	179976	179977	179978	179979	179980	179981	179981
Lab R f N	3	7	3	6	6	9	3	6	9	9
C o m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES	ES
S m p l T y p	TP704	TP704	TP684	TP684	TP684	TP684	TP683	TP683	TP683	TP683
T r i J P l t / B h l N	0.30	0.80	0.30	0.30	0.80	1.10	0.20	1.30	2.30	2.30
D p t h (m)										
H d t a d g t S r f (Y/N)										
pH	Val	7.2				8.2				
/ L s s l g t	%									
/ M s t e	%									
% S t	%									
A b e s t o	%	0.001				<0.001				
PHENOLICS										
B t y l P h n o l	mg/kg					0.5				
C t h l	mg/kg	0.5				0.5				
C l s (m)	mg/kg	0.5				0.5				
N p h t h l	mg/kg	0.5				0.5				
P h l	mg/kg	0.5				0.5				
R s o r c o l	mg/kg	0.5				0.5				
T m t h y p h l	mg/kg	0.5				<0.5				
X y l n o l & E t h y p h o l	mg/kg	0.5				0.5				
T t a l P h l	mg/kg	0.5				0.5				
US EPA PRIORITY PAH										
A c e p h t h	mg/kg	0.5				0.5				
A p h t h y l e	mg/kg	0.5				0.5				
A n t h r a c e	mg/kg	0.5				<0.5				
B n z () A n t h r a c e n e	mg/kg	0.5				0.5				
B o () p y r e	mg/kg	0.5				0.5				
B n z o (b) f l r a t h	mg/kg	0.5				0.5				
B z o (k) f l r a t h	mg/kg	0.5				0.5				
B e n z o (g h) p e r y l	mg/kg	0.5				0.5				
C h r y s e	mg/kg	0.5				0.5				
D b n z (h) a n t h r a c e ⁻²	mg/kg	0.5				0.5				
I n d (1 2 3 - c d) p y r e n e ⁻²	mg/kg	0.5				0.5				
F l r a t h n e	mg/kg	0.5				0.5				
F l r e	mg/kg	0.5				0.5				
N p h t h l	mg/kg	0.5				0.5				
P h e t h	mg/kg	0.5				<0.5				
P y r	mg/kg	0.5				0.5				
T t a l U S E P A 1 6 P A H	mg/kg	0.5				0.5				
OTHER PAH										
A n t h a t h e n e	mg/kg									
B e n o () p y r e	mg/kg									
C y c l p e t a (c d) p y r e	mg/kg									
GENERAL INORGANICS										
C o m p l C y a n i d	mg/kg									
E l y L i b e r a l a b l e C y a n i d (f r e e)	mg/kg									
T h o c y a t e	mg/kg									
T o t a l C y a n i d	mg/kg	1				1				
S l p h d	mg/kg	2				<2				
S l p h (f r e e)	mg/kg	50				60				
T o t l S u l p h a t e	mg/kg	200				100				
W t e S o l u b l S l p h a t e	mg/kg									
W t S o l b l C h l o r i d	mg/kg									
Phosphat	mg/kg									
E c h a g b l A m m o n i u m	mg/kg	22.4				19.8				
N i t r a t	mg/kg									
N i t r i t e	mg/kg									

Norwest Holst Soil Engineering Ltd
R68260 Durham Rd Newport

	19/09/03	1 /09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
D t S mpl d									
Lab R f No	179973	179974	179975	179976	179977	179978	179979	179980	179981
C t m R f N	3	7	3	6	6	9	3	6	9
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES
T i Pit / B h i N	TP704	TP704	TP684	TP684	TP684	TP684	TP683	TP683	TP683
D pth (m)	0.30	0.80	0.30	0.30	0.80	1.10	0.20	1.30	2.30
H rd ta d g t S rface (Y/N)									

HEAVY METALS/METALLOIDS

	mg/kg		mg/kg
Al m m			
A tm y			
Ars	17.4		14.7
B m			
B ryl n			
B ro (W t Sol bl)	2.5		2.4
C dm m	0.5		0.5
Chrom m (T tal)	58		54
Ch m m (H xavale t)			2
C b lt			
C ppe	16		14
G m m			
L d	40		34
M ry	0.5		0.5
M lybde m			
N k l	49		40
S l m	0.5		0.7
V d m			
Z	114		99

ESSENTIAL ELEMENTS

	mg/kg
C lc m	
Iro	
M gn m	
M g	
Pot m	
Sod m	

MONOAROMATICS

	mg/kg
B nze	
T l	
Ethylbe	
M ta & P ra Xyl	
Orth Xyl	

T tal Xylen	mg/kg

MTBE	mg/kg

1,2,4-T m thylbenz	mg/kg
1,3,5-T m thylbenz	mg/kg

TOTAL HYDROCARBONS

Petrole m Rang Org cs (C C)	mg/kg	5	5
Desel Ra g O g cs (C -C ₂₆)	mg/kg	5	5
Hydrocarbo Screen (GC-FID)	mg/kg	5	5

VOC

	mg/kg
1,1,1 T hi ro th	
1,1,2 T trachi roetha	
1,1,2 T hi ro-1,2,2-trifl oroeth	
1,1,2 T chloroeth	
1,1 D hloro th e	
1,1 D chl roethene	
1,2,3-T chl rop op ne	
1,2,3-T m thylbenzene	
1,2,4-Tri hi b nze	
1,2,4-Tmethylbenzene	
1,2-Dibromo-3-Chl roprop ne	
1,2-D chlo be zene	
1,2 D chloroetha e	
1,2 Di hi ropropene	
1,2 D chlo opropene	
1,3,5-T methylbenz	
1,3-D chl robenze	

Norwest Hoist Soil Engineering Ltd
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	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
D t S mpl d	179973	179974	179975	17 976	179977	179978	179979	179980	179981
L b R f N	3	7	3	6	6	9	3	6	9
C t me R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP704	TP704	TP684	TP684	TP684	TP684	TP683	TP683	TP683
Tri I Pk / Boreh l N	0 30	0 80	0 30	0 30	0 80	1 10	0 20	1 30	2 30
D pth (m)									
H d ta di g t S rface (Y/N)									

1 3-D chl roprop	mg/kg
1 4 D hlo obenz n	mg/kg
1 Chl otol e	mg/kg
1 M thyp pyb nzene	mg/kg
2 2 D chl roprop	mg/kg
2 Chl rotol	mg/kg
B z ne	mg/kg
Brom b nze	mg/kg
Bromochl rometh	mg/kg
B om d chl rom th ne	mg/kg
Bromoform	mg/kg
C rbo T tra hi d (PCM)	mg/kg
Chlorobenz (m)	mg/kg
Chl rod bromom th	mg/kg
Chl roetha	mg/kg
Chloroform	mg/kg
ci 1 2 D chl roethyl e	mg/kg
ci 1 3 D chl roprope	mg/kg
Dib m chlorom th ne	mg/kg
D b omoetha e	mg/kg
D bromom th	mg/kg
D chlorobe e	mg/kg
D chlorom tha	mg/kg
Ethylbenze	mg/kg
H xachl robutad	mg/kg
met & p ra Xyle	mg/kg
M thyl- propylbenz	mg/kg
M chlorob nze	mg/kg
M chloroph ols (m)	mg/kg
B tybenz	mg/kg
Propylbenz ne	mg/kg
orth Xyl	mg/kg
Styr ne	mg/kg
l rt B tybenz e	mg/kg
T tr chl rob nze	mg/kg
T trachl roeth (PCE)	mg/kg
T trahydrofura	mg/kg
T i ne	mg/kg
tra 1 2 D chloroeth	mg/kg
tra 1 3-d chl roprope e	mg/kg
T hloroeth e (TCE)	mg/kg
T chlrofl rometha	mg/kg
T hi rom thane	mg/kg
V yl Chl d	mg/kg

SVOC s	
1 2 4-T chl robe ze	mg/kg
1 4 D chl robe zene	mg/kg
2 3 4 6-T trachl roph l (m)	mg/kg
2 4 5-T chl rophe l	mg/kg
2 4 6-T chl rophe l	mg/kg
2 4-D chl roph nol (m)	mg/kg
2 4 Dimethylphe ol	mg/kg
2 4-D itrot l ne	mg/kg
2 6 Dim thylphenol	mg/kg
2 6-D itrotolu	mg/kg
2-Chloronaphth lene	mg/kg
2-Chlorophenol (sum)	mg/kg
2-M thylph nol	mg/kg
2-Nitrophe ol	mg/kg
4-Chloro-3-methylphe l	mg/kg
4-chlorobenzylphenylether	mg/kg
4-Methylphe ol	mg/kg
4-N trophen l	mg/kg
Az benze	mg/kg
b s(2-chl roethyl)ether	mg/kg

Norwest Holst Soil Engineering Ltd
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D t Sampl d	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
Lab R f N	179973	179974	179975	179976	179977	179978	179979	179980	179981
C tome R f N	3	7	3	6	6	9	3	6	9
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tri / Pit / B rehol N	TP704	TP704	TP684	TP684	TP684	TP684	TP683	TP683	TP683
D pth (m)	0.30	0.80	0.30	0.30	0.80	1.10	0.20	1.30	2.30
H d ta di g t S rfa (Y/N)									

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chloroxyacetate	mg/kg
Dacamba	mg/kg
Dichloroprop	mg/kg
Mecoprop	mg/kg
Sida	mg/kg

TRIAZINES

Altriazin	mg/kg
Symtriazin	mg/kg

PCB

PCB Conge 28	mg/kg
PCB Conge 52	mg/kg
PCB Conge 101	mg/kg
PCB Conge 118	mg/kg
PCB Conge 138	mg/kg
PCB Conge 153	mg/kg
PCB Conge 180	mg/kg

Total PCB	mg/kg
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ALCOHOLS

Butanol	mg/kg
Ethanol	mg/kg
Ethylene Glycol	mg/kg
Methanol	mg/kg
Propyl-1-ol	mg/kg
Propyl-2-ol	mg/kg

MISCELLANEOUS

Calcium Chloride	mg/kg
Silica	mg/kg
Titanium	mg/kg

1,2-Dichloropropane	mg/kg
1,3-Dichloropropane	mg/kg
2,4-Dinitrophenol	mg/kg
Acetone	mg/kg
Carbazole	mg/kg
Chlorobenzene	mg/kg
Cresols (TPH by GCFID)	mg/kg
Cyclohexane	mg/kg
Cyclohexane	mg/kg
Hexachlorocyclopentadiene	mg/kg
Hydroquinone	mg/kg
N-Nitrosodiphenylamine	mg/kg
p-Chloroaniline	mg/kg
Pyridine	mg/kg
Styrene	mg/kg
Sulphur	mg/kg
Toluene Extractable Matter (Hot)	mg/kg
Toxaphene	mg/kg
Tert-butyl Alcohol	mg/kg
Trichloroethane	mg/kg
Vinyl Acetate	mg/kg

CONCRETE

Chloride BS1377 Part 3: chloride preparation	mg/kg
HAC (Refractory High Alumina Cement)	mg/kg
Mix Proportions-Cement/Aggregate Ratio-BS188	mg/kg

Organic Matter	%
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Notes

Benzo(b)fluoranthene
Di-benzo(a,h)anthracene
Labelled standard
Official use

	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
D te S mpl d	179982	179983	179984	179985	179986	179987	179988	179989	179990	
L b R f N	12	3	6	10	3	6	3	7	10	
C tom R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES	
S mpl Typ	TP683	TP662	TP662	TP662	TP643	TP643	TP642	TP642	TP642	
Tn i Pit / B reh i N	3 30	0 30	0 70	1 20	0 30	0 90	0 35	0 70	0 90	
D pth (m)										
H d ta di g t S rf (Y/N)										
pH		V I	8 4							
/ Loss o lg iton		%								
% M ture		%								
% St es		%								
Asbe to		%	Trace							
PHENOLICS										
Butyl Ph ols		mg/kg								
C t chol		mg/kg	0 5							
Cre l (m)		mg/kg	0 5							
N phth l		mg/kg	0 5							
Phe i		mg/kg	0 5							
R ci l		mg/kg	0 5							
Trm thylph l		mg/kg	0 5							
Xyl l & Ethylph l		mg/kg	0 5							
T tal Ph ls		mg/kg	0 5							
US EPA PRIORITY PAH										
Ac phth e		mg/kg	0 5							
A phthyl		mg/kg	0 5							
A thra		mg/kg	0 5							
Benz (JA thra		mg/kg	0 5							
B ol)pyr		mg/kg	0 5							
B nzo(b)fl ora th		mg/kg	0 5							
B (k)fl ora th		mg/kg	0 5							
Benzo(g h)peryl		mg/kg	0 5							
Chrys		mg/kg	0 5							
D benzo(h) a thra		mg/kg	0 5							
I d (1,2,3-cd)py e		mg/kg	0 5							
Fl ra th		mg/kg	0 5							
Fl		mg/kg	0 5							
N phth l ne		mg/kg	0 5							
Phe threne		mg/kg	0 5							
Pyr ne		mg/kg	0 5							
T tal US EPA 16 PAH		mg/kg	0 5							
OTHER PAH										
A th thre		mg/kg								
B nzo()pyre		mg/kg								
Cycl pe ta(cd)pyr e		mg/kg								
GENERAL INORGANICS										
C mpl Cya d		mg/kg								
Ea ly Lib ratabl Cyan de (fre)		mg/kg								
Th ocyanate		mg/kg								
T t l Cy d		mg/kg	1							
S lph d		mg/kg	<2							
S lph (free)		mg/kg	130							
T tal S lph te		mg/kg	300							
W t Sol bl S lph l		mg/kg								
W t Sol bl Chl d		mg/kg								
Ph phat		mg/kg								
Excha ge bl Amm m		mg/kg	17 3							
Nitrat		mg/kg								
Nitrite		mg/kg								

	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
D t S mpl d	179982	179983	179984	179985	179986	179987	179988	179989	179990	
Lab R f N	12	3	6	10	3	6	3	7	10	
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES	
S mpl Type	TP683	TP662	TP662	TP662	TP643	TP643	TP642	TP642	TP642	
Tri PK / B h l N	3 30	0 30	0 70	1 20	0 30	0 90	0 35	0 70	0 90	
D pth (m)										
H rd ta d g t S rf (Y/N)										

HEAVY METALS/METALLOIDS

Al m m	mg/kg	
A t m y	mg/kg	
Ars	mg/kg	7 2
B m	mg/kg	
B ryl m	mg/kg	
B ro (W t S l ble)	mg/kg	0 8
C dm m	mg/kg	0 5
Chrom m (T tal)	mg/kg	17
Chrom m (H xa l t)	mg/kg	
C b l t	mg/kg	
C ppe	mg/kg	14
G rma m	mg/kg	
L d	mg/kg	18
Mercury	mg/kg	0 5
Molybd m	mg/kg	
N k l	mg/kg	18
S i m	mg/kg	0 5
V d m	mg/kg	
Z	mg/kg	41

ESSENTIAL ELEMENTS

Calc m	mg/kg	
Iro	mg/kg	
M g m	mg/kg	
M g se	mg/kg	
P lass m	mg/kg	
S d m	mg/kg	

MONOAROMATICS

B nz	mg/kg	
T i	mg/kg	
Ethylb nze	mg/kg	
M ta & P ra Xyl e	mg/kg	
Orth Xyl	mg/kg	

T tal Xyl	mg/kg	
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MTBE	mg/kg	
1 2 4 T m thylb	mg/kg	
1 3 5-T methylb ne	mg/kg	

TOTAL HYDROCARBONS

P tr l m R g Org cs (C ₆ -C ₂₀)	mg/kg	5
D l R g Org cs (C ₆ -C ₂₀)	mg/kg	<5
Hydrocarbo S (GC-FID)	mg/kg	5

VOC

1 1 1 T hlo oethane	mg/kg	
1 1,2 2 T tra hl oetha	mg/kg	
1 1 2 T hloro-1 2 2 trifl ro th	mg/kg	
1 1 2 T chl roetha	mg/kg	
1 1 D chl roetha	mg/kg	
1 1 D hloroeth	mg/kg	
1 2 3-T hl roprop	mg/kg	
1 2 3-T m thylbenzen	mg/kg	
1 2 4-T nchlo benz ne	mg/kg	
1 2 4 T m thylbenze	mg/kg	
1 2 D bromo-3-Chloropropane	mg/kg	
1 2-D chlorobenz ne	mg/kg	
1 2 D chl roetha e	mg/kg	
1 2 D hloroprop	mg/kg	
1 2-D chl roprop e	mg/kg	
1 3 5-T m thylbenz e	mg/kg	
1 3-D chl robenze	mg/kg	

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	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
D t S m p l d										
L b R f N	179982	179983	179984	179985	179986	179987	179988	179989	179990	
C t m R f N	12	3	6	10	3	6	3	7	10	
S m p l T y p	ES	ES	ES	ES	ES	ES	ES	ES	ES	
T i P r t / B h i l N	TP683	TP662	TP662	TP662	TP643	TP643	TP642	TP642	TP642	
D p t h (m)	3.30	0.30	0.70	1.20	0.30	0.90	0.35	0.70	0.90	
H r d t a d g t S r f (Y/N)										

1,3-Dichloropropane	mg/kg
1,4-Dichlorobenzene	mg/kg
1-Chlorobenzene	mg/kg
1-Methyl-2-propylbenzene	mg/kg
2,2-Dichloropropane	mg/kg
2-Chlorobenzene	mg/kg
Benzene	mg/kg
Bromobenzene	mg/kg
Bromochlorobenzene	mg/kg
Bromodichlorobenzene	mg/kg
Bromofluorobenzene	mg/kg
Carbonyl sulfide (PCM)	mg/kg
Chlorobenzene (m)	mg/kg
Chlorobromobenzene	mg/kg
Chloroethane	mg/kg
Chloroform	mg/kg
cis-1,2-Dichloroethane	mg/kg
cis-1,3-Dichloropropane	mg/kg
Dibromochlorobenzene	mg/kg
Dibromoethane	mg/kg
Dibromobenzene	mg/kg
Dichlorobenzene	mg/kg
Dichloromethane	mg/kg
Ethylbenzene	mg/kg
Hexachlorobenzene	mg/kg
meta- and para-Xylene	mg/kg
Methyl propylbenzene	mg/kg
Methyl chlorobenzene	mg/kg
Methyl chloroform (m)	mg/kg
Biphenyl	mg/kg
Propylbenzene	mg/kg
ortho-Xylene	mg/kg
Styrene	mg/kg
tert-Biphenyl	mg/kg
Trichlorobenzene	mg/kg
Tetrahydroethene (PCE)	mg/kg
Tetrahydrofuran	mg/kg
Toluene	mg/kg
trans-1,2-Dichloroethane	mg/kg
trans-1,3-dichloropropane	mg/kg
Trichloroethene (TCE)	mg/kg
Trichloroethane	mg/kg
Trichloromethane	mg/kg
Vinyl Chloride	mg/kg

SVOCs

1,2,4-Trichlorobenzene	mg/kg
1,4-Dichlorobenzene	mg/kg
2,3,4,6-Tetrachlorophenol (s m)	mg/kg
2,4,5-Trichlorophenol	mg/kg
2,4,6-Trichlorophenol	mg/kg
2,4-Dichlorophenol (m)	mg/kg
2,4-Dimethylphenol	mg/kg
2,4-Dinitrophenol	mg/kg
2,6-Dimethylphenol	mg/kg
2,6-Dinitrophenol	mg/kg
2-Chlorophenol	mg/kg
2-Chlorophenol (m)	mg/kg
2-Methylphenol	mg/kg
2-Nitrophenol	mg/kg
4-Chloro-3-methylphenol	mg/kg
4-chlorobenzylphenyl	mg/kg
4-Methylphenol	mg/kg
4-Nitrophenol	mg/kg
Azobenzene	mg/kg
bis(2-chloroethyl)ether	mg/kg

D t Sampl d	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
Lab R f N	179982	179983	179984	179985	179986	179987	179988	179989	179990	
C t m R f N	12	3	6	10	3	6	3	7	10	
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	
T lPt/B h i N	TP683	TP662	TP662	TP662	TP643	TP643	TP642	TP642	TP642	
D pth (m)	3.30	0.30	0.70	1.20	0.30	0.90	0.35	0.70	0.90	
H d ta d g t S rf (Y/N)										

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chloroxyflorfen	mg/kg
Dicamba	mg/kg
Dichloroprop	mg/kg
Mecoprop	mg/kg
SI	mg/kg

TRIAZINES

Alachlor	mg/kg
Simazine	mg/kg

PCB

PCB C g 28	mg/kg
PCB C g 52	mg/kg
PCB C g 101	mg/kg
PCB C g 118	mg/kg
PCB C g 138	mg/kg
PCB Co g 153	mg/kg
PCB C g 180	mg/kg

Total PCB	mg/kg
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ALCOHOLS

Butan-1-ol	mg/kg
Ethanol	mg/kg
Ethyl Glycol	mg/kg
Methanol	mg/kg
Propyl-1-ol	mg/kg
Propyl-2-ol	mg/kg

MISCELLANEOUS

Calcium Chloride	Ca/g
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Silver	mg/kg
Tin	mg/kg

1,2-Dichloropropane	mg/kg
1,3-Dichloropropane	mg/kg
2,4-Dinitrophenol	mg/kg
Acetone	mg/kg
Carbazole	mg/kg
Carbonyl sulphide	mg/kg
Creosote (TPH by GCFID)	mg/kg
Cyclohexane	mg/kg
Cyclohexane	mg/kg
Hexachlorocyclopentadiene	mg/kg
Hydroquinone	mg/kg
N-Nitrosodiphenylamine	mg/kg
p-Chloroaniline	mg/kg
Permethrin/Cypermethrin	mg/kg
Pyrene	mg/kg
Styrene	mg/kg
Sulphur	mg/kg
Toluene Extractable Matter (Historic)	mg/kg
Toluene	mg/kg
Tributyltin	mg/kg
Toluene	mg/kg
Vinyl Acetate	mg/kg

CONCRETE

Chloride BS1377 Part 3 including preparation	mg/kg
HAC (Residual term of High Alkaline Cement)	mg/kg
Mortar Cement/Aggregate Ratio-BS188	mg/kg

Organic Matter	%
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Notes

- Benzo(b)fluoranthene
- Di-benzofluoranthene
- Labelled as 0
- Insufficient sample

Norwest Hoist Soil Engineering Ltd
R68260 Durham Rd Newport

Date Sampled	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
L b R f N	179991	179992	179993	179994	179995	179996	179997	179998	179999
C s t m R f N	3	6	9	3	6	4	6	7	10
S m p l T y p	ES	ES	ES	ES	ES	ES	ES	ES	ES
T r a l P l t / B r e h l N	TP667	TP668	TP669	TP610	TP610	TP617	TP617	TP617	TP617
D e p t h (m)	0.30	1.20	2.50	0.30	1.30	0.50	1.50	1.60	2.20
H o s t a d i n g t S r f (Y/N)									
pH	V I	7.8			8.3				
/ L o g t i									
/ M t r e	/								
/ S t s	/								
A s b e t o s	%	0.001			0.001				
PHENOLICS									
Butyl Phenol	mg/kg								
Catechol	mg/kg	0.5			0.5				
Cresol (m)	mg/kg	<0.5			0.5				
Naphthol	mg/kg	<0.5			0.5				
Phenol	mg/kg	0.5			0.5				
Resorcinol	mg/kg	0.5			0.5				
2,4,6-trichlorophenol	mg/kg	0.5			<0.5				
Xylenol & Ethylphenol	mg/kg	0.5			0.5				
Total Phenol	mg/kg	<0.5			0.5				
US EPA PRIORITY PAH									
Acenaphthene	mg/kg	0.7			<0.5				
Acenaphthyl	mg/kg	1.0			0.7				
Anthracene	mg/kg	0.5			2.8				
Benzo(a)anthracene	mg/kg	3.1			10.4				
Benzo(b)fluoranthene	mg/kg	0.5			8.2				
Benzo(k)fluoranthene	mg/kg	4.0			7.4				
Benzo(g,h)perylene	mg/kg	0.5			6.5				
Chrysene	mg/kg	3.8			10.1				
Di-benzofluoranthene	mg/kg								
Indeno(1,2,3-cd)perylene	mg/kg	0.7			0.8				
Fluoranthene	mg/kg	5.1			18.3				
Fluorene	mg/kg	0.6			1.7				
Naphthalene	mg/kg	1.0			0.8				
Phenanthrene	mg/kg	3.3			11.8				
Pyrene	mg/kg	6.0			12.0				
Total US EPA 16 PAH	mg/kg	29.8			91.5				
OTHER PAH									
Anthracene	mg/kg								
Benzo(e)pyrene	mg/kg								
Cyclopenta(cd)pyrene	mg/kg								
GENERAL INORGANICS									
Compl. Cyanide	mg/kg								
Elemental Liberatable Cyanide (free)	mg/kg								
Thiocyanate	mg/kg								
Total Cyanide	mg/kg	1			1				
Sulphide	mg/kg	2			<2				
Sulphate (free)	mg/kg	170			310				
Total Sulphate	mg/kg	100			100				
Water Soluble Sulphate	mg/kg								
Water Soluble Chloride	mg/kg								
Phosphate	mg/kg								
Exchangeable Ammonium	mg/kg	20.6			5.8				
Nitrate	mg/kg								
Nitrite	mg/kg								

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	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
D t S mpl d	179991	179992	179993	179994	179995	179996	179997	179998	179999
L b R f N	3	6	9	3	6	4	6	7	10
C t me R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP667	TP668	TP669	TP610	TP610	TP617	TP617	TP617	TP617
T I Pit / B h l N	0.30	1.20	2.50	0.30	1.30	0.50	1.50	1.60	2.20
D pth (m)									
H d t a d g t S r f (Y/N)									

HEAVY METALS/METALLOIDS

	mg/kg	mg/kg	mg/kg
Al m m			
Antm y			
Ars	111.5		44.0
B m			
B ryl m			
B (W t S i b l)	1.1		0.7
C dm m	2.3		1.5
Chrom m (T tal)	41		46
Chrom m (He val t)	2		2
Cob ll			
Copp	344		243
G rma m			
Lead	615		331
M ry	1.1		1.7
Molybd m			
N k l	97		71
S l m	4.6		3.9
V d m			
Zi	671		388

ESSENTIAL ELEMENTS

	mg/kg
Cal m	
Iro	
M gnes m	
M g se	
P t ss m	
S d m	

MONOAROMATICS

	mg/kg	mg/kg
Ben		0.2
T l		0.2
Ethylbenz ne		<0.2
M ta & P ra Xyl		0.2
Orth Xylene		0.2
T tal Xyl		0.2

MTBE

	mg/kg
MTBE	
1,2,4-T m thylb nzen	
1,3,5-T methylbenz e	

TOTAL HYDROCARBONS

	mg/kg	mg/kg
P trol m R g Org cs (C ₆ -C ₁₀)		5
Die el R g Org nics (C ₆ -C ₂₆)		5
Hydrocarbo Scree (GC-FID)		<5

VOC

	mg/kg
1,1,1-T chloroeth	
1,1,2,2-T trachl roetha e	
1,1,2-T chl ro-1,2,2 trifl oroetha e	
1,1,2-Tnchl oethane	
1,1-D chl roeth ne	
1,1-D chloroeth	
1,2,3-Tnchloroprop ne	
1,2,3-Tim thylbenzen	
1,2,4-Trichlorobenzene	
1,2,4-T methylbenze	
1,2-D bromo-3-Chl ropropa e	
1,2-D chlorob nze e	
1,2-Dichloroethane	
1,2-D chloropropan	
1,2-D chl ropropene	
1,3,5-T m thylbenze	
1,3-D chl rob nzene	

	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
D t S mpl d	179991	179992	179993	179994	179995	179996	179997	179998	179999
L b R f N	3	6	9	3	6	4	6	7	10
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP667	TP668	TP669	TP610	TP610	TP617	TP617	TP617	TP617
Trt IPit/Bo h l N	0.30	1.20	2.50	0.30	1.30	0.50	1.50	1.60	2.20
D pth (m)									
H d ta d ng t S rf (Y/N)									

1,3-Dichloropropane	mg/kg
1,4-Dichlorobenzene	mg/kg
1-Chloroethane	mg/kg
1-Methylpropylbenzene	mg/kg
2,2-Dichloropropane	mg/kg
2-Chloroethanol	mg/kg
Benzene	mg/kg
Bromobenzene	mg/kg
Bromochloromethane	mg/kg
Bromoform	mg/kg
Carbon tetrachloride (PCM)	mg/kg
Chlorobenzene (s m)	mg/kg
Chlorodibromomethane	mg/kg
Chloroethane	mg/kg
Chloroform	mg/kg
1,2-Dichloroethane	mg/kg
1,3-Dichloropropane	mg/kg
Dibromochloromethane	mg/kg
Dibromoethane	mg/kg
Dibromomethane	mg/kg
Dichlorobenzene	mg/kg
Dichloromethane	mg/kg
Ethylbenzene	mg/kg
Hexachlorocyclopentadiene	mg/kg
1,2-Dichloroethane	mg/kg
1,3-Dichloropropane	mg/kg
Methylpropylbenzene	mg/kg
Monochlorobenzene	mg/kg
Methylchlorobenzene (m)	mg/kg
Butylbenzene	mg/kg
Propylbenzene	mg/kg
Ortho-Xylene	mg/kg
Styrene	mg/kg
1,2,4-Trichlorobenzene	mg/kg
Tetrachlorobenzene	mg/kg
Trichloroethene (PCE)	mg/kg
Tetrahydrofuran	mg/kg
Toluene	mg/kg
1,2-Dichloroethane	mg/kg
trans-1,3-dichloropropane	mg/kg
Trichloroethene (TCE)	mg/kg
Trichlorofluoromethane	mg/kg
Trichloromethane	mg/kg
Vinyl Chloride	mg/kg

SVOC's	
1,2,4-Trichlorobenzene	mg/kg
1,4-Dichlorobenzene	mg/kg
2,3,4,6-Tetrachlorophenol (m)	mg/kg
2,4,5-Trichlorophenol	mg/kg
2,4,6-Trichlorophenol	mg/kg
2,4-Dichlorophenol (m)	mg/kg
2,4-Dimethylphenol	mg/kg
2,4-Dinitrophenol	mg/kg
2,6-Dinitrophenol	mg/kg
2,6-Dinitrotoluene	mg/kg
2-Chloronaphthalene	mg/kg
2-Chlorophenol (s m)	mg/kg
2-Methylphenol	mg/kg
2-Nitrophenol	mg/kg
4-Chloro-3-methylphenol	mg/kg
4-chlorobenzylphenyl ether	mg/kg
4-Methylphenol	mg/kg
4-Nitrophenol	mg/kg
Azobenzene	mg/kg
1,2-bis(2-chloroethyl)ethane	mg/kg

	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
D t S mpled	179991	179992	179993	179994	179 95	179996	179997	179998	179999
L b R f N	3	6	9	3	6	4	6	7	10
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP667	TP668	TP669	TP610	TP610	TP617	TP617	TP617	TP617
Tn (Pt/Bo h l N	0 30	1 20	2 50	0 30	1 30	0 50	1 50	1 60	2 20
D pth (m)									
H d ta d g at S rf ce (Y/N)									

bis(2 hloro thyoxy)metha	mg/kg
bs(hl ro p pyl)eth	mg/kg
Brom ph yph yleth	mg/kg
H hl ro-1 3-butad e e	mg/kg
H hl robe	mg/kg
H chl th n	mg/kg
l ph ro	mg/kg
N tr benz	mg/kg
-nitr d -n-propyl 1 p p m	mg/kg
P t hl rob nz	mg/kg
P ta hl roph ol	mg/kg

B (2-ethyl xyl)phth l t	mg/kg
B tybe zyphthal te	mg/kg
D thylphth l t	mg/kg
D m thylphth l t	mg/kg
D -n b tylphth l t	mg/kg
D -octyl phthalate	mg/kg

T tal Phth l t	mg/kg
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ORGANO CHLORINE PESTICIDES

Ald	mg/kg
Bet HCH (B ta BHC)	mg/kg
Chl rd	mg/kg
DDD	mg/kg
D ld	mg/kg
D (l tal)	mg/kg
E d lfa l	mg/kg
E d lf ll	mg/kg
E d lf S lph t	mg/kg
E d	mg/kg
E d E d Ald hyd	mg/kg
G mma HCH (L nd ne)	mg/kg
H pt chl	mg/kg
Hept chl po d	mg/kg
H pta hl robenze	mg/kg
M th xy hl	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azi ph m thyl	mg/kg
Dem l -s-m thyl	mg/kg
Dazi	mg/kg
D hl rvos	mg/kg
D oxath	mg/kg
D if to	mg/kg
EPN Eth on	mg/kg
Mai th	mg/kg
Methyl P rath n	mg/kg
P rath	mg/kg
T rbufos	mg/kg

CARBAMATE (P sti d)

C rb ryl	mg/kg
Carbolura	mg/kg
Ma b	mg/kg

PHENOL UREA HERBICIDES

Chi rot l ro	mg/kg
Di ro	mg/kg
l proturon	mg/kg
Lin ron	mg/kg

	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
D t S mpl d	179991	179992	179993	179994	179995	179996	179997	179998	179999
L b R f N	3	6	9	3	6	4	6	7	10
C stom R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP667	TP668	TP669	TP610	TP610	TP617	TP617	TP617	TP617
T l Pit /B h l N	0.30	1.20	2.50	0.30	1.30	0.50	1.50	1.60	2.20
D pth (m)									
H rd ta di g t S rfa (Y/N)									

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5 T	mg/kg
2 4-D	mg/kg
Chl ro-o-l yl xyaceti d	mg/kg
D camb	mg/kg
D chl prop	mg/kg
M coprop	mg/kg
S l x	mg/kg

TRIAZINES

Altrizi e	mg/kg
S m z	mg/kg

PCB

PCB C g 28	mg/kg
PCB C ng 52	mg/kg
PCB C g 101	mg/kg
PCB C g 118	mg/kg
PCB Co g 138	mg/kg
PCB Co g 153	mg/kg
PCB C g 180	mg/kg

T tal PCB	mg/kg
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ALCOHOLS

Buta l	mg/kg
Eth l	mg/kg
Ethyl Gly l	mg/kg
M tha l	mg/kg
Prop 1-ol	mg/kg
Prop n-2-ol	mg/kg

MISCELLANEOUS

Cal f V l	C l/g
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S l	mg/kg
T	mg/kg

1 2-D hl roprop	mg/kg
1 3 D hl ropropene	mg/kg
2 4 D trophe l	mg/kg
Aceto	mg/kg
C rb l	mg/kg
Carbo d lph d	mg/kg
Cre t (TPH by GCFID)	mg/kg
Cycl hex ne	mg/kg
Cy l h xa o	mg/kg
H hl rocycl pe tadie e	mg/kg
Hydroq o	mg/kg
N-Nitro odph ylam	mg/kg
p-Chl ro lne	mg/kg
Prem th n/Cyperm th	mg/kg
Pynd	mg/kg
Styre	mg/kg
S lph l	mg/kg
T l Extra labl M tte (Histo)	mg/kg
Toxaph e	mg/kg
T b tyl T	mg/kg
T chl rometh e	mg/kg
Vnyl Acetat	mg/kg

CONCRETE

Chlorid BS1377 P r t 3 including prep rato	mg/kg
HAC (R p d t m tion of H gh Al m na Cem-	mg/kg
M Proport -C me t/Agg eg t R to-BS188	mg/kg

Org M tt	/
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3 8

N te
Benzo(b)fl
-2 D benzo(h)
Labelled 0
** Insuffici t sa

Norwest Holst Soil Engineering Ltd
R68260 Durham Rd Newport

	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
D t S mpl d	180000	180001	180002	180003	180004	180005	180006	180007	180008
L b R f N	3	6	3	6	3	6	9	3	6
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Type	TP698	TP698	TP644	TP644	TP637	TP637	TP637	TP638	TP638
T l Pit / B hol N	0.30	1.30	0.20	0.80	0.30	1.30	2.20	0.40	1.20
D pth (m)									
H rd ta d g t S rfac (Y/N)									

pH	V i e	7.6		8.4
% L s l g i t i	%			
% M t u r e	/			
% S t	/			
Asb t	%	0.001		0.001

PHENOLICS

B t y l P h e l	mg/kg			
C a t c h l	mg/kg	0.5		0.5
C i (m)	mg/kg	0.5		0.5
N p h t h l	mg/kg	0.5		0.5
P h l	mg/kg	0.5		0.5
R c i l	mg/kg	0.5		0.5
T m t h y l p h e l	mg/kg	0.5		0.5
X y l l & E t h y l p h l s	mg/kg	0.5		0.5
T t a l P h l s	mg/kg	0.5		0.5

US EPA PRIORITY PAH

A c e n a p h t h	mg/kg	<0.5		0.5
A c e p h t h y l	mg/kg	0.5		0.5
A n t h r a	mg/kg	0.5		0.7
B n z () A n t h r a c e	mg/kg	0.5		4.7
B e n z () p y r e n e	mg/kg	<0.5		4.3
B z o (b) f l r a t h e n e	mg/kg			
B n z (k) f l r a t h e n e	mg/kg	0.5		5.5
B n z o (g h) p e r y l e	mg/kg	0.5		5.9
C h r y s	mg/kg	0.5		6.0
D b z o (h) t h r a c e	mg/kg			
I d o (1 2 3 - c d) p y r	mg/kg	0.5		2.7
F l r a t h	mg/kg	0.5		7.3
F l r e	mg/kg	0.5		0.5
N p h t h l e n e	mg/kg	0.5		1.1
P h t h r e n e	mg/kg	0.5		4.5
P y r e	mg/kg	<0.5		6.5
T t a l U S E P A 1 6 P A H	mg/kg	0.5		50.2

OTHER PAH s

A t h a t h e n e	mg/kg			
B o () p y r	mg/kg			
C y l o p e t a (c d) p y r e n e	mg/kg			
GENERAL INORGANICS				
C m p l C y a n i d	mg/kg			
E t h y l L i b r a t a b l C y a n i d (f r e)	mg/kg			
T h i o c y a n i t	mg/kg			
T t a l C y a n i d	mg/kg	1		1
S u l p h d e	mg/kg	2		2
S i l i c a (f r e)	mg/kg	80		210
T t a l S i l i c a	mg/kg	200		200
W t S o l b l S u l p h a t	mg/kg			
W t S o l b l C h l o r i d e	mg/kg			
W t S o l b l P h o s p h o r u s	mg/kg			
W t S o l b l A m m o n i u m	mg/kg	5.1		7.1
N i t r a t e	mg/kg			
N i t r i t e	mg/kg			

Norwest Holst Soil Engineering Ltd
R68260 Durham Rd Newport

Dat Sampl d	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
Lab R f N	180000	180001	180002	180003	180004	180005	180006	180007	180008	
C t m R f N	3	6	3	6	3	6	9	3	6	
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	
T i l P t / B reh i N	TP698	TP698	TP644	TP644	TP637	TP637	TP637	TP638	TP638	
D pth (m)	0.30	1.30	0.20	0.80	0.30	1.30	2.20	0.40	1.20	
H d ta d g t S rfa (Y/N)										

HEAVY METALS/METALLOIDS

Al m um	mg/kg									
A tm y	mg/kg									
Arse	mg/kg	18.4				38.4				
B m	mg/kg									
B ryl m	mg/kg									
B o (Wat S i bl)	mg/kg	2.7				1.6				
Cadm m	mg/kg	0.7				2.2				
Chrom m (T tal)	mg/kg	51				39				
Chrom m (Hexaval t)	mg/kg	2				2				
C balt	mg/kg									
Copper	mg/kg	25				379				
G rm m	mg/kg									
Le d	mg/kg	50				1391				
M cury	mg/kg	0.5				1.4				
M lybd m	mg/kg									
N kel	mg/kg	40				125				
S i m	mg/kg	0.5				3.3				
V d m	mg/kg									
Zi	mg/kg	124				1281				

ESSENTIAL ELEMENTS

Calci m	mg/kg									
i	mg/kg									
M gne m	mg/kg									
M g	mg/kg									
P la m	mg/kg									
S d m	mg/kg									

MONOAROMATICS

B ze	mg/kg									
T i ne	mg/kg									
Ethylbenzen	mg/kg									
M ta & P ra Xyl	mg/kg									
Orth Xyl ne	mg/kg									

T tal Xyl ne	mg/kg									
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MTBE	mg/kg									
------	-------	--	--	--	--	--	--	--	--	--

1,2,4-T m thylbenzen	mg/kg									
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1,3,5-T m thylbenzene	mg/kg									
-----------------------	-------	--	--	--	--	--	--	--	--	--

TOTAL HYDROCARBONS

P t i m Ra g O g cs (C -C ₁)	mg/kg	5				5				
D I R ng Org cs (C C ₂₆)	mg/kg	5				42				
Hydrocarb S ree (GC FID)	mg/kg	5				50				

VOC

1,1,1-T chl roetha	mg/kg									
1,1,2,2-T trachil ro thia	mg/kg									
1,1,2-T chl ro-1,2,2 trflu roeth	mg/kg									
1,1,2-T chloroetha	mg/kg									
1,1-D chl roetha e	mg/kg									
1,1-Dichlo oethene	mg/kg									
1,2,3-T chl roprop	mg/kg									
1,2,3-T m thylbenzene	mg/kg									
1,2,4-T chl robenzene	mg/kg									
1,2,4-T m thylbenzene	mg/kg									
1,2-Dibromo-3-Chl roprop e	mg/kg									
1,2-D chlorobenzene	mg/kg									
1,2-D chloroetha e	mg/kg									
1,2-Dichlo propane	mg/kg									
1,2-D hl ropropene	mg/kg									
1,3,5-T methylbenzene	mg/kg									
1,3-Dichlorobenzene	mg/kg									

Norwest Holst Soil Engineering Ltd
R68260_Durham Rd Newport

D t Sampl d	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
L b R f N	180000	180001	180002	180003	180004	180005	180006	180007	180008
Cust m R f N	3	6	3	6	3	6	9	3	6
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES
T i l Pit / B h i N	TP698	TP698	TP644	TP644	TP637	TP637	TP637	TP638	TP638
D pth (m)	0.30	1.30	0.20	0.80	0.30	1.30	2.20	0.40	1.20
H rdsta di g t S rfa (Y/N)									

1,3-Dichloropropane	mg/kg
1,4-Dichlorobenzene	mg/kg
1-Chlorotoluene	mg/kg
1-Methylpropylbenzene	mg/kg
2,2-Dichloropropane	mg/kg
2-Chlorotoluene	mg/kg
Benzenes	mg/kg
Bromobenzene	mg/kg
Bromochlorobenzene	mg/kg
Bromodichloromethane	mg/kg
Bromofluorobenzene	mg/kg
Carbon tetrachloride (PCM)	mg/kg
Chlorobenzene (m)	mg/kg
Chlorobromomethane	mg/kg
Chloroethane	mg/kg
Chloroform	mg/kg
1,2-Dichloroethylene	mg/kg
cis-1,3-Dichloropropane	mg/kg
Dibromochloromethane	mg/kg
Dibromoethane	mg/kg
Dibromomethane	mg/kg
Dichlorobenzene	mg/kg
Dichloromethane	mg/kg
Ethylbenzene	mg/kg
Hexachlorobutadiene	mg/kg
m,p-Dichlorobenzene	mg/kg
Methylpropylbenzene	mg/kg
Methylchlorobenzene	mg/kg
Methylchlorobenzene (m)	mg/kg
Butylbenzene	mg/kg
Propylbenzene	mg/kg
o-Dichlorobenzene	mg/kg
Styrene	mg/kg
tert-Butylbenzene	mg/kg
Toluene	mg/kg
Tetrachloroethene (PCE)	mg/kg
Tetrahydrofuran	mg/kg
Toluene	mg/kg
trans-1,2-Dichloroethane	mg/kg
trans-1,3-Dichloropropane	mg/kg
Toluene (TCE)	mg/kg
Toluene	mg/kg
Toluene	mg/kg
Toluene	mg/kg
Vinyl Chloride	mg/kg

SVOC	
1,2,4-Trichlorobenzene	mg/kg
1,4-Dichlorobenzene	mg/kg
2,3,4,6-Tetrachlorophenol (m)	mg/kg
2,4,5-Trichlorophenol	mg/kg
2,4,6-Trichlorophenol	mg/kg
2,4-Dichlorophenol (sum)	mg/kg
2,4-Dimethylphenol	mg/kg
2,4-Dinitrophenol	mg/kg
2,6-Dimethylphenol	mg/kg
2,6-Dinitrophenol	mg/kg
2-Chlorophthalene	mg/kg
2-Chlorophenol (m)	mg/kg
2-Methylphenol	mg/kg
2-Nitrophenol	mg/kg
4-Chloro-3-methylphenol	mg/kg
4-chlorobenzylphenyl ether	mg/kg
4-Methylphenol	mg/kg
4-Nitrophenol	mg/kg
Azobenzene	mg/kg
bis(2-chloroethyl)ether	mg/kg

Date Sampled	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
Lab Ref No	180000	180001	180002	180003	180004	180005	180006	180007	180008
Contaminant	3	6	3	6	3	6	9	3	6
Sample Type	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tri Pit / Borehole No	TP698	TP698	TP644	TP644	TP637	TP637	TP637	TP638	TP638
Depth (m)	0.30	1.30	0.20	0.80	0.30	1.30	2.20	0.40	1.20
Height of Sample (Y/N)									

b (2-chloroethoxy)methane	mg/kg
bis(1-chloropropyl)ether	mg/kg
Bromophenyl ether	mg/kg
1-chloro-3-butadiene	mg/kg
1-chlorobenzene	mg/kg
1-chloroethane	mg/kg
Isophorone	mg/kg
Nitrobenzene	mg/kg
1,2-dichloro-1,1-dipropyl ether	mg/kg
p-tachlorobenzene	mg/kg
p-tachlorophenol	mg/kg

Bis(2-ethylhexyl)phthalate	mg/kg
Bis(2-phenyl)phthalate	mg/kg
Dibutylphthalate	mg/kg
Dimethylphthalate	mg/kg
Dibutylphthalate	mg/kg
Dioctylphthalate	mg/kg

Toluene	mg/kg
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ORGANO CHLORINE PESTICIDES

Aldrin	mg/kg
Beta HCH (Beta BHC)	mg/kg
Chlordane	mg/kg
DDD	mg/kg
Dieldrin	mg/kg
Dieldrin (total)	mg/kg
Endosulfan	mg/kg
Endosulfan sulfate	mg/kg
Endosulfan	mg/kg
Endosulfan Aldehyde	mg/kg
Gamma HCH (Lindane)	mg/kg
Heptachlor	mg/kg
Heptachlor epoxide	mg/kg
Heptachlorobenzene	mg/kg
Methoxychlor	mg/kg
pp-DDE	mg/kg
pp-DDT	mg/kg
pp-TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	mg/kg
Dimethoate	mg/kg
Diazinon	mg/kg
Dichlorvos	mg/kg
Diazinon	mg/kg
Disulfoton	mg/kg
EPN Ethion	mg/kg
Malathion	mg/kg
Methyl Parathion	mg/kg
Phosphorothion	mg/kg
Tebuflufen	mg/kg

CARBAMATE (Pesticides)

Carbaryl	mg/kg
Carbofuran	mg/kg
Maneb	mg/kg

PHENOL UREA HERBICIDES

Chlorotoluron	mg/kg
Diuron	mg/kg
Isoproturon	mg/kg
Linuro	mg/kg

	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03
D t S mpl d	180000	180001	180002	180003	180004	180005	180006	180007	180008
Lab R f N	3	6	3	6	3	6	9	3	6
C t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP698	TP698	TP644	TP644	TP637	TP637	TP637	TP638	TP638
T al Pit /Bo hole N	0.30	1.30	0.20	0.80	0.30	1.30	2.20	0.40	1.20
D pth (m)									
H dstand g t S rf (Y/N)									

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chloroxyacetic acid	mg/kg
Dicamba	mg/kg
Dihl prop	mg/kg
Mecoprop	mg/kg
Sil	mg/kg

TRIAZINES

Altrazine	mg/kg
S-metaz	mg/kg

PCB

PCB Congene 28	mg/kg
PCB Congene 52	mg/kg
PCB Congene 101	mg/kg
PCB Congene 118	mg/kg
PCB Congene 138	mg/kg
PCB Congene 153	mg/kg
PCB Congene 180	mg/kg

Total PCB	mg/kg
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ALCOHOLS

Butanol	mg/kg
Ethanol	mg/kg
Ethylene Glycol	mg/kg
Methanol	mg/kg
Propan-1-ol	mg/kg
Propan-2-ol	mg/kg

MISCELLANEOUS

Calcium Chloride	Ca/g
Silver	mg/kg
Tin	mg/kg
1,2-Dichloropropane	mg/kg
1,3-Dichloropropane	mg/kg
2,4-Dinitrophenol	mg/kg
Acetone	mg/kg
Carbazole	mg/kg
Carbonyl sulfide	mg/kg
Creosote (TPH by GCFID)	mg/kg
Cyclohexane	mg/kg
Cyclohexane	mg/kg
Hexachlorocyclopentadiene	mg/kg
Hydroquinone	mg/kg
N-Nitrosodiphenylamine	mg/kg
p-Chloroaniline	mg/kg
Pernitrochlorobenzene	mg/kg
Pyridine	mg/kg
Styrene	mg/kg
Sulphur	mg/kg
Total Extractable Matter (Historical)	mg/kg
Toluene	mg/kg
Tributyltin	mg/kg
Trichloroethylene	mg/kg
Vinyl Acetate	mg/kg

CONCRETE

Chloride BS1377 Part 3 chloride preparation	mg/kg
HAC (Rapid determination of High Alkaline Cement)	mg/kg
Mix Proportions-Cement/Aggregate Ratio-BS188	mg/kg

Organic Matter	%
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Notes

- Benzo(b)fl
- ** Di-benzo(h)fl
- Labelled 0
- ** Insufficient data

Norwest Holst Soil Engineering Ltd
R68260 Durham Rd Newport

	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	R68260
D t S mpl d	180009	180010	180011	180012	180013	180014	180015		AQC
Lab R f N	9	12	3	6	3	4	9		Lab Std
C st m R f No	ES	ES	ES	ES	ES	ES	ES		
Sampl Typ	TP638	TP638	TP639	TP639	TP641	TP641	TP641		
T 1Pht /Bo hol N	2.20	3.20	0.40	1.40	0.20	0.50	1.00		
D pth (m)									
H d ta di g at S r f ce (Y/N)									
pH						8.5			7.9
% Loss									
% Moisture									
% Solids									
Asbestos						0.001			
PHENOLICS									
B ty l Ph ol									
C tech l						<0.5			
Cre i (s m)						<0.5			
Naphthol						0.5			
Ph l						0.5			
R sorc l						0.5			
T m thylph ol						0.5			
Xyl ol & Ethylph ls						0.5			
Total Phenol						<0.5			0.297
US EPA PRIORITY PAH									
Ac phth						0.5			
Ace phthyle						<0.5			
Anthracene						<0.5			
Be zo()Anthracene						<0.5			
B nzo()pyre e						0.5			
B nzo(b)fl ra thene									
B nzo(k)fluora th						<0.5			
B zo(g h)perylene						<0.5			
Chrys ne						0.5			
D-b nz (a h)a thrace ²									
I d c(1,2,3-cd)pyrene ²						0.5			
Fl ra thene						0.5			
Fl re						0.5			
N phth l ne						0.5			
Ph n thren						0.5			
Pyrene						0.5			
Total US EPA 16 PAH						0.5			3507.7
OTHER PAH									
Anth thre									
B zo()pyre									
Cycl pe ta(cd)pyren									
GENERAL INORGANICS									
C mple Cyan d									
Eas ly Liberatable Cya d (free)									
Th cya t									
Total Cya d						1			2.0
S lph d						2			0.7
S lph (free)						80			580
Total S lphat						100			6700
W t Sol ble S lphat									
Water S l bl Chlo de									
Ph ph t									
Excha geabl Amm m						5			149.8
Nitrat									
Nitrit									

Norwest Holst Soil Engineering Ltd
R68260 Durham Rd Newport

	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	R68260
D t S mpl d	180009	180010	180011	180012	180013	180014	180015		AQC
Lab R f N	9	12	3	6	3	4	9		Lab Std
C t m R f N	ES	ES	ES	ES	ES	ES	ES		
S mpl Type	TP638	TP638	TP639	TP639	TP641	TP641	TP641		
Tri Plt / B h le N	2 20	3 20	D 40	1 40	0 20	0 50	1 00		
D pth (m)									
H rd t d g t S rfa (Y/N)									

HEAVY METALS/METALLOIDS

Al m m	mg/kg							
A tm ny	mg/kg							
Ars	mg/kg					10 3		22 0
B m	mg/kg							
Beryll m	mg/kg							
B (W t S i b i)	mg/kg					0 9		2 0
Cadm m	mg/kg					0 8		2 1
Chrom m (T tal)	mg/kg					24		237
Chrom um (H xa al t)	mg/kg					2		11
C b ll	mg/kg							
C ppe	mg/kg					36		73
Germa m	mg/kg							
L d	mg/kg							
M c ry	mg/kg					30		162
M lybd m	mg/kg					<0 5		1 4
N k l	mg/kg						39	36
S l m	mg/kg						2 1	1 8
V d m	mg/kg							
Z	mg/kg						36	126

ESSENTIAL ELEMENTS

Calci m	mg/kg							
Iro	mg/kg							
M g m	mg/kg							
M g	mg/kg							
Pot m	mg/kg							
Sod m	mg/kg							

MONOAROMATICS

B nz ne	mg/kg							
T l ne	mg/kg							
Ethylbenz	mg/kg							
M ta & P ra Xyl	mg/kg							
Ortho Xyl	mg/kg							

T tal Xyl	mg/kg							
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MTBE	mg/kg							
1 2 4 T m thylbenzene	mg/kg							
1 3 5 T m thylbenze	mg/kg							

TOTAL HYDROCARBONS

P tral m R g Org cs (C -C)	mg/kg					5		
D el R g Org cs (C -C ₂₆)	mg/kg					5		
Hydrocarbo S ree (GC-FID)	mg/kg					5		

VOC s								
1 1 1 T chl roethane	mg/kg							
1 1 2 2 Tetrachloroethane	mg/kg							
1 1 2 T hl o-1,2,2-trifl roeth ne	mg/kg							
1 1,2 T chl roeth ne	mg/kg							
1 1 D chl roethane	mg/kg							
1 1-D chl roeth e	mg/kg							
1 2 3-T chl ropropane	mg/kg							
1 2 3-Trm thylbenze e	mg/kg							
1 2 4-T chlorobenza	mg/kg							
1 2 4-T m thylbenze	mg/kg							
1 2 Dibromo-3-Chl ropropane	mg/kg							
1 2-D chl robenzene	mg/kg							
1 2-D hl roeth ne	mg/kg							
1 2 D chloroprop ne	mg/kg							
1 2-D chl ropropene	mg/kg							
1 3 5-T m thylbenzene	mg/kg							
1 3-D hlorob nzene	mg/kg							

Norwest Holst Soil Engineering Ltd
R68260 Durham Rd Newport

	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	R68260
D t S mpl d	180009	180010	180011	180012	180013	180014	180015	AQC
Lab R f N	9	12	3	6	3	4	9	Lab Std
C t m R f N	ES	ES	ES	ES	ES	ES	ES	
S mpl Typ	TP638	TP638	TP639	TP639	TP641	TP641	TP641	
Trf l Prt / B h l N	2 20	3 20	0 40	1 40	0 20	0 50	1 00	
D pth (m)								
H d ta d g t S rface (Y/N)								

13-D hlo p opa	mg/kg
14 D hl b nz	mg/kg
1-Chl tol e e	mg/kg
1 M thylpropylb nze	mg/kg
2 2 D chl roprop	mg/kg
2-Chl rot l	mg/kg
Benz e	mg/kg
Brom benze	mg/kg
B m chl rom th	mg/kg
Bromod hl rom th	mg/kg
Brom f rm	mg/kg
C rbo T t hl d (PCM)	mg/kg
Chl robe ze (m)	mg/kg
Chl rod b m m th ne	mg/kg
Chl oeth ne	mg/kg
Chl f rm	mg/kg
c 1 2 D hl roethyle e	mg/kg
13-D hl p pe	mg/kg
D brom hl rometh ne	mg/kg
D b m th ne	mg/kg
D brom metha	mg/kg
D hl benz	mg/kg
D chl rom th	mg/kg
Ethylbe ne	mg/kg
H hl rob tad	mg/kg
meta & para Xyl	mg/kg
M thyl sopropylbe ze	mg/kg
M chl robenz	mg/kg
M nochloroph l (m)	mg/kg
B tyb nze	mg/kg
P pylbenz	mg/kg
rtho Xyl	mg/kg
Styre	mg/kg
i rt B tyb nz	mg/kg
T trachl benz ne	mg/kg
T trachl oeth (PCE)	mg/kg
T trahydrof ra	mg/kg
Tol ne	mg/kg
trans 1 2 D hl roeth	mg/kg
tra 13-d hl rop ope	mg/kg
T chl roeth (TCE)	mg/kg
T chlrofl rom th	mg/kg
T hl rometh ne	mg/kg
V nyl Chl de	mg/kg

SVOC	
1 2 4 T chl b nz	mg/kg
14-D hl rob ze	mg/kg
2 3 4 6-T tra hl ph ol (m)	mg/kg
2 4 5-T hl rophen l	mg/kg
2 4 6 T hloroph nol	mg/kg
2 4-D chlo ph l(s m)	mg/kg
2 4 D methyphe l	mg/kg
2 4-Dinitrot l e	mg/kg
2 6-D m thyphe ol	mg/kg
2 6-D trolol	mg/kg
2-Chl ro phthal	mg/kg
2-Chl roph l (m)	mg/kg
2-M thylphenol	mg/kg
2-Nitroph nol	mg/kg
4-Chl ro-3-m thylph nol	mg/kg
4-chlo benzyph yl the	mg/kg
4-M thylphenol	mg/kg
4-Nitroph nol	mg/kg
Azobe	mg/kg
b s(2-chl oethyl)eth r	mg/kg

D t S mpl d	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	R68260
Lab R f N	180009	180010	180011	180012	180013	180014	180015		AOC
C t m R f N	9	12	3	6	3	4	9		L b Std
S mpl Typ	ES	ES	ES	ES	ES	ES	ES		
T l Pit/Bo h le N	TP638	TP638	TP639	TP639	TP641	TP641	TP641		
D pth (m)	2.20	3.20	0.40	1.40	0.20	0.50	1.00		
H d ta d g t S rf (Y/N)									

bs(2-chlorophenyl)methane	mg/kg
bis(2-chlorophenyl)ethane	mg/kg
Bromophenyl ether	mg/kg
Hexachloro-1,3-butadiene	mg/kg
Hexachlorobenzene	mg/kg
Hexachlorocyclohexane	mg/kg
Hexachlorocyclopentadiene	mg/kg
Nitrobenzene	mg/kg
1,4-dinitrobenzene	mg/kg
1,2-dinitrobenzene	mg/kg
1,3-dinitrobenzene	mg/kg

Bis(2-ethylhexyl)phthalate	mg/kg
Butylbenzylphthalate	mg/kg
Dibutylphthalate	mg/kg
Dimethylphthalate	mg/kg
Diethylphthalate	mg/kg
Dioctylphthalate	mg/kg

Tetralin	mg/kg
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ORGANO CHLORINE PESTICIDES

Aldrin	mg/kg
Beta HCH (Beta BHC)	mg/kg
Chlordane	mg/kg
DDD	mg/kg
Dieldrin	mg/kg
Dinitrophenol	mg/kg
Endosulfan I	mg/kg
Endosulfan II	mg/kg
Endosulfan Siphate	mg/kg
Endosulfan	mg/kg
Endrin	mg/kg
Gamma HCH (Lindane)	mg/kg
Heptachlor	mg/kg
Heptachlor epoxide	mg/kg
Heptachlorobenzene	mg/kg
Methoxychlor	mg/kg
pp-DDE	mg/kg
pp-DDT	mg/kg
pp-TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	mg/kg
Demeton-methyl	mg/kg
Diazinon	mg/kg
Disulfoton	mg/kg
Diethion	mg/kg
Difluthion	mg/kg
EPN	mg/kg
Malathion	mg/kg
Methylphosphorothioate	mg/kg
Phosphorothioate	mg/kg
Terbufos	mg/kg

CARBAMATE (Pesticides)

Carbaryl	mg/kg
Carbaryl	mg/kg
Maneb	mg/kg

PHENOL UREA HERBICIDES

Chlorotoluron	mg/kg
Dropanolone	mg/kg
Isoproturon	mg/kg
Linuron	mg/kg

D t S mpl d	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	19/09/03	R68260
Lab R f N	180009	180010	180011	180012	180013	180014	180015		AQC
C t m R f N	9	12	3	6	3	4	9		Lab Std
S mpl Typ	ES	ES	ES	ES	ES	ES	ES		
Trnal Pkt/Bo hol N	TP638	TP638	TP639	TP639	TP641	TP641	TP641		
D pth (m)	2.20	3.20	0.40	1.40	0.20	0.50	1.00		
H d ta d g tS rf (Y/N)									

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chl ro-o-t lyl xy cetic acid	mg/kg
D camb	mg/kg
D hl roprop	mg/kg
M cop p	mg/kg
Sl	mg/kg

TRIAZINES

Altrzi	mg/kg
S rnzzi	mg/kg

PCB

PCB C g 28	mg/kg
PCB Co g 52	mg/kg
PCB Co g 101	mg/kg
PCB C g ne 118	mg/kg
PCB C ng e 138	mg/kg
PCB C g 15	mg/kg
PCB C g 180	mg/kg

Total PCB	mg/kg
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ALCOHOLS

Buta l	mg/kg
Etha ol	mg/kg
Ethyl Glycol	mg/kg
M th l	mg/kg
Propan-1-ol	mg/kg
P p 2-ol	mg/kg

MISCELLANEOUS

Cal f Value	Cal/g
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S lv	mg/kg
T	mg/kg

1,2-Dchl ropropane	mg/kg
1,3-Dchl r propene	mg/kg
2,4-D troph l	mg/kg
Acet	mg/kg
C rb zol	mg/kg
C rbo d sulph d	mg/kg
Craosot (TPH by GCFID)	mg/kg
Cycloh ne	mg/kg
Cyclohexa	mg/kg
H hl ocyclope tad	mg/kg
Hydroq	mg/kg
N N trosod ph nylam ne	mg/kg
p-Chl ro l	mg/kg
Prem th n/Cyperm th	mg/kg
Pynd	mg/kg
Styre e	mg/kg
S iphoia	mg/kg
T l Extractable Matte (H sto c)	mg/kg
Toxsph ne	mg/kg
T butyl T n	mg/kg
Thchl rometh	mg/kg
V nyl Acet te	mg/kg

CONCRETE

Chl d BS1377 P rt 3 cl d g preparation	mg/kg
HAC (Rap d determ nabo f H gh Alum na Cem)	mg/kg
M Proportio s-Cerne l/Aggreg t Ratio-BS188	mg/kg

Org ic Matte	%
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84

N tes
Benzo(b)fluor
2-D-benzo(h)
Labelled s 0
** Insufficient sa

ENVIRONMENTAL ANALYSIS LABORATORIES

15 Burgess Road Ivyhouse Lane Industrial Estate Hastings East Sussex TN35 4NR
 Tel 01424 444433 Fax 01424 442299 Info@environmentalanalysis.com

ANALYTICAL REPORT No R68260

Location Durham Rd Newport

Your Project No F13041

Reporting Date 09/10/03

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
 Leeds LS11 5SX

Soils

Date Sampled	19/09/03	19/09/03
Lab Ref No	179968	179995
Customer Ref No	6	6
Sample Type	ES	ES
Trial Pit / Borehole No	TP707	TP610
Depth (m)	1 20	1 30

Aromatic

C ₅ C ₇	(mg/kg) N	<5	<5
>C ₇ C ₉	(mg/kg) N	<5	<5
>C ₉ C ₁₀	(mg/kg) N	<5	<5
>C ₁₀ C ₁₂	(mg/kg) N	<5	<5
>C ₁₂ C ₁₆	(mg/kg) N	<5	<5
>C ₁₆ C ₂₁	(mg/kg) N	<5	<5
>C ₂₁ C ₃₅	(mg/kg) N	<5	<5

Aliphatic

C ₅ C ₈	(mg/kg) N	<5	<5
>C ₆ C ₈	(mg/kg) N	<5	<5
>C ₈ C ₁₀	(mg/kg) N	<5	<5
>C ₁₀ C ₁₂	(mg/kg) N	<5	<5
>C ₁₂ C ₁₆	(mg/kg) N	<5	<5
>C ₁₆ C ₂₁	(mg/kg) N	<5	<5
>C ₂₁ C ₃₄	(mg/kg) N	<5	<5

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t - not tested

MJB

www.environmentalanalysis.com

ENVIRONMENTAL ANALYSIS LABORATORIES

15 Burgess Road Ivyhouse Lane Industrial Estate Hastings East Sussex TN35 4NR
Tel 01424 444433 Fax 01424 442299 info@environmentalanalysis.com

ANALYTICAL REPORT No R68260

Location Newport

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
Leeds LS11 5SX

Your Project No F13041

Reporting Date 09/10/03

Asbestos Identification

Date Sampled	19/09/03
Lab Ref No	179983
Customer Ref No	3
Sample Type	ES
Trial Pit / Borehole No	TP662
Depth (m)	0.30
Description of Sample Matrix	Soil
Overall Percentage of Asbestos Identified	Trace
Type of Asbestos identified	Chrysotile (white)

Descriptions of methods available on request (V8)
Asbestos identification UKAS accredited method
Quantification of asbestos and tentative identification
of non asbestos materials is not covered by
UKAS accreditation
MJB

www.environmentalanalysis.com

Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 11/10/03

ANALYTICAL REPORT No R68259

Location Durham Rd Newport

Your Project No F13041

The attached analytical results relate to samples received on 22 Sep 2003

The report is only valid if it contains the total number of pages indicated at the bottom of this page

Checked by 

Authorised by 

If you have any queries regarding this report please contact Steve Chapman or Steve Knight

■ ENVIRONMENTAL ANALYSIS LABORATORIES
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www.soilengineering.co.uk
E mail info@environmentalanalysis.com

A Division of Norwest Holst Soil Engineering Ltd
Registered in England No 980795
Registered Office Parkside Lane Dewsbury Road Leeds LS11 5SX

Page 1 of 17

Norwest Holst Soil Engineering Ltd
R68259 Durham Rd Newport

	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03
D i S mpled										
Lab R f N	17 944	17 945	179946	179947	179948	179949	179950	179951	179952	
C tom Ref N	3	6	3	7	3	6	10	3	7	
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES	
T i l Pit / B o h l N	TP606	TP606	TP607	TP607	TP608	TP608	TP608	TP644	TP644	
D pth (m)	0 20	0 50	0 20	0 70	0 10	0 30	0 70	0 20	1 40	
H d ta d g t S rf ca (Y/N)										
pH		V l					7 5		7 6	
% L ss o lg rto		%								
/ Mo stu		%								
% St nes		%								
Asbest s		%					<0 001		0 001	
PHENOLICS										
B tyl Phe ols		mg/kg								
C t chol		mg/kg					0 5		0 5	
C es l (m)		mg/kg					0 5		0 5	
N phth is		mg/kg					0 5		0 5	
Ph ol		mg/kg					0 5		0 5	
R cncol		mg/kg					<0 5		0 5	
T m thylphe ol		mg/kg					<0 5		0 5	
Xyl ois & Ethylph ls		mg/kg					0 5		0 5	
Total Ph ols		mg/kg					0 5		0 5	
US EPA PRIORITY PAH										
A phthene		mg/kg					0 5		0 5	
Acen phthyl ne		mg/kg					<0 5		0 5	
Anthracene		mg/kg					0 5		0 5	
Benzo()Anthrace		mg/kg					0 5		0 5	
Benzo(a)pyre		mg/kg					0 5		0 5	
B nzo(b)fluora the		mg/kg								
B nzo(k)fluoranth		mg/kg					0 5		0 5	
Benzo(g h)peryl		mg/kg					0 5		0 5	
Chrys		mg/kg					0 5		0 5	
D benzo(a h) a th ca ²		mg/kg								
I d o(1 2 3-cd)pyr ne ²		mg/kg					0 5		0 5	
Fl ra thene		mg/kg					0 5		0 5	
Fl re		mg/kg					0 5		0 5	
N phthalene		mg/kg					0 5		0 5	
Ph threne		mg/kg					<0 5		0 5	
Pyrene		mg/kg					<0 5		0 5	
Total US EPA 16 PAH		mg/kg					0 5		0 5	
OTHER PAHs										
Antha thre e		mg/kg								
Benzo()pyr ne		mg/kg								
Cycl pe ta(cd)pyrene		mg/kg								
GENERAL INORGANICS										
Comple Cya de		mg/kg								
Ea ly Liberatable Cyan d (free)		mg/kg								
Th ocyanat		mg/kg								
Total Cyanide		mg/kg					1		1	
Sulphide		mg/kg					<2		2	
S lphur (free)		mg/kg					80		170	
Total S lphate		mg/kg					100		100	
Water Solubi S lphat		mg/kg								
W t Soluble Chlorid		mg/kg								
Pho ph te		mg/kg								
Excha geable Amm i m		mg/kg					11 6		5 1	
N trate		mg/kg								
N trit		mg/kg								

Norwest Holst Soil Engineering Ltd
R66259 Durham Rd Newport

D t Sampl d	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03
L b R f N	179944	179945	179946	179947	179948	179949	179950	179951	179952
C t m R f N	3	6	3	7	3	6	10	3	7
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES
T i l Ptt /Bo h l No	TP606	TP606	TP607	TP607	TP608	TP608	TP608	TP644	TP644
D pth (m)	0.20	0.50	0.20	0.70	0.10	0.30	0.70	0.20	1.40
H dsta d g t S rf ce (Y/N)									

HEAVY METALS/METALLOIDS

Al m m	mg/kg								
Ant m ny	mg/kg								
Ars	mg/kg						24.4		14.6
B m	mg/kg								
B ryl m	mg/kg								
B o (Wat S luble)	mg/kg						2.2		1.7
C dm um	mg/kg						0.7		0.7
Ch om m (Total)	mg/kg						51		48
Ch om m (H xa i t)	mg/kg						<2		2
Cobalt	mg/kg								
Coppe	mg/kg						13		20
G rman m	mg/kg								
Le d	mg/kg						36		39
Me ry	mg/kg						0.5		0.5
M lybde m	mg/kg								
N ck l	mg/kg						37		45
Sel m	mg/kg						0.8		0.5
V d m	mg/kg								
Z	mg/kg						110		109

ESSENTIAL ELEMENTS

Cal m	mg/kg								
I	mg/kg								
Mag sium	mg/kg								
Ma ga	mg/kg								
P t s um	mg/kg								
Sod m	mg/kg								

MONOAROMATICS

Be z	mg/kg						0.2		
T l	mg/kg						<0.2		
Ethylbe zene	mg/kg						0.2		
M ta & P ra Xyle	mg/kg						0.2		
Orth Xyle	mg/kg						0.2		
Tot l Xyle es	mg/kg						<0.2		
MTBE	mg/kg								
1 2 4-T m thylbenz	mg/kg								
1 3 5-Tnm thylbenz ne	mg/kg								

TOTAL HYDROCARBONS

P t l m Ra g Org cs (C ₆ -C ₁₀)	mg/kg								5
Die l Ra g Org cs (C ₉ -C ₂₆)	mg/kg								5
Hyd carbo Screen (GC-FID)	mg/kg								5

VOC s

1 1 1 T hloroethane	mg/kg								
1 1 2 2 T rchl oetha e	mg/kg								
1 1 2 Tnchloro-1 2 2 trfl oethane	mg/kg								
1 1 2 T chl roethane	mg/kg								
1 1 D chloroethan	mg/kg								
1 1 D chloroeth n	mg/kg								
1 2 3-Tnchl roprop	mg/kg								
1 2 3-Tnmethylbenzene	mg/kg								
1 2 4-Tnchl robenz ne	mg/kg								
1 2 4-Tnmethylbenz ne	mg/kg								
1 2-D bromo-3-Chloroprop ne	mg/kg								
1 2 D chlorobenz n	mg/kg								
1 2 D chl roethane	mg/kg								
1 2 D chl ropropene	mg/kg								
1 2 D chloropropene	mg/kg								
1 3 5-Tnm thylbenze	mg/kg								
1 3-D chl robenzene	mg/kg								

Norwest Holst Soil Engineering Ltd
R68259 Durham Rd Newport

	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03
D t S mpl d									
Lab R f No	179944	179945	179946	179947	179948	179949	179950	179951	179952
C t m R f N	3	6	3	7	3	6	10	3	7
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tri l Pit / B rehol N	TP606	TP606	TP607	TP607	TP608	TP608	TP608	TP644	TP644
D pth (m)	0.20	0.50	0.20	0.70	0.10	0.30	0.70	0.20	1.40
H d ta d g t Surfa (Y/N)									

1,3-Dichloropropane	mg/kg
1,4-Dichlorobenzene	mg/kg
1-Chloroethane	mg/kg
1-Methylpropylbenzene	mg/kg
2,2-Dichloropropane	mg/kg
2-Chlorotoluene	mg/kg
Benzene	mg/kg
Bromobenzene	mg/kg
Bromochloromethane	mg/kg
Bromodichloromethane	mg/kg
Bromofluoromethane	mg/kg
Carb. Tetrachloroethane (PCM)	mg/kg
Chlorobenzene (m)	mg/kg
Chlorodibromomethane	mg/kg
Chloroethane	mg/kg
Chloroform	mg/kg
cis-1,2-Dichloroethane	mg/kg
cis-1,3-Dichloropropane	mg/kg
Dibromochloromethane	mg/kg
Dibromomethane	mg/kg
Dibromomethane	mg/kg
Dichlorobenzene	mg/kg
Dichloromethane	mg/kg
Ethylbenzene	mg/kg
Hexachlorobutadiene	mg/kg
m,p-Dichloro-xylene	mg/kg
Methyl-isopropylbenzene	mg/kg
Methylbenzene	mg/kg
Methylchlorophenol (s,m)	mg/kg
o-Toluidine	mg/kg
Propylbenzene	mg/kg
p-Toluidine	mg/kg
Styrene	mg/kg
tert-Butylbenzene	mg/kg
Tetrachlorobenzene	mg/kg
Tetrachloroethene (PCE)	mg/kg
Trihydrofluoromethane	mg/kg
Toluene	mg/kg
trans-1,2-Dichloroethane	mg/kg
trans-1,3-Dichloropropane	mg/kg
Trichloroethene (TCE)	mg/kg
Trichlorophenol	mg/kg
Trichloromethane	mg/kg
Vinyl Chloride	mg/kg

SVOC

1,2,4-Trichlorobenzene	mg/kg
1,4-Dichlorobenzene	mg/kg
2,3,4,6-Tetrachlorophenol (s,m)	mg/kg
2,4,5-Trichlorophenol	mg/kg
2,4,6-Trichlorophenol	mg/kg
2,4-Dichlorophenol (m)	mg/kg
2,4-Dimethylphenol	mg/kg
2,4-Dinitrotoluene	mg/kg
2,6-Dimethylphenol	mg/kg
2,6-Dinitrotoluene	mg/kg
2-Chlorophenol	mg/kg
2-Chlorophenol (m)	mg/kg
2-Methylphenol	mg/kg
2-Nitrophenol	mg/kg
4-Chloro-o-cresol	mg/kg
4-chlorobenzophenone	mg/kg
4-Methylphenol	mg/kg
4-Nitrophenol	mg/kg
Azobenzene	mg/kg
bis(2-chloroethyl)ether	mg/kg

Norwest Holst Soil Engineering Ltd
R68259 Durham Rd Newport

D t S mpl d	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03
L b R f N	179944	179945	179946	179947	179948	179949	179950	179951	179952
C t m Ref N	3	6	3	7	3	6	10	3	7
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tri l Pit / B reh l N	TP606	TP606	TP607	TP607	TP608	TP608	TP608	TP644	TP644
D pth (m)	0 20	0 50	0 20	0 70	0 10	0 30	0 70	0 20	1 40
H d t d g t S rf (Y/N)									

b (2-chl o thyoxy)m tha	mg/kg
b (hl o sopropyl)eth	mg/kg
Brom phe ylphe yleth	mg/kg
H a hl o-1 3 b t d e e	mg/kg
H hl robenz	mg/kg
He hio eth	mg/kg
l pho ne	mg/kg
N trobenze	mg/kg
n tro od p opyl 1 propa m	mg/kg
P tachl rob rz ne	mg/kg
P t chl roph l	mg/kg

B (2-ethylhexyl)phth l t	mg/kg
B tylbenzyphthaiat	mg/kg
D thylphth l t	mg/kg
D methylphth l t	mg/kg
D n-b tylphthai t	mg/kg
D -octyl phthai te	mg/kg

T t l Phthalates	mg/kg
------------------	-------

ORGANO CHLORINE PESTICIDES

Aldn	mg/kg
B ta HCH (B ta BHC)	mg/kg
Chl rd	mg/kg
DDD	mg/kg
Dield	mg/kg
Dn s (total)	mg/kg
E d lfa l	mg/kg
Endo ff ll	mg/kg
E d lf Sulph t	mg/kg
E d	mg/kg
E d End Ald hyd	mg/kg
G mm HCH (Li d)	mg/kg
H ptachl	mg/kg
H pt chlo epoxid	mg/kg
H ptachlorobe ze	mg/kg
M tho ychlo	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azi pho m thyl	mg/kg
Dem ton-s m thyl	mg/kg
D zi	mg/kg
D hl rvo	mg/kg
D xathio	mg/kg
D s lfoton	mg/kg
EPN Eth n	mg/kg
M lath	mg/kg
Methyl P rath	mg/kg
Pa thion	mg/kg
T rbufos	mg/kg

CARBAMATE (Pesticide)

Carbaryl	mg/kg
Carbof ran	mg/kg
Ma eb	mg/kg

PHENOL UREA HERBICIDES

Chl otoluron	mg/kg
D on	mg/kg
Isoprot ron	mg/kg
Li ron	mg/kg

Norwest Hoist Soil Engineering Ltd
 R68259 Durham Rd Newport

	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03
D i S mpl d	179944	179945	179946	179947	179948	179949	179950	179951	179952
Lab R f N	3	6	3	7	3	6	10	3	7
Cu t m R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP606	TP606	TP607	TP607	TP608	TP608	TP608	TP644	TP644
T l Pht / B ehool No	0 20	0 50	0 20	0 70	0 10	0 30	0 70	0 20	1 40
D pth (m)									
H d ta dl g t Surfa (Y/N)									

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5-T	mg/kg
2 4-D	mg/kg
Chl -o-t lyl xyacet cid	mg/kg
D camb	mg/kg
D hl prop	mg/kg
M coprop	mg/kg
Sl	mg/kg

TRIAZINES

Altrnz e	mg/kg
S maz	mg/kg

PCB

PCB C g 28	mg/kg
PCB Cong 52	mg/kg
PCB Co g 101	mg/kg
PCB C g ne 118	mg/kg
PCB C ge 138	mg/kg
PCB C g 153	mg/kg
PCB C g e 180	mg/kg

Total PCB

	mg/kg
--	-------

ALCOHOLS

B l !	mg/kg
Eth nol	mg/kg
Ethyl ne Glycol	mg/kg
M th ol	mg/kg
Prop 1-ol	mg/kg
Prop 2-ol	mg/kg

MISCELLANEOUS

Cal rif V l	Cal/g
S lve	mg/kg
T	mg/kg
1 2 D chl ropropa	mg/kg
1 3-D hlo prope	mg/kg
2 4 D t phenol	mg/kg
Aceto	mg/kg
Carbazole	mg/kg
C rbon d's lph de	mg/kg
Creosol (TPH by GCFID)	mg/kg
Cyclohexane	mg/kg
Cy loh xa e	mg/kg
Hexachl rocycl pe tad e	mg/kg
Hydroqu e	mg/kg
N Nit o od ph yl m	mg/kg
p-Chloro il ne	mg/kg
Premeth n/Cyperm th	mg/kg
Pynd e	mg/kg
Styre	mg/kg
S lph l	mg/kg
Tol e e Extractable M tt (H st c)	mg/kg
Toxaph ne	mg/kg
Tnbutyl Tin	mg/kg
T chlo m than	mg/kg
V yl Acetat	mg/kg

CONCRETE

Chloride BS1377 Part 3 ncl d g preparatio	mg/kg
HAC (Rapid d terminatio of H gh Al mina Cemt	mg/kg
Max Proporti s-Cem nt/Aggregate Ratio-BS188	mg/kg

Org Matte % 0 9

N tes

Benzo(b)fluora thene & Benzo(k)fluoranth ne co-elut (report d s sum)
 D benzo(a h)anthrace e & lnd no(1 2 3-cd)pyrene co-elute (reported m)

Norwest Hoist Soil Engineering Ltd
R68259 Durham Rd Newport

	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03
D t S mpl d	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03
Lab R f N	179953	179954	179955	179956	179957	179958	179959	179960	179961
C tom R f N	3	7	3	6	3	5	3	6	9
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES
Trn l Prt / Bo h l No	TP664	TP664	TP621	TP621	TP622	TP622	TP623	TP623	TP623
D pth (m)	0.20	1.50	0.10	1.50	0.20	1.30	0.30	1.10	1.90
H d t nd g at Surf ce (Y/N)									

	Value
pH	9.1
% Loss to	%
% Moist	%
% Solids	/
Asbestos	0.001

PHENOLICS

Butyl Phenol	mg/kg	
Chloro	mg/kg	0.5
Chloro (m)	mg/kg	0.5
Naphthol	mg/kg	0.5
Phenol	mg/kg	0.5
Resorcinol	mg/kg	0.5
T-methylphenol	mg/kg	<0.5
Xylenols & Ethylphenols	mg/kg	<0.5
Total Phenol	mg/kg	<0.5

US EPA PRIORITY PAH

Acenaphthene	mg/kg	0.5
Acenaphthylene	mg/kg	2.2
Acenaphthene	mg/kg	0.5
Benzo(a)anthracene	mg/kg	2.5
Benzo(a)pyrene	mg/kg	2.7
Benzo(b)fluoranthene	mg/kg	
Benzo(k)fluoranthene	mg/kg	2.3
Benzo(g,h)perylene	mg/kg	2.9
Chrysene	mg/kg	2.6
Dibenz(a,h)anthracene	mg/kg	
Indene (1,2,3-cd)pyrene	mg/kg	1.0
Fluoranthene	mg/kg	5.7
Fluorene	mg/kg	1.7
Naphthalene	mg/kg	0.5
Phenanthrene	mg/kg	0.9
Pyrene	mg/kg	5.0
Total US EPA 16 PAH	mg/kg	30.0

OTHER PAH

Anthracene	mg/kg
Benzo(e)pyrene	mg/kg
Cyclopenta(cd)pyrene	mg/kg

GENERAL INORGANICS

Complex Cyanide	mg/kg	
Easily Liberatable Cyanide (free)	mg/kg	
Thiocyanate	mg/kg	
Total Cyanide	mg/kg	1
Sulphide	mg/kg	2
Sulphur (free)	mg/kg	250
Total Sulphate	mg/kg	100
Weight Soil Sulphate	mg/kg	
Weight Soil Chloride	mg/kg	
Phosphate	mg/kg	
Exchangeable Ammonium	mg/kg	7.1
Nitrate	mg/kg	
Nitrite	mg/kg	

Norwest Hoist Soil Engineering Ltd
 R68259 Durham Rd Newport

D t S mpl d	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03	18/09/03
Lab R f N	179953	179954	179955	179956	179957	179958	179959	179960	179961
C tom R f N	3	7	3	6	3	5	3	6	9
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES
T al Pit / B hol No	TP664	TP664	TP621	TP621	TP622	TP622	TP623	TP623	TP623
D pth (m)	0 20	1 50	0 10	1 50	0 20	1 30	0 30	1 10	1 90
H d ta di gat Surf (Y/N)									

HEAVY METALS/METALLOIDS

Al m ium	mg/kg	
Ant m y	mg/kg	
Ars c	mg/kg	19 3
Ba m	mg/kg	
B ryl m	mg/kg	
Bo n (W t Sol ble)	mg/kg	2 0
Cadm m	mg/kg	0 7
Chrom m (T tal)	mg/kg	40
Chrom m (H val t)	mg/kg	2
C b lt	mg/kg	
Coppe	mg/kg	64
Germ ium	mg/kg	
Le d	mg/kg	86
M ury	mg/kg	0 5
M lybd m	mg/kg	
N kel	mg/kg	29
Sele m	mg/kg	1 3
V ad m	mg/kg	
Zi	mg/kg	144

ESSENTIAL ELEMENTS

Calc um	mg/kg
l o	mg/kg
Mag m	mg/kg
M ga ese	mg/kg
Potas m	mg/kg
Sod um	mg/kg

MONDAROMATICS

B nzene	mg/kg
Tol ene	mg/kg
Ethylbenz	mg/kg
M l & Para Xylene	mg/kg
Ortho Xylen	mg/kg

Total Xyl ne mg/kg

MTBE	mg/kg
1 2 4-T methylbenz e	mg/kg
1 3 5-T methylbenze	mg/kg

TOTAL HYDROCARBONS

Petroleum Ra ge O g cs (C ₆ -C ₁₀)	mg/kg	5
D sel Ra ge Org cs (C ₇ -C ₂₆)	mg/kg	5
Hydrocarbon Scree (GC-FID)	mg/kg	<5

VOC

1 1 1 Trichloroetha e	mg/kg
1 1 2 2 Tetrachloroetha	mg/kg
1 1 2 T chloro-1 2 2 trifi roethan	mg/kg
1 1 2 T chloroetha	mg/kg
1 1 D chloroeth e	mg/kg
1 1 D chl roethe	mg/kg
1 2 3-Trichl roprop n	mg/kg
1 2 3 Trnethylbenzene	mg/kg
1,2,4-Trnchlorobenzene	mg/kg
1 2 4-T methylbenzene	mg/kg
1 2 Dibromo-3-Chloroprop ne	mg/kg
1 2 Dichlorobenzen	mg/kg
1 2-D chl roethane	mg/kg
1 2 Dichloroprop ne	mg/kg
1 2 D chloropropene	mg/kg
1 3 5-T m thylbenz ne	mg/kg
1 3-D chlorobenze	mg/kg

ENVIRONMENTAL ANALYSIS LABORATORIES

15 Burgess Road Ivyhouse Lane Industrial Estate Hastings East Sussex TN35 4NR

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ANALYTICAL REPORT No R68259

Location Durham Rd Newport

Your Project No F13041

Reporting Date 11/10/03

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
Leeds LS11 5SX

	Date Sampled	18/09/03
	Lab Ref No	179950
<u>Soils</u>	Customer Ref No	10
	Sample Type	ES
	Trial Pit / Borehole No	TP608
	Depth (m)	0.70

Aromatic

C ₅ C ₇	(mg/kg)	N	<5
>C ₇ C ₈	(mg/kg)	N	<5
>C ₈ C ₁₀	(mg/kg)	N	<5
>C ₁₀ C ₁₂	(mg/kg)	N	<5
>C ₁₂ C ₁₆	(mg/kg)	N	<5
>C ₁₆ C ₂₁	(mg/kg)	N	<5
>C ₂₁ C ₃₅	(mg/kg)	N	<5

Aliphatic

C ₅ C ₈	(mg/kg)	N	<5
>C ₈ C ₈	(mg/kg)	N	<5
>C ₈ C ₁₀	(mg/kg)	N	<5
>C ₁₀ C ₁₂	(mg/kg)	N	<5
>C ₁₂ C ₁₆	(mg/kg)	N	<5
>C ₁₆ C ₂₁	(mg/kg)	N	<5
>C ₂₁ C ₃₄	(mg/kg)	N	<5

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t not tested

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Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 10/10/03

ANALYTICAL REPORT No R68323

Location Durham Rd Newport

Your Project No F13041

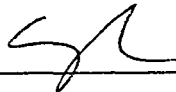
The attached analytical results relate to samples received on 25 Sep 2003

The report is only valid if it contains the total number of pages indicated at the bottom of this page

Checked by



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If you have any queries regarding this report please contact Steve Chapman or Steve Knight

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A Division of Norwest Holst Soil Engineering Ltd
Registered in England No 980795
Registered Office Parkside Lane Dewsbury Road Leeds LS11 5SX

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Norwest Holst Soil Engineering Ltd
R68323 Durham Rd Newport

Date Sampled	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03
L b Ref N	180462	180463	180464	180465	180466	180467	180468	180471
C t m R f No	3	6	10	3	6	9	12	3
S mple Typ	ES	ES	ES	ES	ES	ES	ES	ES
T l P / Bo hol N	TP611	TP611	TP611	TP685	TP685	TP685	TP685	TP686
D pth (m)	0.40	1.40	2.40	0.20	0.30	1.30	2.10	0.30
Ha d t d ng t Surf ce (Y/N)								
pH	Value		7.6			8.2		7.3
% Loss n lg r n	/							
/ Moist e	/							
/ St es	/							
A best s	/		0.001			0.001		0.001
PHENOLICS								
Butyl Phenols	mg/kg							
Catechol	mg/kg		0.5			0.5		0.5
C esol (sum)	mg/kg		0.5			0.5		0.5
Naphthols	mg/kg		0.5			0.5		0.5
Phenol	mg/kg		0.5			<0.5		0.5
Resorcinol	mg/kg		<0.5			0.5		0.5
T methylphenol	mg/kg		0.5			0.5		0.5
Xylenols & Ethylphenols	mg/kg		<0.5			0.5		0.5
T tal Phenol	mg/kg		0.5			<0.5		0.5
US EPA PRIORITY PAH s								
Acenaphthene	mg/kg		0.5			0.5		0.5
Acenaphthylene	mg/kg		0.5			0.5		0.5
Anthracene	mg/kg		0.5			0.5		0.5
Benzo(a)Anthracene	mg/kg		1.4			<0.5		0.5
Benzo(a)pyrene	mg/kg		10.5			<0.5		0.5
Benzo(b)fluoranthene	mg/kg							
Benzo(k)fluoranthene	mg/kg		2.9			<0.5		<0.5
Benzo(g,h,i)perylene	mg/kg		<0.5			0.5		<0.5
Chrysene	mg/kg		2.3			0.5		0.5
Dibenz(a,h)anthracene	mg/kg							
Indeno(1,2,3-cd)pyrene	mg/kg		0.5			<0.5		<0.5
Fluoranthene	mg/kg		2.0			0.5		<0.5
Fluorene	mg/kg		0.5			0.5		0.5
Naphthalene	mg/kg		<0.5			0.5		0.5
Phenanthrene	mg/kg		0.5			0.5		0.5
Pyrene	mg/kg		7.3			0.5		0.5
Tot l US EPA 16 PAH	mg/kg		26.4			0.5		<0.5
OTHER PAH								
Anthracene	mg/kg							
Benzo(e)pyrene	mg/kg							
Cyclopenta(cd)pyrene	mg/kg							
GENERAL INORGANICS								
Complete Cyanide	mg/kg							
Easily Liberatable Cyanide (free)	mg/kg							
Thiocyanate	mg/kg							
Total Cyanide	mg/kg		<1			1		1
Sulphide	mg/kg		<2			2		2
Sulphur (free)	mg/kg		200			20		50
Total Sulphate	mg/kg		100			1200		200
Water Soluble Sulphate	mg/kg							
Water Soluble Chloride	mg/kg							
Phosphate	mg/kg							
Exchangeable Ammonium	mg/kg		97.0			38.5		39.1
Nitrate	mg/kg							
Nitrite	mg/kg							

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Date Sampled	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03
Lab Ref N	180462	180463	180464	180465	180466	180467	180468	180471
Cut m r R f N	3	6	10	3	6	9	12	3
Sample Type	ES	ES	ES	ES	ES	ES	ES	ES
Trial Pit / Borehole No	TP611	TP611	TP611	TP685	TP685	TP685	TP685	TP686
Depth (m)	0.40	1.40	2.40	0.20	0.30	1.30	2.10	0.30
Height standing at 5 rfa (Y/N)								

HEAVY METALS/METALLOIDS

Aluminium	mg/kg							
Antimony	mg/kg							
Arsenic	mg/kg		20.5			50.4		90.0
Barium	mg/kg							
Beryllium	mg/kg							
Boron (Water Soluble)	mg/kg		7.5			1.2		0.8
Cadmium	mg/kg		1.3			9.8		2.3
Chromium (Total)	mg/kg		38			38		42
Chromium (Hexavalent)	mg/kg		2			<2		2
Cobalt	mg/kg							
Copper	mg/kg		43			151		915
Germium	mg/kg							
Lead	mg/kg		91			370		1951
Mercury	mg/kg		0.5			8.4		3.3
Molybdenum	mg/kg							
Nickel	mg/kg		31			67		149
Selenium	mg/kg		0.6			1.5		7.1
Vanadium	mg/kg							
Zinc	mg/kg		131			2412		879

ESSENTIAL ELEMENTS

Calcium	mg/kg
Iron	mg/kg
Magnesium	mg/kg
Manganese	mg/kg
Potassium	mg/kg
Sodium	mg/kg

MONOAROMATICS

Benzene	mg/kg
Toluene	mg/kg
Ethylbenzene	mg/kg
Meta & Para Xylene	mg/kg
Ortho Xylene	mg/kg

Tertiary Xylene	mg/kg
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MTBE	mg/kg
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1,2,4-Triethylbenzene	mg/kg
1,3,5-Triethylbenzene	mg/kg

TOTAL HYDROCARBONS

Petroleum Range Organics (C ₆ -C ₁₀)	mg/kg	5	<5	5
Distillate Range Organics (C ₈ -C ₁₂)	mg/kg	<5	<5	5
Hydrocarbon Screen (GC-FID)	mg/kg	<5	11	9

VOC

1,1,1-Trichloroethane	mg/kg
1,1,2,2-Tetrachloroethane	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg
1,1,2-Trichloroethane	mg/kg
1,1-Dichloroethane	mg/kg
1,1-Dichloroethene	mg/kg
1,2-Trichloropropane	mg/kg
1,2,3-Triethylbenzene	mg/kg
1,2,4-Triethylbenzene	mg/kg
1,2,4-Triethylbenzene	mg/kg
1,2-Dibromo-3-Chloropropane	mg/kg
1,2-Dichlorobenzene	mg/kg
1,2-Dichloroethane	mg/kg
1,2-Dichloropropane	mg/kg
1,2-Dichloropropene	mg/kg
1,3,5-Triethylbenzene	mg/kg
1,3-Dichlorobenzene	mg/kg

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D t Samp l	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03
L b R f N	180462	180463	180464	180465	180466	180467	180468	180471
C t m Ref N	3	6	10	3	6	9	12	3
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES
Tri l Pit / Borehol No	TP611	TP611	TP611	TP685	TP685	TP685	TP685	TP686
D pth (m)	0.40	1.40	2.40	0.20	0.30	1.30	2.10	0.30
H d t nd g at Surf e (Y/N)								

1 3-D chlo op opa e	mg/kg
1 4-D chlorobenzene	mg/kg
1 Chlorotol ene	mg/kg
1 Methylpropylbenze e	mg/kg
2 2 D chlorop opane	mg/kg
2 Chlorotol ene	mg/kg
Benzene	mg/kg
Brom be z e	mg/kg
Brom chloromethane	mg/kg
Brom d chl rometha e	mg/kg
Bromoform	mg/kg
Carbon Tetrachlo de (PCM)	mg/kg
Chlorobe ze e (sum)	mg/kg
Chlorod b om metha e	mg/kg
Chloroethane	mg/kg
Chloroform	mg/kg
cis-1 2 D chloroethylene	mg/kg
cis 1 3-D chloropropene	mg/kg
Dib omochloromethane	mg/kg
D bromoethane	mg/kg
Dib omomethane	mg/kg
D chl obenzene	mg/kg
D chlo omethane	mg/kg
Ethylbenze e	mg/kg
Hexachlorobutad en	mg/kg
m ta & p a Xylen	mg/kg
Methyl sopropylbenzene	mg/kg
Monochl obenzen	mg/kg
Mo ochl oph nol (s m)	mg/kg
n B tybenzen	mg/kg
n Propylb nze e	mg/kg
rtho Xyl ne	mg/kg
Styrene	mg/kg
tert Butylbenz e	mg/kg
Tetrachlorob nze	mg/kg
Tetr chl roethe (PCE)	mg/kg
Tetrahydrofura	mg/kg
Toi e e	mg/kg
trans 1 2 D chloroethene	mg/kg
trans-1 3-d chlo oprope e	mg/kg
Trnchl oethene (TCE)	mg/kg
Trnchl fluo om tha e	mg/kg
T chloromethane	mg/kg
V nyl Chloride	mg/kg

SVOC	
1 2 4 T chlorob nze e	mg/kg
1 4 D chlorobenzene	mg/kg
2 3 4 6-Tetrachlorophenol (sum)	mg/kg
2 4 5-T chlorophenol	mg/kg
2 4 6-Trnchlorophenol	mg/kg
2 4-D chlorophenol (sum)	mg/kg
2 4-D methylphe ol	mg/kg
2 4 D itrotoluene	mg/kg
2 6-D methylphe ol	mg/kg
2 6-D trolol ne	mg/kg
2 Chloro phthalene	mg/kg
2 Chloroph nol (sum)	mg/kg
2 Methylphenol	mg/kg
2 N trophe ol	mg/kg
4 Chloro-3-m thylph nol	mg/kg
4-chlorobenzylph nyl ther	mg/kg
4 Methylphenol	mg/kg
4-Nitroph nol	mg/kg
Azobenzene	mg/kg
b s(2 chloroethyl)ether	mg/kg

Dat S mpl d	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03
Lab R f No	180462	180463	180464	180465	180466	180467	180468	180471
C t me R f No	3	6	10	3	6	9	12	3
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES
T i Pit / B ehol N	TP611	TP611	TP611	TP685	TP685	TP685	TP685	TP686
D pth (m)	0 40	1 40	2 40	0 20	0 30	1 30	2 10	0 30
H rd ta d i g at S rf ce (Y/N)								

bis(2-chloroethoxy)methane	mg/kg
bis(chlorophenyl)ethane	mg/kg
Bromophenylphenylethane	mg/kg
Hexachloro-1,3-bis(2-chlorophenyl)propane	mg/kg
Hexachlorobenzene	mg/kg
Hexachloroethane	mg/kg
Isophorone	mg/kg
Nitrobenzene	mg/kg
1,1,1-trichloro-2,2,2-trifluoroethane	mg/kg
Pentachlorobenzene	mg/kg
Pentachlorophenol	mg/kg

Bis(2-ethylhexyl)phthalate	mg/kg
Butylbenzylphthalate	mg/kg
Dibutylphthalate	mg/kg
Dimethylphthalate	mg/kg
Dibutylphthalate	mg/kg
Dinonylphthalate	mg/kg

Total Phthalates	mg/kg
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ORGANO CHLORINE PESTICIDES

Aldrin	mg/kg
Beta HCH (Beta BHC)	mg/kg
Chlordane	mg/kg
DDD	mg/kg
Dieldrin	mg/kg
DDEs (total)	mg/kg
Endosulfan I	mg/kg
Endosulfan II	mg/kg
Endosulfan Sulphate	mg/kg
Endrin	mg/kg
Endrin Aldehyde	mg/kg
Gamma HCH (Lindane)	mg/kg
Heptachlor	mg/kg
Heptachlor epoxide	mg/kg
Heptachlorobenzene	mg/kg
Methoxychlor	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	mg/kg
Demeton-s-methyl	mg/kg
Diazinon	mg/kg
Dichlorvos	mg/kg
Oxathion	mg/kg
Disulfoton	mg/kg
EPN Ethion	mg/kg
Malathion	mg/kg
Methyl Parathion	mg/kg
Parathion	mg/kg
Terbufos	mg/kg

CARBAMATE (Pesticides)

Carbaryl	mg/kg
Carbofuran	mg/kg
Maneb	mg/kg

PHENOL UREA HERBICIDES

Chlorotoluron	mg/kg
Duron	mg/kg
Isoproturon	mg/kg
Linuron	mg/kg

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Dat Sampl d	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03
L b R f No	180462	180463	180464	180465	180466	180467	180468	180471
C tom r R f N	3	6	10	3	6	9	12	3
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES
T / Pit / Bor hole No	TP611	TP611	TP611	TP685	TP685	TP685	TP685	TP686
D pth (m)	0 40	1 40	2 40	0 20	0 30	1 30	2 10	0 30
H d ta di g t S rf (Y/N)								

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5-T	mg/kg
2 4-D	mg/kg
Chloro-o-tolylloxyacetic acid	mg/kg
D camba	mg/kg
D chloropr p	mg/kg
Mecoprop	mg/kg
Sil ex	mg/kg

TRIAZINES

Altnz e	mg/kg
S mazi e	mg/kg

PCB s

PCB Congener 28	mg/kg
PCB Co g r 52	mg/kg
PCB Co ge er 101	mg/kg
PCB Congener 118	mg/kg
PCB Co g ne 138	mg/kg
PCB Congene 153	mg/kg
PCB Cong er 180	mg/kg

Tot l PCB s	mg/kg
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ALCOHOLS

Butanol	mg/kg
Etha l	mg/kg
Ethyle e Glycol	mg/kg
M thanol	mg/kg
Propa 1-ol	mg/kg
Propan-2-ol	mg/kg

MISCELLANEOUS

Calonf c Value	Cal/g
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S1 er	mg/kg
T	mg/kg

1 2 D chlorop opane	mg/kg
1 3-D chloropropene	mg/kg
2 4-D nitrophenol	mg/kg
A eto e	mg/kg
Carbazole	mg/kg
C rbo d sulph de	mg/kg
Creosote (TPH by GCFID)	mg/kg
Cycli hexa e	mg/kg
Cyclohexa one	mg/kg
Hexachl rocyclopentad e e	mg/kg
Hydroqu no e	mg/kg
N-Nitrosod phe yfamine	mg/kg
p-Chloroan l e	mg/kg
Premeth n/Cypermethnn	mg/kg
Pynd	mg/kg
Styre e	mg/kg
Sulpholane	mg/kg
Toluene Extractable Matter (Historic)	mg/kg
Toxaphene	mg/kg
T butyl T n	mg/kg
Tnchloromethane	mg/kg
V yl Acetate	mg/kg

CONCRETE

Chl nde BS1377 Part 3 l clud g preparation	mg/kg
HAC (Rapid d term nation of H gh Alumina Cem	mg/kg
Mix Proportions-Cement/Aggregate Ratio-BS1881	mg/kg

Notes

Benzo(b)fluoranthene & Ben
-2 Di-benzo(a h)anthracene & l

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D t S mpled	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03
Lab R f N	180472	180473	180476	180477	180478	180479	180480	180481	
Cust m R f No	6	10	3	6	10	3	6	9	
S mple Type	ES	ES	ES	ES	ES	ES	ES	ES	
Tral Pit / Bor h l No	TP686	TP686	TP705	TP705	TP705	TP706	TP706	TP706	
D pth (m)	1.30	2.10	0.30	1.30	2.10	0.30	1.30	2.10	
Had t ndi g t S r f e (Y/N)									

pH	Val e	8.4
% Loss on Ig itn	/	
/ Moist e	%	
% Sto es	%	
Asbest s	%	0.001

PHENOLICS

Butyl Phe ols	mg/kg	
Catechol	mg/kg	0.5
Cresols (s m)	mg/kg	0.5
N phthols	mg/kg	0.5
Phe ol	mg/kg	0.5
Resorci ol	mg/kg	0.5
T methylphenol	mg/kg	0.5
Xylenols & Ethylphenols	mg/kg	0.5
Total Ph nols	mg/kg	<0.5

US EPA PRIORITY PAH

Ace aphth ne	mg/kg	0.5
Acenaphthylen	mg/kg	0.5
Anthracene	mg/kg	0.8
Benzo(a)Anthracene	mg/kg	8.1
B nzo(a)pyrene	mg/kg	6.0
Benzo(b)fl ora thene	mg/kg	
Benzo(k)fluo anthe e	mg/kg	5.2
Benzo(g h)perylene	mg/kg	9.3
Chryse e	mg/kg	5.5
D benzo(a h)a thracene *2	mg/kg	
Inde o(1 2 3 cd)pyre e	mg/kg	2.3
Fl o a th e	mg/kg	8.7
Flu ne	mg/kg	0.5
Naphthale e	mg/kg	0.8
Phen th en	mg/kg	3.0
Pyrene	mg/kg	8.8
Total US EPA 16 PAH	mg/kg	58.5

OTHER PAH

A thanthre	mg/kg	
B nzo(e)pyre e	mg/kg	
Cyclopenta(cd)pyre e	mg/kg	

GENERAL INORGANICS

Complex Cyanide	mg/kg	
Easily L beratable Cyan de (free)	mg/kg	
Thiocyanate	mg/kg	
Total Cya d	mg/kg	1
S lph de	mg/kg	<2
S lphu (free)	mg/kg	90
Total Sulphate	mg/kg	100
Wate Soluble S lphate	mg/kg	
Wate Soluble Chloride	mg/kg	
Ph sphate	mg/kg	
Exchangeabl Ammonium	mg/kg	9.6
Ntrate	mg/kg	
N trite	mg/kg	

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Date Sampled	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03
Lab Ref No	180472	180473	180476	180477	180478	180479	180480	180481
Client Ref No	6	10	3	6	10	3	6	9
Sample Type	ES	ES	ES	ES	ES	ES	ES	ES
Trial Pit / Borehole N	TP686	TP686	TP705	TP705	TP705	TP706	TP706	TP706
Depth (m)	1.30	2.10	0.30	1.30	2.10	0.30	1.30	2.10
Handling at Surf (Y/N)								

HEAVY METALS/METALLOIDS

Aluminium	mg/kg	
Antimony	mg/kg	
Arsenic	mg/kg	26.3
Barium	mg/kg	
Beryllium	mg/kg	
Boron (Water Soluble)	mg/kg	0.8
Cadmium	mg/kg	0.5
Chromium (Total)	mg/kg	32
Chromium (Hexavalent)	mg/kg	2
Cobalt	mg/kg	
Copper	mg/kg	206
Germanium	mg/kg	
Lead	mg/kg	1028
Mercury	mg/kg	<0.5
Molybdenum	mg/kg	
Nickel	mg/kg	39
Selenium	mg/kg	1.4
Vanadium	mg/kg	
Zinc	mg/kg	2071

ESSENTIAL ELEMENTS

Calcium	mg/kg
Iron	mg/kg
Magnesium	mg/kg
Manganese	mg/kg
Potassium	mg/kg
Sodium	mg/kg

MONOAROMATICS

Benzene	mg/kg
Toluene	mg/kg
Ethylbenzene	mg/kg
Meta & Para Xylenes	mg/kg
Ortho Xylene	mg/kg

Total Xylenes	mg/kg
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MTBE	mg/kg
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1,2,4-Trimethylbenzene	mg/kg
1,3,5-Trimethylbenzene	mg/kg

TOTAL HYDROCARBONS

Petroleum Range Organics (C ₆ -C ₁₀)	mg/kg	5
Diesel Range Organics (C ₈ -C ₂₈)	mg/kg	27
Hydrocarbon Screen (GC-FID)	mg/kg	96

VOC

1,1,1-Trichloroethane	mg/kg
1,1,2,2-Tetrachloroethane	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg
1,1,2-Trichloroethane	mg/kg
1,1-Dichloroethane	mg/kg
1,1-Dichloroethene	mg/kg
1,2,3-Trichloropropane	mg/kg
1,2,3-Trimethylbenzene	mg/kg
1,2,4-Trichlorobenzene	mg/kg
1,2,4-Trimethylbenzene	mg/kg
1,2-Dibromo-3-Chloropropane	mg/kg
1,2-Dichlorobenzene	mg/kg
1,2-Dichloroethane	mg/kg
1,2-Dichloropropane	mg/kg
1,2-Dichloropropene	mg/kg
1,3,5-Trimethylbenzene	mg/kg
1,3-Dichlorobenzene	mg/kg

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Detail	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03
Lab Ref N	180472	180473	180476	180477	180478	180479	180480	180481
Core Ref N	6	10	3	6	10	3	6	9
Sample Typ	ES	ES	ES	ES	ES	ES	ES	ES
Tran Pit / Borehole N	TP686	TP686	TP705	TP705	TP705	TP706	TP706	TP706
Depth (m)	1.30	2.10	0.30	1.30	2.10	0.30	1.30	2.10
Horst dug Surface (Y/N)								

1,3-Dichloropropane	mg/kg
1,4-Dichlorobenzene	mg/kg
1-Chlorotoluene	mg/kg
1-Methylpropylbenzene	mg/kg
2,2-Dichloropropane	mg/kg
2-Chlorotoluene	mg/kg
Benzene	mg/kg
Bromobenzene	mg/kg
Bromochloromethane	mg/kg
Bromodichloromethane	mg/kg
Bromoform	mg/kg
Carbo Tetrachloride (PCM)	mg/kg
Chlorobenzene (sum)	mg/kg
Chlorodichloromethane	mg/kg
Chloroethane	mg/kg
Chloroform	mg/kg
cis-1,2-Dichloroethylene	mg/kg
cis-1,3-Dichloropropene	mg/kg
Dibromochloromethane	mg/kg
Dibromoethane	mg/kg
Dibromomethane	mg/kg
Dichlorobenzene	mg/kg
Dichloromethane	mg/kg
Ethylbenzene	mg/kg
Hexachlorobutadiene	mg/kg
meta & para Xylene	mg/kg
Methylsopropylbenzene	mg/kg
Monochlorobenzene	mg/kg
Monochlorophenols (sum)	mg/kg
n-Butylbenzene	mg/kg
n-Propylbenzene	mg/kg
ortho Xylene	mg/kg
Styrene	mg/kg
tert-Butylbenzene	mg/kg
Tetrachlorobenzene	mg/kg
Tetrachloroethene (PCE)	mg/kg
Tetrahydrofuran	mg/kg
Toluene	mg/kg
trans-1,2-Dichloroethene	mg/kg
trans-1,3-Dichloropropene	mg/kg
Trichloroethene (TCE)	mg/kg
Trichlorofluoromethane	mg/kg
Trichloromethane	mg/kg
Vinyl Chloride	mg/kg

SVOC's

1,2,4-Trichlorobenzene	mg/kg
1,4-Dichlorobenzene	mg/kg
2,3,4,6-Tetrachlorophenol (sum)	mg/kg
2,4,5-Trichlorophenol	mg/kg
2,4,6-Trichlorophenol	mg/kg
2,4-Dichlorophenol (sum)	mg/kg
2,4-Dimethylphenol	mg/kg
2,4-Dinitrotoluene	mg/kg
2,6-Dimethylphenol	mg/kg
2,6-Dinitrotoluene	mg/kg
2-Chloronaphthalene	mg/kg
2-Chlorophenol (sum)	mg/kg
2-Methylphenol	mg/kg
2-Nitrophenol	mg/kg
4-Chloro-3-methylphenol	mg/kg
4-chlorobenzylphenylether	mg/kg
4-Methylphenol	mg/kg
4-Nitrophenol	mg/kg
Azobenzene	mg/kg
bis(2-chloroethyl)ether	mg/kg

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D t S mpled	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03
Lab R f No	180472	180473	180476	180477	180478	180479	180480	180481
C t m R f No	6	10	3	6	10	3	6	9
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES
Trial P t / Bo hole No	TP686	TP686	TP705	TP705	TP705	TP706	TP706	TP706
D pth (m)	1.30	2.10	0.30	1.30	2.10	0.30	1.30	2.10
Hard t nd ng at Surf c (Y/N)								

b s(2-chloroethoxy)methane	mg/kg
b (chl sopropyl)ether	mg/kg
B moph nylphenylethe	mg/kg
H xachloro-1 3 butad ene	mg/kg
He achlorob nzene	mg/kg
Hexachlo oethane	mg/kg
Isopho one	mg/kg
Ntrobenze	mg/kg
n nitrosod n propyl 1 prop amine	mg/kg
Pe tachl robenzene	mg/kg
Pe tachlorophe ol	mg/kg

B (2-ethylhe yl)phthai te	mg/kg
B tylb nzyphthalate	mg/kg
D ethylphthalate	mg/kg
D methylphthalate	mg/kg
D n-butylphthalate	mg/kg
D n-octyl phthalate	mg/kg

Total Phthalates mg/kg

ORGANO CHLORINE PESTICIDES

Aldn	mg/kg
Beta HCH (Beta BHC)	mg/kg
Chlorda e	mg/kg
DDD	mg/kg
D eld	mg/kg
D (total)	mg/kg
Endos lfan I	mg/kg
E dosulfa II	mg/kg
E dosulfan Sulphate	mg/kg
End	mg/kg
E d E d n Aldehyd	mg/kg
G mma HCH (Lindane)	mg/kg
Heptachlo	mg/kg
Hept hlor epox d	mg/kg
Heptachlorobenzene	mg/kg
Methoxychlor	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azi phos methyl	mg/kg
Demeton s-methyl	mg/kg
Diazin	mg/kg
D chlorvos	mg/kg
D oxath on	mg/kg
D sulfoton	mg/kg
EPN Eth on	mg/kg
Malath on	mg/kg
Methyl Parathion	mg/kg
Parath on	mg/kg
Terbufos	mg/kg

CARBAMATE (Pesticide)

Carbaryl	mg/kg
Carbofuran	mg/kg
Maneb	mg/kg

PHENOL UREA HERBICIDES

Chlorotoluron	mg/kg
Di ro	mg/kg
Isoprot ron	mg/kg
L ron	mg/kg

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Date Sampled	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03
Lab Ref No	180472	180473	180476	180477	180478	180479	180480	180481
Courtesy Ref No	6	10	3	6	10	3	6	9
Sample Type	ES	ES	ES	ES	ES	ES	ES	ES
Trial Pit / Borehole No	TP686	TP686	TP705	TP705	TP705	TP706	TP706	TP706
Depth (m)	1.30	2.10	0.30	1.30	2.10	0.30	1.30	2.10
Hardening Test Result (Y/N)								

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chloro-o-toloxycetic acid	mg/kg
Dacamba	mg/kg
Dichloroprop	mg/kg
Mecoprop	mg/kg
Silax	mg/kg

TRIAZINES

Altrazin	mg/kg
Simazine	mg/kg

PCBs

PCB Congener 28	mg/kg
PCB Congener 52	mg/kg
PCB Congener 101	mg/kg
PCB Congener 118	mg/kg
PCB Congener 138	mg/kg
PCB Congener 153	mg/kg
PCB Congener 180	mg/kg

Total PCB	mg/kg
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ALCOHOLS

Butanol	mg/kg
Ethanol	mg/kg
Ethylene Glycol	mg/kg
Methanol	mg/kg
Propan-1-ol	mg/kg
Propan-2-ol	mg/kg

MISCELLANEOUS

Calcium Valerate	Cal/g
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Silica	mg/kg
Titanium	mg/kg

1,2-Dichloropropane	mg/kg
1,3-Dichloropropene	mg/kg
2,4-Dinitrophenol	mg/kg
Acetone	mg/kg
Carbazole	mg/kg
Carbonyl sulfide	mg/kg
Creosote (TPH by GCFID)	mg/kg
Cyclohexane	mg/kg
Cyclohexanone	mg/kg
Heptachlorocyclopentadiene	mg/kg
Hydroquinone	mg/kg
N-Nitrosodiphenylamine	mg/kg
p-Chloroaniline	mg/kg
Premethrin/Cypermethrin	mg/kg
Pyridine	mg/kg
Styrene	mg/kg
Sipholane	mg/kg
Toluene Extractable Matter (H stone)	mg/kg
Toxaphene	mg/kg
Tributyltin	mg/kg
Trichloromethane	mg/kg
Vinyl Acetate	mg/kg

CONCRETE

Chloride BS1377 Part 3 including preparation	mg/kg
HAC (Rapid determination of High Alumina Cement)	mg/kg
Mix Proportions-Cement/Aggregate Ratio-BS1881	mg/kg

Notes

Benzo(b)fluoranthene
2-Dibenz(a,h)anthracene

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D t S mple d	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03
Lab Ref No	180482	180483	180484	180485	180486	180487	180488	180489
Costomer R f No	3	7	10	3	6	9	3	6
S mple Type	ES	ES	ES	ES	ES	ES	ES	ES
T l Pit / Bo hole N	TP722	TP722	TP722	TP723	TP723	TP723	TP724	TP724
Depth (m)	0.30	1.30	2.20	0.30	1.30	2.10	0.20	0.30
H rdst d ng t Surf (Y/N)								
pH			7.6		8.1		8.2	
/ Loss on Ignitio			%					
/ Moisture			/					
/ Stones			/					
Asbestos			/	0.001	0.001		0.001	
PHENOLICS								
Butyl Phenols			mg/kg					
Catechol			mg/kg	0.5	0.5		<0.5	
Cesol (sum)			mg/kg	0.5	<0.5		0.5	
N phthols			mg/kg	0.5	0.5		0.5	
Phenol			mg/kg	0.5	0.5		<0.5	
Reso ci ol			mg/kg	0.5	0.5		<0.5	
Tnm thylphenol			mg/kg	0.5	0.5		<0.5	
Xyl ol & Ethylphe ols			mg/kg	0.5	<0.5		0.5	
T t l Phe ol			mg/kg	<0.5	0.5		0.5	
US EPA PRIORITY PAH s								
Acen phthene			mg/kg	<0.5	0.5		0.5	
Acen phthylene			mg/kg	0.5	0.5		0.5	
Anthracene			mg/kg	0.5	0.5		0.5	
Benzo(a)A thrac ne			mg/kg	0.5	0.5		0.5	
Benzo(a)pyre e			mg/kg	0.5	0.5		0.5	
B nzo(b)fl ora then			mg/kg					
B nzo(k)fl oranthe			mg/kg	0.5	0.5		0.5	
Benzo(g h l) p rylene			mg/kg	0.5	0.5		0.5	
Chrys			mg/kg	0.5	<0.5		<0.5	
D benzo(a h)anthrace e ⁻²			mg/kg					
I d no(1 2 3-cd)pyrene ⁻²			mg/kg	0.5	0.5		0.5	
Fl oranthe e			mg/kg	0.5	0.5		0.5	
Fl e			mg/kg	0.5	0.5		0.5	
Naphthalen			mg/kg	0.5	0.5		<0.5	
Phe a thre			mg/kg	0.5	0.5		<0.5	
Pyr e			mg/kg	0.5	0.5		0.5	
Total US EPA 16 PAH			mg/kg	0.5	0.5		0.5	
OTHER PAH s								
A th nth e e			mg/kg					
Benzo(e)pyrene			mg/kg					
Cyclopenta(cd)pyre e			mg/kg					
GENERAL INORGANICS								
Comple Cyan de			mg/kg					
Ea ly L beratable Cyan de (free)			mg/kg					
Thiocyanat			mg/kg					
Total Cyan de			mg/kg	1	<1		1	
Sulph de			mg/kg	<2	<2		2.3	
Sulphu (f ee)			mg/kg	1290	170		80	
Total S lphate			mg/kg	300	3100		200	
Wate Soluble Sulphate			mg/kg		202			
Wate Soluble Chloride			mg/kg					
Phosphate			mg/kg					
Exchangeable Ammonium			mg/kg	39.1	10.3		23.0	
Nitrate			mg/kg					
Nitrite			mg/kg					

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Date Sampled	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03
Location	180482	180483	180484	180485	180486	180487	180488	180489
Stomach Rinse	3	7	10	3	6	9	3	6
Sample Type	ES	ES	ES	ES	ES	ES	ES	ES
Triplet / Borehole No	TP722	TP722	TP722	TP723	TP723	TP723	TP724	TP724
Depth (m)	0.30	1.30	2.20	0.30	1.30	2.10	0.20	0.30
Horizontal Distance at Surface (Y/N)								

HEAVY METALS/METALLOIDS

Element	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Aluminium							
Antimony							
Arsenic			14.1		85.8		32.1
Barium							
Beryllium							
Boron (Water Soluble)			5.8		2.5		1.4
Cadmium			1.1		1.8		1.2
Chromium (Total)			48		40		32
Chromium (Hexavalent)			2		2		2
Cobalt							
Copper			30		364		106
Germium							
Lead			47		680		220
Mercury			0.5		3.8		1.0
Molybdenum							
Nickel			38		76		38
Selenium			0.5		3.7		1.4
Vanadium							
Zinc			138		576		292

ESSENTIAL ELEMENTS

Element	mg/kg
Calcium	
Iron	
Magnesium	
Manganese	
Potassium	
Sodium	

MONOAROMATICS

Compound	mg/kg
Benzene	
Toluene	
Ethylbenzene	
Meta & Para Xylenes	
Ortho Xylene	

Total Xylenes mg/kg

Compound	mg/kg
MTBE	
1,2,4-Trimethylbenzene	
1,3,5-Trimethylbenzene	

TOTAL HYDROCARBONS

Parameter	mg/kg	mg/kg	mg/kg
Petroleum Range Organics (C ₆ -C ₁₀)	5	5	<5
Diesel Range Organics (C ₈ -C ₂₂)	<5	5	<5
Hydrocarbon Screen (GC-FID)	5	5	6

VOC

Compound	mg/kg
1,1,1-Trichloroethane	
1,1,2,2-Tetrachloroethane	
1,1,2-Trichloro-1,2,2-trifluoroethane	
1,1,2-Trichloroethane	
1,1-Dichloroethane	
1,1-Dichloroethene	
1,2,3-Trichloropropane	
1,2,3-Trimethylbenzene	
1,2,4-Trichlorobenzene	
1,2,4-Trimethylbenzene	
1,2-Dibromo-3-Chloropropane	
1,2-Dichlorobenzene	
1,2-Dichloroethane	
1,2-Dichloropropane	
1,2-Dichloropropene	
1,3,5-Trimethylbenzene	
1,3-Dichlorobenzene	

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D t Sampl d	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03
Lab R f No	180482	180483	180484	180485	180486	180487	180488	180489
C t m Ref No	3	7	10	3	6	9	3	6
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES
T l Pt / B rehole No	TP722	TP722	TP722	TP723	TP723	TP723	TP724	TP724
D pth (m)	0.30	1.30	2.20	0.30	1.30	2.10	0.20	0.30
Ha dstand ng at Surf ce (Y/N)								

1,3-Dichlorobenzene	mg/kg
1,4-Dichlorobenzene	mg/kg
1-Chlorotoluene	mg/kg
1-Methyl-2-pyrene	mg/kg
2,2-Dichloropropane	mg/kg
2-Chlorotoluene	mg/kg
Benzene	mg/kg
Bromobenzene	mg/kg
Bromochloromethane	mg/kg
Bromodichloromethane	mg/kg
Bromofluoromethane	mg/kg
Carbon Tetrachloride (PCM)	mg/kg
Chlorobenzene (sum)	mg/kg
Chlorobromomethane	mg/kg
Chloroethane	mg/kg
Chloroform	mg/kg
cis-1,2-Dichloroethylene	mg/kg
cis-1,3-Dichloropropane	mg/kg
Dibromochloromethane	mg/kg
Dibromoethane	mg/kg
Dibromomethane	mg/kg
Dichlorobenzene	mg/kg
Dichloromethane	mg/kg
Ethylbenzene	mg/kg
Hexachlorobutadiene meta & para Xylene	mg/kg
Methyl isopropylbenzene	mg/kg
Monochlorobenzene	mg/kg
Monochlorophenols (sum)	mg/kg
n-Butylbenzene	mg/kg
Propylbenzene	mg/kg
o-Xylene	mg/kg
Styrene	mg/kg
tert-Butylbenzene	mg/kg
Tetrachlorobenzene	mg/kg
Tetrachloroethene (PCE)	mg/kg
Tetrahydrofuran	mg/kg
Toluene	mg/kg
trans-1,2-Dichloroethene	mg/kg
trans-1,3-dichloropropane	mg/kg
Trichloroethene (TCE)	mg/kg
Trichlorofluoromethane	mg/kg
Trichloromethane	mg/kg
Vinyl Chloride	mg/kg

SVOCs	
1,2,4-Trichlorobenzene	mg/kg
1,4-Dichlorobenzene	mg/kg
2,3,4,6-Tetrachlorophenol (sum)	mg/kg
2,4,5-Trichlorophenol	mg/kg
2,4,6-Trichlorophenol	mg/kg
2,4-Dichlorophenol (sum)	mg/kg
2,4-Dimethylphenol	mg/kg
2,4-Dinitrophenol	mg/kg
2,6-Dimethylphenol	mg/kg
2,6-Dinitrophenol	mg/kg
2-Chloronaphthalene	mg/kg
2-Chlorophenol (sum)	mg/kg
2-Methylphenol	mg/kg
2-Nitrophenol	mg/kg
4-Chloro-3-methylphenol	mg/kg
4-chlorobenzylphenylether	mg/kg
4-Methylphenol	mg/kg
4-Nitrophenol	mg/kg
Azobenzene	mg/kg
bis(2-chloroethyl)ether	mg/kg

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D t S mpl d Lab R f N C t m R f N Sampl Type T I P t / B hole No Depth (m) Ha d t d g at Surf c (Y/N)	22/09/03 180482 3 ES TP722 0 30	22/09/03 180483 7 ES TP722 1 30	22/09/03 180484 10 ES TP722 2 20	22/09/03 180485 3 ES TP723 0 30	22/09/03 180486 6 ES TP723 1 30	22/09/03 180487 9 ES TP723 2 10	22/09/03 180488 3 ES TP724 0 20	22/09/03 180489 6 ES TP724 0 30
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bis(2-chloroethoxy)methane	mg/kg
bis(chloroisopropyl) ther	mg/kg
Bromophe ylphenylether	mg/kg
He achloro-1 3-b tad ene	mg/kg
Hexachlorobenzene	mg/kg
He achl roeth ne	mg/kg
Isophorone	mg/kg
N trobenze	mg/kg
n- itrosod n-propyl 1 propanam	mg/kg
Pentachl rob nzene	mg/kg
Pentachl rophenol	mg/kg

B s(2-ethylhexyl)phthalate	mg/kg
Butylbenzylphth l t	mg/kg
D ethylphthalate	mg/kg
D methylphth late	mg/kg
Di n-butylphthalat	mg/kg
D -octyl phthai te	mg/kg
Total Phthalates	mg/kg

ORGANO CHLORINE PESTICIDES

Aldnn	mg/kg
B ta HCH (Beta BHC)	mg/kg
Chlordane	mg/kg
DDD	mg/kg
D eldn	mg/kg
Dnns (total)	mg/kg
E d s ffa l	mg/kg
Endosulfan II	mg/kg
End suffa S lphate	mg/kg
E d n	mg/kg
Endn E d Aldehyd	mg/kg
G mma HCH (L dane)	mg/kg
Heptachlor	mg/kg
Heptachlo epoxide	mg/kg
Heptachlorobenze e	mg/kg
Methoxychlor	mg/kg
pp -DDE	mg/kg
pp'DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azi phos methyl	mg/kg
Demeton-s-methyl	mg/kg
Diazinon	mg/kg
D chlorvos	mg/kg
D xath on	mg/kg
D sulfoton	mg/kg
EPN Ethio	mg/kg
Malathion	mg/kg
Methyl Parath on	mg/kg
Parath o	mg/kg
Terbufos	mg/kg

CARBAMATE (P st ide)

Carbaryl	mg/kg
Carbofuran	mg/kg
Maneb	mg/kg

PHENOL UREA HERBICIDES

Chlorotol ron	mg/kg
Dnuron	mg/kg
Isoproturon	mg/kg
Linuron	mg/kg

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Date Sampled	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03	22/09/03
Lab Ref No	180482	180483	180484	180485	180486	180487	180488	180489
Custom Ref No	3	7	10	3	6	9	3	6
Sample Typ	ES	ES	ES	ES	ES	ES	ES	ES
Tri Pit / Borehole No	TP722	TP722	TP722	TP723	TP723	TP723	TP724	TP724
Depth (m)	0.30	1.30	2.20	0.30	1.30	2.10	0.20	0.30
Hardening Test (Y/N)								

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chloro-o-tolylxyacetic acid	mg/kg
Dacamba	mg/kg
Dichloroprop	mg/kg
Mecoprop	mg/kg
Silax	mg/kg

TRIAZINES

Alazine	mg/kg
Sazine	mg/kg

PCBs

PCB Congener 28	mg/kg
PCB Congener 52	mg/kg
PCB Congener 101	mg/kg
PCB Congener 118	mg/kg
PCB Congener 138	mg/kg
PCB Congener 153	mg/kg
PCB Congener 180	mg/kg

Total PCBs	mg/kg
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ALCOHOLS

Butanol	mg/kg
Ethanol	mg/kg
Ethylene Glycol	mg/kg
Methanol	mg/kg
Propan-1-ol	mg/kg
Propan-2-ol	mg/kg

MISCELLANEOUS

Caloric Value	Cal/g
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Silver	mg/kg
Tin	mg/kg

1,2-Dichloropropane	mg/kg
1,3-Dichloropropane	mg/kg
2,4-Dinitrophenol	mg/kg
Acetone	mg/kg
Carbazole	mg/kg
Carbon disulphide	mg/kg
Creosote (TPH by GCFID)	mg/kg
Cyclohexane	mg/kg
Cyclohexanon	mg/kg
Hexachlorocyclopentadiene	mg/kg
Hydroquinone	mg/kg
N-Nitrosodiphenylamine	mg/kg
p-Chloroaniline	mg/kg
Premethrin/Cypermethrin	mg/kg
Pyridine	mg/kg
Styrene	mg/kg
Sulpholane	mg/kg
Toluene Extractable Matter (Historic)	mg/kg
Toxaphene	mg/kg
Tributyltin	mg/kg
Trichloromethane	mg/kg
Vinyl Acetate	mg/kg

CONCRETE

Chionde BS1377 Part 3 in situ preparation	mg/kg
HAC (Rapid determination of High Al in Cement)	mg/kg
Mix Proportion Cement/Aggregate Ratio-BS1881	mg/kg

Notes

Benzo(b)fluoranthene
2,3-Dibenz(a,h)anthracene

Norwest Holst Soil Engineering Ltd
R68323 Durham Rd Newport

Date Sampled	22/09/03	22/09/03	23/09/03	23/09/03	23/09/03	23/09/03	R68323
Lab Ref No	180490	180493	180494	180495	180496	180497	AQC
Comete Ref No	10	15	3	6	10	13	Lab Std
Sample Typ	ES	ES	ES	ES	ES	ES	
Tail Pit / Borehole N	TP724	TP724	TP626	TP626	TP626	TP626	
Depth (m)	1.30	2.10	0.20	1.20	2.20	2.50	
Hardening at Surface (Y/N)							

HEAVY METALS/METALLOIDS

Aluminium	mg/kg						
Antimony	mg/kg						
Arsenic	mg/kg				88.1		25.7
Barium	mg/kg						
Beryllium	mg/kg						
Boron (Water Soluble)	mg/kg				3.9		2.5
Cadmium	mg/kg				1.7		2.2
Chromium (Total)	mg/kg				24		244
Chromium (Hexavalent)	mg/kg						11
Cobalt	mg/kg						
Copper	mg/kg				209		79
Germanium	mg/kg						
Lead	mg/kg				432		168
Mercury	mg/kg				0.5		1.5
Molybdenum	mg/kg						
Nickel	mg/kg				63		37
Selenium	mg/kg				2.8		1.6
Vanadium	mg/kg						
Zinc	mg/kg				596		136

ESSENTIAL ELEMENTS

Calcium	mg/kg	
Iron	mg/kg	
Magnesium	mg/kg	
Manganese	mg/kg	
Potassium	mg/kg	
Sodium	mg/kg	

MONOAROMATICS

Benzene	mg/kg	
Toluene	mg/kg	
Ethylbenzene	mg/kg	
Meta & Para Xylene	mg/kg	
Ortho Xylene	mg/kg	

Total Xylenes mg/kg

MTBE	mg/kg	
1,2,4-T methylbenzene	mg/kg	
1,3,5-Tmethylbenzene	mg/kg	

TOTAL HYDROCARBONS

Petroleum Range Organics (C ₆ -C ₁₀)	mg/kg	<5
Diesel Range Organics (C ₁₀ -C ₂₈)	mg/kg	22
Hydrocarbon Screen (GC-FID)	mg/kg	77

VOCs

1,1,1-Trichloroethane	mg/kg	
1,1,2-Tetrachloroethane	mg/kg	
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg	
1,1,2-Trichloroethane	mg/kg	
1,1-Dichloroethane	mg/kg	
1,1-Dichloroethene	mg/kg	
1,2,3-Trichloropropane	mg/kg	
1,2,3-Trimethylbenzene	mg/kg	
1,2,4-Trichlorobenzene	mg/kg	
1,2,4-Tmethylbenzene	mg/kg	
1,2-Dibromo-3-Chloropropane	mg/kg	
1,2-Dichlorobenzene	mg/kg	
1,2-Dichloroethane	mg/kg	
1,2-Dichloropropane	mg/kg	
1,2-Dichloropropene	mg/kg	
1,3,5-Tmethylbenzene	mg/kg	
1,3-Dichlorobenzene	mg/kg	

Norwest Holst Soil Engineering Ltd
 R68323 Durham Rd Newport

Dat Sampled	22/09/03	22/09/03	23/09/03	23/09/03	23/09/03	23/09/03	R68323
L b R f No	180490	180493	180494	180495	180496	180497	AQC
C tom Ref No	10	15	3	6	10	13	Lab Std
S mple Type	ES	ES	ES	ES	ES	ES	
T l Pit / Borehol N	TP724	TP724	TP626	TP626	TP626	TP626	
D pth (m)	1.30	2.10	0.20	1.20	2.20	2.50	
H rd t nd g t Surf (Y/N)							

1,3-Dichloropropane	mg/kg
1,4-Dichlorobenzene	mg/kg
1-Chlorobenzene	mg/kg
1-Methylpropylbenzene	mg/kg
2,2-Dichloropropane	mg/kg
2-Chlorotoluene	mg/kg
Benzene	mg/kg
Bromobenzene	mg/kg
Bromochloromethane	mg/kg
Bromodichloromethane	mg/kg
Bromofluoromethane	mg/kg
Carbon Tetrachloride (PCM)	mg/kg
Chlorobenzenes (sum)	mg/kg
Chlorodibromomethane	mg/kg
Chloroethane	mg/kg
Chloroform	mg/kg
cis-1,2-Dichloroethane	mg/kg
cis-1,3-Dichloropropene	mg/kg
Dibromochloromethane	mg/kg
Dibromomethane	mg/kg
Dibromobenzene	mg/kg
Dichlorobenzene	mg/kg
Dichloromethane	mg/kg
Ethylbenzene	mg/kg
Hexachlorobutadiene	mg/kg
meta & para-Xylene	mg/kg
Methylisopropylbenzene	mg/kg
Monochlorobenzenes (sum)	mg/kg
o-Xylene	mg/kg
Propylbenzene	mg/kg
ortho-Xylene	mg/kg
Styrene	mg/kg
tert-Butylbenzene	mg/kg
Tetrachlorobenzene	mg/kg
Tetrachloroethene (PCE)	mg/kg
Tetrahydrofuran	mg/kg
Toluene	mg/kg
trans-1,2-Dichloroethane	mg/kg
trans-1,3-Dichloropropene	mg/kg
Trichloroethene (TCE)	mg/kg
Trichlorofluoromethane	mg/kg
Trichloromethane	mg/kg
Vinyl Chloride	mg/kg

SVOCs

1,2,4-Trichlorobenzene	mg/kg
1,4-Dichlorobenzene	mg/kg
2,3,4,6-Tetrachlorophenols (sum)	mg/kg
2,4,5-Trichlorophenol	mg/kg
2,4,6-Trichlorophenol	mg/kg
2,4-Dichlorophenols (sum)	mg/kg
2,4-Dimethylphenol	mg/kg
2,4-Dinitrophenol	mg/kg
2,6-Dimethylphenol	mg/kg
2,6-Dinitrophenol	mg/kg
2-Chlorophthalene	mg/kg
2-Chlorophenol (sum)	mg/kg
2-Methylphenol	mg/kg
2-Nitrophenol	mg/kg
4-Chloro-3-methylphenol	mg/kg
4-chlorobenzylphenylether	mg/kg
4-Methylphenol	mg/kg
4-Nitrophenol	mg/kg
Azobenzene	mg/kg
bis(2-chloroethyl)ether	mg/kg

Norwest Holst Soil Engineering Ltd
R68323 Durham Rd Newport

Dat Sampl d	22/09/03	22/09/03	23/09/03	23/09/03	23/09/03	23/09/03	R68323
Lab Ref No	180490	180493	180494	180495	180496	180497	AQC
Customer R f No	10	15	3	6	10	13	Lab Std
S mpl Typ	ES	ES	ES	ES	ES	ES	
Tr 1 Pit / Bo hol No	TP724	TP724	TP626	TP626	TP626	TP626	
D pth (m)	1.30	2.10	0.20	1.20	2.20	2.50	
Hardst nd ng t S rf (Y/N)							

b s(2-chloroethyo y)methane	mg/kg
b s(chloroisopropyl)ethe	mg/kg
Bromophe ylphenylether	mg/kg
Hexachloro-1 3-b tad ene	mg/kg
Hexachlorobenze e	mg/kg
He achloroethane	mg/kg
Isophorone	mg/kg
Nitrobenz e	mg/kg
nitrosod n propyl 1 propa am e	mg/kg
Pe tachlorobenzene	mg/kg
P ntachlorophenol	mg/kg

B s(2-ethylhexyl)phthalate	mg/kg
Butylbenzylphthalat	mg/kg
Diethylphthalate	mg/kg
D methylphthalate	mg/kg
D-n-butylphthalate	mg/kg
D-n-octyl phthi late	mg/kg

Total Phthalates mg/kg

ORGANO CHLORINE PESTICIDES

Aldnn	mg/kg
Beta HCH (Beta BHC)	mg/kg
Chlorda	mg/kg
DDD	mg/kg
Dieldrn	mg/kg
D s (total)	mg/kg
Endos ffan i	mg/kg
E do if n II	mg/kg
Endos ffan Sulphate	mg/kg
E dn	mg/kg
E d End n Aldehyde	mg/kg
G mm HCH (Lindane)	mg/kg
Heptachlor	mg/kg
H ptachlor epo de	mg/kg
Heptachlorobenzene	mg/kg
Metho ychlo	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	mg/kg
D m ton-s-methyl	mg/kg
Diazinon	mg/kg
D chlorvos	mg/kg
D xath on	mg/kg
D sulfoton	mg/kg
EPN Eth on	mg/kg
Malath o	mg/kg
M thyl Parathion	mg/kg
Parath on	mg/kg
Terbufos	mg/kg

CARBAMATE (Pesticid)

Carbaryl	mg/kg
Carbofura	mg/kg
Maneb	mg/kg

PHENOL UREA HERBICIDES

Chlorotol ron	mg/kg
D uron	mg/kg
Isoproturon	mg/kg
Li ron	mg/kg

Norwest Holst Soil Engineering Ltd
R68323 Durham Rd Newport

Date Sampled	22/09/03	22/09/03	23/09/03	23/09/03	23/09/03	23/09/03	R68323
Lab Ref No	180490	180493	180494	180495	180496	180497	AQC
Contract Ref No	10	15	3	6	10	13	Lab Std
Sample Type	ES	ES	ES	ES	ES	ES	
Trial Pit / Borehole No	TP724	TP724	TP626	TP626	TP626	TP626	
Depth (m)	1.30	2.10	0.20	1.20	2.20	2.50	
Handstanding at Site (Y/N)							

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chloro-o-tolylloxyacetic acid	mg/kg
Dicamba	mg/kg
Dichloroprop	mg/kg
Mecoprop	mg/kg
Sisex	mg/kg

TRIAZINES

Altrazine	mg/kg
Sisazine	mg/kg

PCBs

PCB Congener 28	mg/kg
PCB Congener 52	mg/kg
PCB Congener 101	mg/kg
PCB Congener 118	mg/kg
PCB Congener 138	mg/kg
PCB Congener 153	mg/kg
PCB Congener 180	mg/kg

Total PCB	mg/kg
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ALCOHOLS

Butanol	mg/kg
Ethanol	mg/kg
Ethylene Glycol	mg/kg
Methanol	mg/kg
Propyl-1-ol	mg/kg
Propan-2-ol	mg/kg

MISCELLANEOUS

Chloride Value	Cal/g
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Silica	mg/kg
Tin	mg/kg

1,2-Dichloropropane	mg/kg
1,3-Dichloropropane	mg/kg
2,4-Dinitrophenol	mg/kg
Acetone	mg/kg
Carbazole	mg/kg
Carbon disulphide	mg/kg
Chrysene (TPH by GCFID)	mg/kg
Cyclohexane	mg/kg
Cyclohexanone	mg/kg
Heptachlorocyclopentadiene	mg/kg
Hydroquinone	mg/kg
N,N-Diethylphenylamine	mg/kg
p-Chloroaniline	mg/kg
Permethrin/Cypermethrin	mg/kg
Pyrene	mg/kg
Styrene	mg/kg
Sulpholane	mg/kg
Toluene Extractable Matter (Hexon)	mg/kg
Toxaphene	mg/kg
Tert-butyl Tin	mg/kg
Tetrachloromethane	mg/kg
Vinyl Acetate	mg/kg

CONCRETE

Chloride BS1377 Part 3 chloride preparation	mg/kg
HAC (Rapid determination of High Alumina Cement)	mg/kg
Mix Proportions-Cement/Aggregate Ratio-BS1881	mg/kg

Notes

Benzo(b)fluoranthene
Di-benzo(a,h)anthracene

Norwest Holst Soil Engineering Ltd
Durham Rd Newport

Date Sampled	22/09/03	R68323
Lab Ref No	180474	AQC
Customer Ref No	11	Lab Std
Sample Type	ES	
Trial Pit / Borehole No	TP686	

pH	Value	7.0	8.3
TOC	mg/l		
Suspended Solids	mg/l		
Elect cal Cond (µS/cm)	µS/cm		

PHENOLICS

Butyl Phenols	ug/l		
Catechol	ug/l	<0.5	
Cresols (sum)	ug/l	0.5	
Naphthols	ug/l	0.5	
Phenol	ug/l	0.5	
Resorc ol	ug/l	0.5	
Tnmethylphenol	ug/l	0.5	
Xylenols & Ethylphenols	ug/l	0.5	
Total Phenols	ug/l	0.5	303

US EPA PRIORITY PAH s

Acenaphthene	ug/l	0.2	
Acenaphthylene	ug/l	1.5	
Anthracene	ug/l	1.1	
Benzo(a)Anthracene	ug/l	6.9	
Benzo(a)pyrene	ug/l	8.3	14.9
Benzo(b)fluoranthene	ug/l	18.0	
Benzo(k)fluoranthene	ug/l	<0.2	
Benzo(g,h,i)perylene	ug/l	<0.2	
Chrysene	ug/l	<0.2	
D benzo(a,h)anthracene ⁻²	ug/l	0.2	
Indeno(1,2,3-cd)pyrene ²	ug/l	0.2	
Fluoranthene	ug/l	11.0	
Fluorene	ug/l	<0.2	
Naphthalene	ug/l	<0.2	15.2
Phenanthrene	ug/l	3.6	
Pyrene	ug/l	8.8	
Total US EPA 16 PAH	ug/l	59.2	

OTHER PAH s

Anthanthrene	ug/l		
Benzo(e)pyrene	ug/l		
Cyclopenta(cd)pyrene	ug/l		

GENERAL INORGANICS

Complex Cyanide	ug/l		
Eas ly Liberatable Cyanide (free)	ug/l		
Th ocyanate	ug/l		
Total Cyanide	ug/l	<5	1930
Sulphide	ug/l		
Sulphur (free)	ug/l		
Sulphate	ug/l	52147	101566
Chlonde	ug/l		
Phosphate	ug/l		
Exchangeable Ammonium	ug/l	168	101027
Nitrate	ug/l		
N trite	ug/l		

Date Sampled	22/09/03	R68323
Lab Ref No	180474	AQC
Customer Ref No	11	Lab Std
Sample Type	ES	
Tri Pit / Borehole No	TP686	

HEAVY METALS/METALLOIDS

Aluminium	ug/l		
Antimony	ug/l		
Arsenic	ug/l	10	59
Barium	ug/l		
Beryllium	ug/l		
Boron	ug/l	366	166
Cadmium	ug/l	1	12
Chromium (Dissolved)	ug/l	20	55
Chromium (Hexavalent)	ug/l		
Cobalt	ug/l		
Copper	ug/l	<5	137
Germanium	ug/l		
Lead	ug/l	20	36
Mercury	ug/l	0.1	7.2
Molybdenum	ug/l		
Nickel	ug/l	<20	48
Selenium	ug/l	<10	42
Vanadium	ug/l		
Zinc	ug/l	171	402

ESSENTIAL ELEMENTS

Calcium	ug/l
Iron	ug/l
Magnesium	ug/l
Manganese	ug/l
Potassium	ug/l
Sodium	ug/l

MONOAROMATICS

Benzene	ug/l
Toluene	ug/l
Ethylbenzene	ug/l
Meta & Para Xylene	ug/l
Ortho Xylene	ug/l

Total Xylenes	ug/l
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MTBE	ug/l
1,2,4-Tmethylbenzene	ug/l
1,3,5-Tmethylbenzene	ug/l

TOTAL HYDROCARBONS

Petroleum Range Organics (C ₆ -C ₁₀)	ug/l	20
Diesel Range Organics (C ₈ -C ₂₆)	ug/l	10660
Hydrocarbon Screen (GC FID)	ug/l	11911

VOCs

1,1,1-Trichloroethane	ug/l
1,1,2,2-Tetrachloroethane	ug/l
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l
1,1,2-Trichloroethane	ug/l
1,1-Dichloroethane	ug/l
1,1-Dichloroethene	ug/l
1,2,3-Trichloropropane	ug/l
1,2,3-Tmethylbenzene	ug/l
1,2,4-Trichlorobenzene	ug/l
1,2,4-Tmethylbenzene	ug/l
1,2-Dibromo-3-Chloropropane	ug/l
1,2-Dichlorobenzene	ug/l
1,2-Dichloroethane	ug/l
1,2-Dichloropropane	ug/l
1,2-Dichloropropene	ug/l
1,3,5-Tmethylbenzene	ug/l
1,3-Dichlorobenzene	ug/l
1,3-Dichloropropane	ug/l

Norwest Holst Soil Engineering Ltd
Durham Rd Newport

Date Sampled	22/09/03	R68323
Lab Ref No	180474	AQC
Customer Ref No	11	Lab Std
Sample Type	ES	
Trial Pit / Borehole No	TP666	

1 4 Dichlorobenzene	ug/l
1 Chlorotoluene	ug/l
1 Methylpropylbenzene	ug/l
2 2 D chloropropane	ug/l
2 Chlorotoluene	ug/l
Benzene	ug/l
Bromobenzene	ug/l
Bromochloromethane	ug/l
Bromodichloromethane	ug/l
Bromoform	ug/l
Carbon Tetrachloride (PCM)	ug/l
Chlorobenzene (sum)	ug/l
Chlorodibromomethane	ug/l
Chloroethane	ug/l
Chloroform	ug/l
cis 1 2 Dichloroethylene	ug/l
cis 1 3 Dichloropropene	ug/l
Dibromochloromethane	ug/l
Dibromoethane	ug/l
Dibromomethane	ug/l
Dichlorobenzene	ug/l
Dichloromethane	ug/l
Ethylbenzene	ug/l
Hexachlorobutadiene	ug/l
meta & para Xylene	ug/l
Methyl isopropylbenzene	ug/l
Monochlorobenzene	ug/l
Monochlorophenols (sum)	ug/l
n Butylbenzene	ug/l
n Propylbenzene	ug/l
ortho Xylene	ug/l
Styrene	ug/l
tert Butylbenzene	ug/l
Tetrachlorobenzene	ug/l
Tetrachloroethene (PCE)	ug/l
Tetrahydrofuran	ug/l
Toluene	ug/l
trans 1 2-Dichloroethene	ug/l
trans 1 3-dichloropropene	ug/l
Trichloroethene (TCE)	ug/l
Trichlorofluoromethane	ug/l
Trichloromethane	ug/l
Vinyl Chloride	ug/l

SVOCs

1 2 4 Trichlorobenzene	ug/l
1 4 Dichlorobenzene	ug/l
2 3 4 6-Tetrachlorophenol (sum)	ug/l
2 4 5-Trichlorophenol	ug/l
2 4 6-Trichlorophenol	ug/l
2 4 Dichlorophenol (sum)	ug/l
2 4 Dimethylphenol	ug/l
2 4-Dinitrotoluene	ug/l
2 6-Dimethylphenol	ug/l
2 6-Dinitrotoluene	ug/l
2 Chloronaphthalene	ug/l
2-Chlorophenol (sum)	ug/l
2 Methylphenol	ug/l
2 Nitrophenol	ug/l
4-Chloro-3-methylphenol	ug/l
4-chlorobenzylphenylether	ug/l
4 Methylphenol	ug/l
4-Nitrophenol	ug/l
Azobenzene	ug/l
bis(2-chloroethyl)ether	ug/l
bis(2-chloroethoxy)methane	ug/l
bis(chloroisopropyl)ether	ug/l

Norwest Holst Soil Engineering Ltd
Durham Rd Newport

Date Sampled	22/09/03	R68323
Lab Ref No	180474	AQC
Customer Ref No	11	Lab Std
Sample Type	ES	
Trial Pit / Borehole No	TP686	

Bromophenylphenylether	ug/l
Hexachloro-1 3 butad ene	ug/l
Hexachlorobenzene	ug/l
Hexachloroethane	ug/l
Isophorone	ug/l
Nitrobenzene	ug/l
n nitrosod -n propyl 1 propanamine	ug/l
Pentachlorobenzene	ug/l
Pentachlorophenol	ug/l

Bis(2-ethylhexyl)phthalate	ug/l
Butylbenzylphthalate	ug/l
Diethylphthalate	ug/l
D methylphthalate	ug/l
D n butylphthalate	ug/l
D n-octyl phthalate	ug/l

Total Phthalates	ug/l
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ORGANO CHLORINE PESTICIDES

Aldnn	ug/l
Beta HCH (Beta BHC)	ug/l
Chlordane	ug/l
DDD	g/l
D eldnn	ug/l
Dnns (total)	ug/l
Endosulfan I	ug/l
Endosulfan II	ug/l
E dosulfan Sulphate	ug/l
Endnn	ug/l
Endnn Endnn Aldehyde	ug/l
Gamma HCH (Lindane)	ug/l
Heptachlor	ug/l
Heptachlor epoxide	ug/l
Heptachlorobenzene	ug/l
Methoxychlor	ug/l
pp DDE	g/l
pp DDT	ug/l
pp TDE	ug/l

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	ug/l
Demeton s-methyl	ug/l
D azinon	ug/l
D chlorvos	ug/l
Dioxath on	g/l
Disulfoton	ug/l
EPN Ethion	ug/l
Malath on	ug/l
Methyl Parath on	ug/l
Parath on	ug/l
Terbufos	ug/l

CARBAMATE (Pesticide)

Carbaryl	ug/l
Carbofuran	ug/l
Maneb	ug/l

PHENOL UREA HERBICIDES

Chlorotoluron	ug/l
D uron	ug/l

Norwest Holst Soil Engineering Ltd
Durham Rd Newport

Date Sampled	22/09/03	R68323
Lab Ref No	180474	AQC
Customer Ref No	11	Lab Std
Sample Type	ES	
Trial Pit / Borehole No	TP686	

Isoproturon	ug/l
Linuron	ug/l

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	ug/l
2,4-D	ug/l
Chloro-o-toloxycetic acid	ug/l
Dicamba	ug/l
Dichloprop	ug/l
Mecoprop	ug/l
Sisex	ug/l

TRIAZINES

Altrazine	ug/l
Simazine	ug/l

PCB s

PCB Congener 28	ug/l
PCB Congener 52	ug/l
PCB Congener 101	ug/l
PCB Congener 118	ug/l
PCB Congener 138	ug/l
PCB Congener 153	ug/l
PCB Congener 180	ug/l

Total PCB s	ug/l
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ALCOHOLS

Butanol	ug/l
Ethanol	ug/l
Ethylene Glycol	ug/l
Methanol	ug/l
Propan 1-ol	ug/l
Propan 2-ol	ug/l

MISCELLANEOUS

Silica	ug/l
Tin	ug/l

1,2-Dichloropropane	ug/l
1,3-Dichloropropene	ug/l
2,4-Dinitrophenol	ug/l
Acetone	ug/l
Carbazole	ug/l
Carbon disulphide	ug/l
Creosote (TPH by GCFID)	ug/l
Cyclohexane	ug/l
Cyclohexanone	ug/l
Hexachlorocyclopentadiene	ug/l
Hydroquinone	ug/l
N-Nitrosodiphenylamine	ug/l
p-Chloroaniline	ug/l
Premethrin/Cypermethrin	ug/l
Pyridine	ug/l
Styrene	ug/l
Sulpholane	ug/l
Toluene Extractable Matter (Historic)	ug/l
Toxaphene	ug/l
Tributyl Tin	ug/l
Trichloromethane	ug/l
Vinyl Acetate	ug/l
Vinyl Acetate	ug/l

Notes

Benzo(b)fluoranthene & Benzo(k)fluoranthene co-elute (reported as sum)
²D-benzo(a,h)anthracene & Indeno(1,2,3-cd)pyrene co-elute (reported as sum)
 Insufficient sample

Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 20/10/03

ANALYTICAL REPORT No R68474

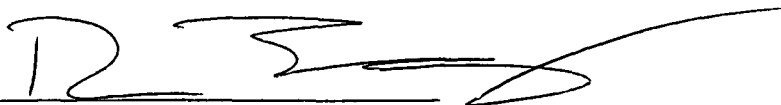
Location Durham Rd Newport

Your Project No F13041

The attached analytical results relate to samples received on 22 Sep 2003

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If you have any queries regarding this report please contact Steve Chapman or Steve Knight

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Registered in England No 980795
Registered Office Parkside Lane Dewsbury Road Leeds LS11 5SX

Norwest Holst Soil Engineering Ltd
R68474 Durham Rd Newport

Date Sampled								
Lab Ref No		181608	181609	181610	181611	181612	181613	181614
Customer Ref No								
Sample Type		WS	WS	WS	WS	WS	WS	WS
Trial Pit / Borehole No		BH404	BH405	BH409	BH506	BH507	BH508	BH518
pH	Value	8.3	9.0	8.6	8.5	8.7	8.9	8.8
TOC	mg/l							
Suspended Solids	mg/l							
Electrical Cond (µS/cm)	µS/cm							
PHENOLICS								
Butyl Phenols	ug/l							
Catechol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cresols (sum)	ug/l	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5
Naphthols	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5
Phenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Resorcinol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trimethylphenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylenols & Ethylphenols	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Phenols	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
US EPA PRIORITY PAH s								
Acenaphthene	ug/l	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acenaphthylene	ug/l	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Anthracene	ug/l	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)Anthracene	ug/l	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	ug/l	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(b)fluoranthene	ug/l	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(k)fluoranthene	ug/l	0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2
Benzo(g,h,i)perylene	ug/l	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chrysene	ug/l	0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2
D benzo(a,h)anthracene ²	ug/l	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2
Indeno(1,2,3-cd)pyrene ²	ug/l	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fluoranthene	ug/l	0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2
Fluorene	ug/l	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Naphthalene	ug/l	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Phenanthrene	ug/l	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2
Pyrene	ug/l	0.2	<0.2	<0.2	<0.2	<0.2	0.2	<0.2
Total US EPA 16 PAH	ug/l	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
OTHER PAH s								
Anthanthrene	ug/l							
Benzo(e)pyrene	ug/l							
Cyclopenta(cd)pyrene	ug/l							
GENERAL INORGANICS								
Complex Cyanide	ug/l							
Easily Liberatable Cyanide (free)	ug/l							
Thiocyanate	ug/l							
Total Cyanide	ug/l	<5	<5	<5	<5	<5	<5	<5
Sulphide	ug/l	<100	<100	<100	<100	<100	<100	<100
Sulphur (free)	ug/l							
Sulphate	ug/l	24647	89658	427732	59281	83059	34830	57485
Chloride	ug/l							
Phosphate	ug/l							
Exchangeable Ammonium	ug/l	2854	1585	2865	2889	3729	9551	5481
Nitrate	ug/l							
Nitrite	ug/l							

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Date Sampled	181608	181609	181610	181611	181612	181613	181614
Lab Ref No							
Customer Ref No							
Sample Type	WS	WS	WS	WS	WS	WS	WS
Tr al P t / Borehole No	BH404	BH405	BH409	BH506	BH507	BH508	BH518

HEAVY METALS/METALLOIDS

Element	Unit	181608	181609	181610	181611	181612	181613	181614
Aluminium	ug/l							
Antimony	ug/l							
Arsenic	ug/l	14	<10	14	<10	<10	<10	10
Barium	ug/l							
Beryllium	ug/l							
Boron	ug/l	546	2575	1292	171	303	390	517
Cadmium	ug/l	1	<1	<1	<1	<1	<1	<1
Chromium (Dissolved)	ug/l	20	<20	<20	<20	<20	<20	<20
Chromium (Hexavalent)	ug/l							
Cobalt	ug/l							
Copper	ug/l	<5	<5	19	<5	7	26	<5
Germanium	ug/l							
Lead	ug/l	20	<20	<20	20	<20	<20	<20
Mercury	ug/l	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
Molybdenum	ug/l							
Nickel	ug/l	<20	<20	<20	<20	<20	<20	<20
Selenium	ug/l	<10	<10	<10	<10	<10	<10	<10
Vanadium	ug/l							
Zinc	ug/l	<50	<50	<50	<50	<50	<50	<50

ESSENTIAL ELEMENTS

Element	Unit
Calcium	ug/l
Iron	ug/l
Magnesium	ug/l
Manganese	ug/l
Potassium	ug/l
Sodium	ug/l

MONOAROMATICS

Compound	Unit	181608	181609	181610	181611	181612	181613	181614
Benzene	ug/l					<20	<20	
Toluene	ug/l					<20	<20	
Ethylbenzene	ug/l					<20	<20	
Meta & Para Xylene	ug/l					<20	<20	
Ortho Xylene	ug/l					<20	<20	
Total Xylenes	ug/l					<20	<20	

MTBE

Compound	Unit
1,2,4-Trimethylbenzene	ug/l
1,3,5-Trimethylbenzene	ug/l

TOTAL HYDROCARBONS

Compound	Unit	181608	181609	181610	181611	181612	181613	181614
Petroleum Range Organics (C ₆ -C ₁₀)	ug/l	<20	20	<20	<20	<20	<20	<20
Diesel Range Organics (C ₈ -C ₂₆)	ug/l	100	<100	<100	100	<100	<100	<100
Hydrocarbon Screen (GC-FID)	ug/l	100	<100	<100	<100	<100	<100	<100

VOCs

Compound	Unit
1,1,1-Trichloroethane	ug/l
1,1,2,2-Tetrachloroethane	ug/l
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l
1,1,2-Trichloroethane	ug/l
1,1-Dichloroethane	ug/l
1,1-Dichloroethene	ug/l
1,2,3-Trichloropropane	ug/l
1,2,3-Trimethylbenzene	ug/l
1,2,4-Trichlorobenzene	ug/l
1,2,4-Trimethylbenzene	ug/l
1,2-Dibromo-3-Chloropropane	ug/l
1,2-Dichlorobenzene	ug/l
1,2-Dichloroethane	ug/l
1,2-Dichloropropane	ug/l
1,2-Dichloropropene	ug/l

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Lab Ref No							
Customer Ref No							
Sample Type	WS	WS	WS	WS	WS	WS	WS
Trial Pit / Borehole No	BH404	BH405	BH409	BH506	BH507	BH508	BH518
1 3 5 Trimethylbenzene	ug/l						
1 3 Dichlorobenzene	ug/l						
1 3-Dichloropropane	ug/l						
1 4 Dichlorobenzene	ug/l						
1-Chlorotoluene	ug/l						
1 Methylpropylbenzene	ug/l						
2 2 Dichloropropane	ug/l						
2 Chlorotoluene	ug/l						
Benzene	ug/l						
Bromobenzene	ug/l						
Bromochloromethane	ug/l						
Bromod chloromethane	ug/l						
Bromoform	ug/l						
Carbon Tetrachloride (PCM)	ug/l						
Chlorobenzene (sum)	ug/l						
Chlorodibromomethane	ug/l						
Chloroethane	ug/l						
Chloroform	ug/l						
cis 1 2 Dichloroethylene	ug/l						
cis 1 3 Dichloropropene	ug/l						
Dibromochloromethane	ug/l						
Dibromoethane	ug/l						
Dibromomethane	ug/l						
D chlorobenzene	ug/l						
Dichloromethane	ug/l						
Ethylbenzene	ug/l						
Hexachlorobutadiene	ug/l						
meta & para Xylene	ug/l						
Methyl isopropylbenzene	ug/l						
Monochlorobenzene	ug/l						
Monochlorophenols (sum)	ug/l						
n Butylbenzene	ug/l						
n Propylbenzene	ug/l						
ortho Xylene	ug/l						
Styrene	ug/l						
tert Butylbenzene	ug/l						
Tetrachlorobenzene	ug/l						
Tetrachloroethene (PCE)	ug/l						
Tetrahydrofuran	ug/l						
Toluene	ug/l						
trans 1 2 Dichloroethene	ug/l						
trans 1 3-dichloropropene	ug/l						
Trichloroethene (TCE)	ug/l						
Trichlorofluoromethane	ug/l						
Trichloromethane	ug/l						
Vinyl Chloride	ug/l						
SVOC s							
1 2 4 Trichlorobenzene	ug/l						
1 4-Dichlorobenzene	ug/l						
2 3 4 6-Tetrachlorophenol (sum)	ug/l						
2 4 5-Trichlorophenol	ug/l						
2 4 6-Trichlorophenol	ug/l						
2 4-Dichlorophenol (sum)	ug/l						
2 4-Dimethylphenol	ug/l						
2 4-Dinitrotoluene	ug/l						
2 6-Dimethylphenol	ug/l						
2 6-D nitrotoluene	ug/l						
2 Chloronaphthalene	ug/l						
2-Chlorophenol (sum)	ug/l						
2 Methylphenol	ug/l						
2 Nitrophenol	ug/l						
4-Chloro-3-methylphenol	ug/l						
4-chlorobenzylphenylether	ug/l						

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Lab Ref No							
Customer Ref No							
Sample Type	WS	WS	WS	WS	WS	WS	WS
Trial Pit / Borehole No	BH404	BH405	BH409	BH506	BH507	BH508	BH518

4 Methylphenol	ug/l
4 Nitrophenol	ug/l
Azobenzene	ug/l
bis(2-chloroethyl)ether	ug/l
bis(2-chloroethoxy)methane	ug/l
bis(chloroisopropyl)ether	ug/l
Bromophenylphenylether	ug/l
Hexachloro 1 3 butadiene	ug/l
Hexachlorobenzene	ug/l
Hexachloroethane	ug/l
Isophorone	ug/l
Nitrobenzene	ug/l
n-nitrosodi n-propyl-1 propanamine	ug/l
Pentachlorobenzene	ug/l
Pentachlorophenol	ug/l

Bis(2-ethylhexyl)phthalate	ug/l
Butylbenzylphthalate	ug/l
Diethylphthalate	ug/l
Dimethylphthalate	ug/l
Di n-butylphthalate	ug/l
Di n-octyl phthalate	ug/l

Total Phthalates ug/l

ORGANO CHLORINE PESTICIDES

Aldrin	ug/l
Beta HCH (Beta BHC)	ug/l
Chlordane	ug/l
DDD	ug/l
Dieldrin	ug/l
Drins (total)	ug/l
Endosulfan I	ug/l
Endosulfan II	ug/l
Endosulfan Sulphate	ug/l
Endrin	ug/l
Endrin Endrin Aldehyde	ug/l
Gamma HCH (Lindane)	ug/l
Heptachlor	ug/l
Heptachlor epoxide	ug/l
Heptachlorobenzene	ug/l
Methoxychlor	ug/l
pp DDE	ug/l
pp DDT	ug/l
pp TDE	ug/l

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	ug/l
Demeton-s-methyl	ug/l
Diazinon	ug/l
Dichlorvos	ug/l
Dioxathion	ug/l
Dsulfoton	ug/l
EPN Ethion	ug/l
Malathion	ug/l
Methyl Parathion	ug/l
Parathion	ug/l
Terbufos	ug/l

CARBAMATE (Pesticide)

Carbaryl	ug/l
Carbofuran	ug/l
Maneb	ug/l

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Lab Ref No							
Customer Ref No							
Sample Type	WS	WS	WS	WS	WS	WS	WS
Trial Pit / Borehole No	BH404	BH405	BH409	BH506	BH507	BH508	BH518

PHENOL UREA HERBICIDES

Chlorotoluron	ug/l
Diuron	ug/l
Isoproturon	ug/l
Linuron	ug/l

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	ug/l
2,4-D	ug/l
Chloro-o-tolxyoxyacetic acid	ug/l
Dicamba	ug/l
Dichloroprop	ug/l
Mecoprop	ug/l
Sil ex	ug/l

TRIAZINES

Altrazine	ug/l
Simazine	ug/l

PCB s

PCB Congener 28	ug/l	<0.05	<0.05
PCB Congener 52	ug/l	0.05	0.10
PCB Congener 101	ug/l	<0.05	<0.05
PCB Congener 118	ug/l	<0.05	0.10
PCB Congener 138	ug/l	<0.05	<0.05
PCB Congener 153	ug/l	<0.05	<0.05
PCB Congener 180	ug/l	<0.05	0.20
Total PCB s	ug/l	<0.05	2.40

ALCOHOLS

Butanol	ug/l
Ethanol	ug/l
Ethylene Glycol	ug/l
Methanol	ug/l
Propan-1-ol	ug/l
Propan-2-ol	ug/l

MISCELLANEOUS

Silver	ug/l
Tin	ug/l
1,2-Dichloropropane	ug/l
1,3-Dichloropropene	ug/l
2,4-Dinitrophenol	ug/l
Acetone	ug/l
Carbazole	ug/l
Carbon disulphide	ug/l
Creosote (TPH by GCFID)	ug/l
Cyclohexane	ug/l
Cyclohexanone	ug/l
Hexachlorocyclopentadiene	ug/l
Hydroquinone	ug/l
N-Nitrosodiphenylamine	ug/l
p-Chloroaniline	ug/l
Premethrin/Cypermethrin	ug/l
Pyridine	ug/l
Styrene	ug/l
Sulpholane	ug/l
Toluene Extractable Matter (Historic)	ug/l
Toxaphene	ug/l
Tributyl Tin	ug/l
Trichloromethane	ug/l
Vinyl Acetate	ug/l

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Date Sampled	181608	181609	181610	181611	181612	181613	181614
Lab Ref No							
Customer Ref No							
Sample Type	WS	WS	WS	WS	WS	WS	WS
Trial Pit / Borehole No	BH404	BH405	BH409	BH506	BH507	BH508	BH518

Vinyl Aceiate	ug/l						
BOD	mg/l						
COD	mg/l						
Dissolved Oxygen	mg/l						
Alkalinity	mg/l				601	611	
Iron (Fe ²⁺)	mg/l						
Iron (Fe ³⁺)	mg/l						

Notes

Benzo(b)fluoranthene & Benzo(k)fluoranthene co-elute (reported as sum)
² Di-benzo(a h)anthracene & Indeno(1 2 3-cd)pyrene co-elute (reported as sum)

Norwest Hoist Soil Engineering Ltd
R68474 Durham Rd Newport

Date Sampled								
Lab Ref No		181615	181616	181617	181618	181619	181620	181621
Customer Ref No								
Sample Type		WS	WS	WS	WS	WS	WS	WS
Trial Pit / Borehole No		BH519	BH520	BH521	BH522	BH523	BH524	BH526
pH	Value	9.0	9.2	8.3	8.5	8.3	8.2	8.5
TOC	mg/l							
Suspended Solids	mg/l							
Electrical Cond (µS/cm)	µS/cm							
PHENOLICS								
Butyl Phenols	ug/l							
Catechol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cresols (sum)	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5
Naphthols	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Resorcinol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trimethylphenol	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Xylenols & Ethylphenols	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Phenols	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
US EPA PRIORITY PAH s								
Acenaphthene	ug/l	<0.2	<0.2	<0.2	6.2	<0.2	<0.2	<0.2
Acenaphthylene	ug/l	<0.2	<0.2	<0.2	1.1	<0.2	1.2	0.2
Anthracene	ug/l	<0.2	<0.2	<0.2	8.9	1.3	1.8	<0.2
Benzo(a)Anthracene	ug/l	<0.2	<0.2	<0.2	33.1	12.2	20.6	<0.2
Benzo(a)pyrene	ug/l	<0.2	<0.2	<0.2	44.2	10.5	22.0	0.2
Benzo(b)fluoranthene	ug/l	<0.2	<0.2	<0.2	82.6	24.0	39.3	<0.2
Benzo(k)fluoranthene ¹	ug/l	<0.2	<0.2	<0.2	15.9	4.0	5.1	<0.2
Benzo(g,h,i)perylene	ug/l	<0.2	<0.2	<0.2	19.1	4.9	9.8	<0.2
Chrysene	ug/l	<0.2	<0.2	<0.2	34.4	16.8	19.1	<0.2
Di-benzo(a,h)anthracene	ug/l	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	0.2
Indeno(1,2,3-cd)pyrene ²	ug/l	<0.2	<0.2	<0.2	24.6	6.3	12.4	<0.2
Fluoranthene	ug/l	<0.2	<0.2	<0.2	60.7	22.2	29.3	0.2
Fluorene	ug/l	<0.2	<0.2	<0.2	6.2	<0.2	<0.2	<0.2
Naphthalene	ug/l	<0.2	<0.2	<0.2	1.0	<0.2	1.0	<0.2
Phenanthrene	ug/l	<0.2	<0.2	<0.2	37.1	5.4	8.2	<0.2
Pyrene	ug/l	<0.2	<0.2	<0.2	39.6	21.6	24.2	0.2
Total US EPA 16 PAH	ug/l	<0.2	<0.2	<0.2	414.7	129.2	194.0	<0.2
OTHER PAH s								
Anthanthrene	ug/l							
Benzo(e)pyrene	ug/l							
Cyclopenta(cd)pyrene	ug/l							
GENERAL INORGANICS								
Complex Cyanide	ug/l							
Easily Liberatable Cyanide (free)	ug/l							
Thiocyanate	ug/l							
Total Cyanide	ug/l	5	<5	<5	<5	<5	5	<5
Sulphide	ug/l	<100	<100	<100	<100	<100	100	<100
Sulphur (free)	ug/l							
Sulphate	ug/l	105184	61608	121408	56162	159736	127950	102139
Chloride	ug/l							
Phosphate	ug/l							
Exchangeable Ammonium	ug/l	2022	2080	1114	7958	3329	5328	5992
Nitrate	ug/l							
Nitrite	ug/l							

Norwest Holst Soil Engineering Ltd
R68474 Durham Rd Newport

Date Sampled	181615	181616	181617	181618	181619	181620	181621
Lab Ref No							
Customer Ref No							
Sample Type	WS	WS	WS	WS	WS	WS	WS
Trial Pit / Borehole No	BH519	BH520	BH521	BH522	BH523	BH524	BH526

HEAVY METALS/METALLOIDS

Element	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Aluminium							
Antimony							
Arsenic	19	12	<10	<10	<10	<10	<10
Barium							
Beryllium							
Boron	1585	811	358	735	521	550	559
Cadmium	<1	<1	<1	<1	<1	<1	1
Chromium (Dissolved)	<20	<20	<20	<20	<20	<20	20
Chromium (Hexavalent)							
Cobalt							
Copper	10	7	<5	6	<5	<5	5
Germanium							
Lead	20	<20	<20	<20	<20	<20	<20
Mercury	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1
Molybdenum							
Nickel	<20	<20	21	<20	<20	<20	<20
Selenium	10	10	<10	<10	<10	<10	<10
Vanadium							
Zinc	<50	<50	50	<50	<50	<50	62

ESSENTIAL ELEMENTS

Element	ug/l
Calcium	
Iron	
Magnesium	
Manganese	
Potassium	
Sodium	

MONOAROMATICS

Compound	ug/l	ug/l	ug/l
Benzene			<20
Toluene			<20
Ethylbenzene			<20
Meta & Para Xylene			20
Ortho Xylene			<20
Total Xylenes			<20

MTBE

Compound	ug/l
1,2,4-Trimethylbenzene	
1,3,5-Trimethylbenzene	

TOTAL HYDROCARBONS

Parameter	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Petroleum Range Organics (C ₆ -C ₁₀)	<20	<20	<20	<20	<20	<20	<20
Diesel Range Organics (C ₈ -C ₂₈)	100	<100	<100	<100	1201	<100	6194
Hydrocarbon Screen (GC-FID)	<100	<100	<100	<100	1602	<100	17451

VOCs

Compound	ug/l
1,1,1-Trichloroethane	
1,1,2-Tetrachloroethane	
1,1,2-Trichloro-1,2,2-trifluoroethane	
1,1,2-Trichloroethane	
1,1-Dichloroethane	
1,1-Dichloroethene	
1,2,3-Trichloropropane	
1,2,3-Trimethylbenzene	
1,2,4-Trichlorobenzene	
1,2,4-Trimethylbenzene	
1,2-Dibromo-3-Chloropropane	
1,2-Dichlorobenzene	
1,2-Dichloroethane	
1,2-Dichloropropane	
1,2-Dichloropropene	

Norwest Holst Soil Engineering Ltd
R68474 Durham Rd Newport

Date Sampled	181615	181616	181617	181618	181619	181620	181621
Lab Ref No							
Customer Ref No							
Sample Type	WS	WS	WS	WS	WS	WS	WS
Trial Pit / Borehole No	BH519	BH520	BH521	BH522	BH523	BH524	BH526
1,3,5-Trimethylbenzene	ug/l						
1,3-Dichlorobenzene	ug/l						
1,3-Dichloropropane	ug/l						
1,4-Dichlorobenzene	ug/l						
1-Chlorotoluene	ug/l						
1-Methylpropylbenzene	ug/l						
2,2-Dichloropropane	ug/l						
2-Chlorotoluene	ug/l						
Benzene	ug/l						
Bromobenzene	ug/l						
Bromochloromethane	ug/l						
Bromodichloromethane	ug/l						
Bromoform	ug/l						
Carbon Tetrachloride (PCM)	ug/l						
Chlorobenzene (sum)	ug/l						
Chlorodibromomethane	ug/l						
Chloroethane	ug/l						
Chloroform	ug/l						
cis-1,2-Dichloroethylene	ug/l						
cis-1,3-Dichloropropene	ug/l						
Dibromochloromethane	ug/l						
Dibromoethane	ug/l						
Dibromomethane	ug/l						
Dichlorobenzene	ug/l						
Dichloromethane	ug/l						
Ethylbenzene	ug/l						
Hexachlorobutadiene	ug/l						
meta & para Xylene	ug/l						
Methyl isopropylbenzene	ug/l						
Monochlorobenzene	ug/l						
Monochlorophenols (sum)	ug/l						
n-Butylbenzene	ug/l						
n-Propylbenzene	ug/l						
ortho Xylene	ug/l						
Styrene	ug/l						
tert-Butylbenzene	ug/l						
Tetrachlorobenzene	ug/l						
Tetrachloroethene (PCE)	ug/l						
Tetrahydrofuran	ug/l						
Toluene	ug/l						
trans-1,2-Dichloroethene	ug/l						
trans-1,3-dichloropropene	ug/l						
Trichloroethene (TCE)	ug/l						
Trichlorofluoromethane	ug/l						
Trichloromethane	ug/l						
Vinyl Chloride	ug/l						
SVOC s							
1,2,4-Trichlorobenzene	ug/l						
1,4-Dichlorobenzene	ug/l						
2,3,4,6-Tetrachlorophenol (sum)	ug/l						
2,4,5-Trichlorophenol	ug/l						
2,4,6-Trichlorophenol	ug/l						
2,4-Dichlorophenol (sum)	ug/l						
2,4-Dimethylphenol	ug/l						
2,4-Dinitrotoluene	ug/l						
2,6-Dimethylphenol	ug/l						
2,6-Dinitrotoluene	ug/l						
2-Chloronaphthalene	ug/l						
2-Chlorophenol (sum)	ug/l						
2-Methylphenol	ug/l						
2-Nitrophenol	ug/l						
4-Chloro-3-methylphenol	ug/l						
4-chlorobenzylphenylether	ug/l						

Norwest Holst Soil Engineering Ltd
R68474 Durham Rd Newport

Date Sampled	181615	181616	181617	181618	181619	181620	181621
Lab Ref No							
Customer Ref No							
Sample Type	WS	WS	WS	WS	WS	WS	WS
Trial Pit / Borehole No	BH519	BH520	BH521	BH522	BH523	BH524	BH526
4 Methylphenol	ug/l						
4-Nitrophenol	ug/l						
Azobenzene	ug/l						
bis(2-chloroethyl)ether	ug/l						
bis(2-chloroethoxy)methane	ug/l						
bis(chloroisopropyl)ether	ug/l						
Bromophenylphenylether	ug/l						
Hexachloro-1 3 butadiene	ug/l						
Hexachlorobenzene	ug/l						
Hexachloroethane	ug/l						
Isophorone	ug/l						
Nitrobenzene	ug/l						
n-nitrosodi-n-propyl 1 propanamine	ug/l						
Pentachlorobenzene	ug/l						
Pentachlorophenol	ug/l						
Bis(2-ethylhexyl)phthalate	ug/l						
Butylbenzylphthalate	ug/l						
Diethylphthalate	ug/l						
Dimethylphthalate	ug/l						
D n-butylphthalate	ug/l						
Di-n-octyl phthalate	ug/l						
Total Phthalates	ug/l						
ORGANO CHLORINE PESTICIDES							
Aldrin	ug/l						
Beta HCH (Beta BHC)	ug/l						
Chlordane	ug/l						
DDD	ug/l						
Dieldrin	ug/l						
Drins (total)	ug/l						
Endosulfan I	ug/l						
Endosulfan II	ug/l						
Endosulfan Sulphate	ug/l						
Endrin	ug/l						
Endrin Endrin Aldehyde	ug/l						
Gamma HCH (Lindane)	ug/l						
Heptachlor	ug/l						
Heptachlor epoxide	ug/l						
Heptachlorobenzene	ug/l						
Methoxychlor	ug/l						
pp DDE	ug/l						
pp DDT	ug/l						
pp TDE	ug/l						
ORGANO PHOSPHOROUS PESTICIDES							
Azinphos methyl	ug/l						
Demeton-s methyl	ug/l						
Diazinon	ug/l						
Dichlorvos	ug/l						
Dioxathion	ug/l						
Disulfoton	ug/l						
EPN Ethion	ug/l						
Malathion	ug/l						
Methyl Parathion	ug/l						
Parathion	ug/l						
Terbufos	ug/l						
CARBAMATE (Pesticide)							
Carbaryl	ug/l						
Carbofuran	ug/l						
Maneb	ug/l						

-Norwest Holst Soil Engineering Ltd
R68474 Durham Rd Newport

Date Sampled	181615	181616	181617	181618	181619	181620	181621
Lab Ref No							
Customer Ref No							
Sample Type	WS	WS	WS	WS	WS	WS	WS
Trial Pit / Borehole No	BH519	BH520	BH521	BH522	BH523	BH524	BH526

PHENOL UREA HERBICIDES

Chlorotoluron	ug/l
Diuron	ug/l
Isoproturon	ug/l
L. nuron	ug/l

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	ug/l
2,4-D	ug/l
Chloro-o-toloxoyacetic acid	ug/l
Dicamba	ug/l
Dichloroprop	ug/l
Mecoprop	ug/l
Silvex	ug/l

TRIAZINES

Altrazine	ug/l
Simazine	ug/l

PCB s

PCB Congener 28	ug/l	<0.05
PCB Congener 52	ug/l	<0.05
PCB Congener 101	ug/l	<0.05
PCB Congener 118	ug/l	0.50
PCB Congener 138	ug/l	1.40
PCB Congener 153	ug/l	0.70
PCB Congener 180	ug/l	0.60
Total PCB s	ug/l	23.30

ALCOHOLS

Butanol	ug/l
Ethanol	ug/l
Ethylene Glycol	ug/l
Methanol	ug/l
Propan-1-ol	ug/l
Propan-2-ol	ug/l

MISCELLANEOUS

Silver	ug/l
Tin	ug/l

1,2-Dichloropropane	ug/l
1,3-Dichloropropene	ug/l
2,4-Dinitrophenol	ug/l
Acetone	ug/l
Carbazole	ug/l
Carbon disulphide	ug/l
Creosote (TPH by GCFID)	ug/l
Cyclohexane	ug/l
Cyclohexanone	ug/l
Hexachlorocyclopentadiene	ug/l
Hydroquinone	ug/l
N-Nitrosodiphenylamine	ug/l
p-Chloroaniline	ug/l
Premethrin/Cypermethrin	ug/l
Pyridine	ug/l
Styrene	ug/l
Sulpholane	ug/l
Toluene Extractable Matter (Historic)	ug/l
Toxaphene	ug/l
Tributyl Tin	ug/l
Trichloromethane	ug/l
Vinyl Acetate	ug/l

Norwest Holst Soil Engineering Ltd
R68474 Durham Rd Newport

Date Sampled	181615	181616	181617	181618	181619	181620	181621
Lab Ref No							
Customer Ref No							
Sample Type	WS	WS	WS	WS	WS	WS	WS
Trial Pit / Borehole No	BH519	BH520	BH521	BH522	BH523	BH524	BH526

Vinyl Acetate ug/l

BOD mg/l

COD mg/l

Dissolved Oxygen mg/l

Alkalinity mg/l 489

Iron (Fe²⁺) mg/l

Iron (Fe) mg/l

Notes

Benzo(b)fluor
² D-benzo(a h)

Norwest Hoist Soil Engineering Ltd
R68474 Durham Rd Newport

Date Sampled					R68474	
Lab Ref No		181622	181623	181624	181625	AQC
Customer Ref No						Lab Std
Sample Type		WS	WS	WS	WS	
Trial Pit / Borehole No		BH528	BH529	BH530	USK (River)	
pH	Value	9.0	8.8	8.3	8.2	8.3
TOC	mg/l					
Suspended Solids	mg/l					
Electrical Cond. (µS/cm)	µS/cm				53000	518
PHENOLICS						
Butyl Phenols	ug/l					
Catechol	ug/l	<0.5	<0.5	<0.5	<0.5	
Cresols (sum)	ug/l	<0.5	<0.5	<0.5	<0.5	
Naphthols	ug/l	0.5	<0.5	<0.5	<0.5	
Phenol	ug/l	<0.5	<0.5	<0.5	<0.5	
Resorcinol	ug/l	<0.5	<0.5	<0.5	<0.5	
Trimethylphenol	ug/l	<0.5	<0.5	<0.5	<0.5	
Xylenols & Ethylphenols	ug/l	<0.5	<0.5	<0.5	<0.5	
Total Phenols	ug/l	<0.5	<0.5	<0.5	<0.5	213.0
US EPA PRIORITY PAHs						
Acenaphthene	ug/l	<0.2	<0.2	<0.2	0.2	
Acenaphthylene	ug/l	<0.2	<0.2	<0.2	<0.2	
Anthracene	ug/l	<0.2	<0.2	<0.2	0.2	
Benzo(a)Anthracene	ug/l	<0.2	<0.2	<0.2	<0.2	
Benzo(a)pyrene	ug/l	<0.2	0.2	<0.2	<0.2	
Benzo(b)fluoranthene	ug/l	<0.2	<0.2	<0.2	<0.2	
Benzo(k)fluoranthene	ug/l	<0.2	<0.2	<0.2	<0.2	
Benzo(g,h,i)perylene	ug/l	<0.2	<0.2	<0.2	<0.2	
Chrysene	ug/l	<0.2	<0.2	<0.2	<0.2	
Di-benzo(a,h)anthracene ²	ug/l	<0.2	<0.2	<0.2	<0.2	
Indeno(1,2,3-cd)pyrene ²	ug/l	<0.2	<0.2	<0.2	<0.2	
Fluoranthene	ug/l	<0.2	<0.2	<0.2	<0.2	
Fluorene	ug/l	<0.2	<0.2	<0.2	<0.2	
Naphthalene	ug/l	<0.2	<0.2	<0.2	<0.2	
Phenanthrene	ug/l	<0.2	<0.2	<0.2	<0.2	
Pyrene	ug/l	<0.2	<0.2	<0.2	<0.2	
Total US EPA 16 PAH	ug/l	<0.2	<0.2	<0.2	<0.2	
OTHER PAHs						
Anthracene	ug/l					
Benzo(e)pyrene	ug/l					
Cyclopenta(cd)pyrene	ug/l					
GENERAL INORGANICS						
Complex Cyanide	ug/l					
Easily Liberatable Cyanide (free)	ug/l					
Thiocyanate	ug/l					
Total Cyanide	ug/l	<5	<5	<5	<5	202
Sulphide	ug/l	<100	<100	<100	<100	722
Sulphur (free)	ug/l					
Sulphate	ug/l	72086	178146	1483904	2169793	104139
Chloride	ug/l					
Phosphate	ug/l					
Exchangeable Ammonium	ug/l	1658	1547	3439	<100	100680
Nitrate	ug/l					
Nitrite	ug/l					

Norwest Holst Soil Engineering Ltd
R68474 Durham Rd Newport

Date Sampled					R68474
Lab Ref No	181622	181623	181624	181625	AQC
Customer Ref No					Lab Std
Sample Type	WS	WS	WS	WS	
Trial Pit / Borehole No	BH528	BH529	BH530	USK (River)	

HEAVY METALS/METALLOIDS

Element	Unit	181622	181623	181624	181625	Lab Std
Aluminium	ug/l					
Antimony	ug/l					
Arsenic	ug/l	<10	<10	13	78	59
Barium	ug/l					
Beryllium	ug/l					
Boron	ug/l	461	1047	1049	3845	106
Cadmium	ug/l	<1	1	<1	<1	12
Chromium (Dissolved)	ug/l	<20	<20	<20	<20	56
Chromium (Hexavalent)	ug/l					
Cobalt	ug/l					
Copper	ug/l	<5	6	14	86	139
Germanium	ug/l					
Lead	ug/l	20	<20	<20	<20	36
Mercury	ug/l	<0.1	<0.1	<0.1	<0.1	6.2
Molybdenum	ug/l					
Nickel	ug/l	<20	<20	<20	<20	49
Selenium	ug/l	<10	<10	<10	<10	40
Vanadium	ug/l					
Zinc	ug/l	<50	<50	77	99	393

ESSENTIAL ELEMENTS

Calcium	ug/l
Iron	ug/l
Magnesium	ug/l
Manganese	ug/l
Potassium	ug/l
Sodium	ug/l

MONOAROMATICS

Benzene	ug/l
Toluene	ug/l
Ethylbenzene	ug/l
Meta & Para Xylene	ug/l
Ortho Xylene	ug/l

Total Xylenes ug/l

MTBE	ug/l
1,2,4-Trimethylbenzene	ug/l
1,3,5-Trimethylbenzene	ug/l

TOTAL HYDROCARBONS

Petroleum Range Organics (C ₆ - C ₁₀)	ug/l	<20	<20	<20	<20
Diesel Range Organics (C ₈ - C ₂₆)	ug/l	772	<100	<100	<100
Hydrocarbon Screen (GC-FID)	ug/l	1024	<100	<100	<100

VOCs

1,1,1-Trichloroethane	ug/l
1,1,2-Tetrachloroethane	ug/l
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l
1,1,2-Trichloroethane	ug/l
1,1-Dichloroethane	ug/l
1,1-Dichloroethene	ug/l
1,2,3-Trichloropropane	ug/l
1,2,3-Trimethylbenzene	ug/l
1,2,4-Trichlorobenzene	ug/l
1,2,4-Trimethylbenzene	ug/l
1,2-Dibromo-3-Chloropropane	ug/l
1,2-Dichlorobenzene	ug/l
1,2-Dichloroethane	ug/l
1,2-Dichloropropane	ug/l
1,2-Dichloropropene	ug/l

Norwest Holst Soil Engineering Ltd
R68474 Durham Rd Newport

Date Sampled					R68474
Lab Ref No	181622	181623	181624	181625	AQC
Customer Ref No					Lab Std
Sample Type	WS	WS	WS	WS	
Trial Pit / Borehole No	BH528	BH529	BH530	USK (River)	

1,3,5-Trimethylbenzene	ug/l
1,3-Dichlorobenzene	ug/l
1,3-Dichloropropane	ug/l
1,4-Dichlorobenzene	ug/l
1-Chlorotoluene	ug/l
1-Methylpropylbenzene	ug/l
2,2-Dichloropropane	ug/l
2-Chlorotoluene	ug/l
Benzene	ug/l
Bromobenzene	ug/l
Bromochloromethane	ug/l
Bromodichloromethane	ug/l
Bromoform	ug/l
Carbon Tetrachloride (PCM)	ug/l
Chlorobenzene (sum)	ug/l
Chlorodibromomethane	ug/l
Chloroethane	ug/l
Chloroform	ug/l
cis-1,2-Dichloroethylene	ug/l
cis-1,3-Dichloropropene	ug/l
Dibromochloromethane	ug/l
Dibromoethane	ug/l
Dibromomethane	ug/l
Dichlorobenzene	ug/l
Dichloromethane	ug/l
Ethylbenzene	ug/l
Hexachlorobutadiene	ug/l
meta & para Xylene	ug/l
Methyl isopropylbenzene	ug/l
Monochlorobenzene	ug/l
Monochlorophenols (sum)	ug/l
n-Butylbenzene	ug/l
n-Propylbenzene	ug/l
ortho Xylene	ug/l
Styrene	ug/l
tert-Butylbenzene	ug/l
Tetrachlorobenzene	ug/l
Tetrachloroethene (PCE)	ug/l
Tetrahydrofuran	ug/l
Toluene	ug/l
trans-1,2-Dichloroethene	ug/l
trans-1,3-dichloropropene	ug/l
Trichloroethene (TCE)	ug/l
Trichlorofluoromethane	ug/l
Trichloromethane	ug/l
Vinyl Chloride	ug/l

SVOC s

1,2,4-Trichlorobenzene	ug/l
1,4-Dichlorobenzene	ug/l
2,3,4,6-Tetrachlorophenol (sum)	ug/l
2,4,5-Trichlorophenol	ug/l
2,4,6-Trichlorophenol	ug/l
2,4-Dichlorophenol (sum)	ug/l
2,4-Dimethylphenol	ug/l
2,4-Dinitrotoluene	ug/l
2,6-Dimethylphenol	ug/l
2,6-Dinitrotoluene	ug/l
2-Chloronaphthalene	ug/l
2-Chlorophenol (sum)	ug/l
2-Methylphenol	ug/l
2-Nitrophenol	ug/l
4-Chloro-3-methylphenol	ug/l
4-chlorobenzylphenylether	ug/l

Norwest Holst Soil Engineering Ltd
R68474 Durham Rd Newport

Date Sampled					R68474
Lab Ref No	181622	181623	181624	181625	AQC
Customer Ref No					Lab Std
Sample Type	WS	WS	WS	WS	
Trial Pit / Borehole No	BH528	BH529	BH530	USK (River)	

4 Methylphenol	ug/l
4 Nitrophenol	ug/l
Azobenzene	ug/l
bis(2-chloroethyl)ether	ug/l
bis(2-chloroethoxy)methane	ug/l
bis(chloro isopropyl)ether	ug/l
Bromophenylphenylether	ug/l
Hexachloro-1 3 butadiene	ug/l
Hexachlorobenzene	ug/l
Hexachloroethane	ug/l
Isophorone	ug/l
Nitrobenzene	ug/l
n-nitrosodi-n-propyl 1 propanamine	ug/l
Pentachlorobenzene	ug/l
Pentachlorophenol	ug/l

Bis(2-ethylhexyl)phthalate	ug/l
Butylbenzylphthalate	ug/l
Diethylphthalate	ug/l
Dimethylphthalate	ug/l
Di-n-butylphthalate	ug/l
Di-n-octyl phthalate	ug/l

Total Phthalates	ug/l
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ORGANO CHLORINE PESTICIDES

Aldrin	ug/l
Beta HCH (Beta BHC)	ug/l
Chlordane	ug/l
DDD	ug/l
Dieldrin	ug/l
Drins (total)	ug/l
Endosulfan I	ug/l
Endosulfan II	ug/l
Endosulfan Sulphate	ug/l
Endrin	ug/l
Endrin Endrin Aldehyde	ug/l
Gamma HCH (Lindane)	ug/l
Heptachlor	ug/l
Heptachlor epoxide	ug/l
Heptachlor oberzene	ug/l
Methoxychlor	ug/l
pp DDE	ug/l
pp DDT	ug/l
pp TDE	ug/l

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	ug/l
Demeton-s methyl	ug/l
Diazinon	ug/l
D chlorvos	ug/l
D oxathion	ug/l
Disulfoton	ug/l
EPN Ethion	ug/l
Malathion	ug/l
Methyl Parathion	ug/l
Parathion	ug/l
Terbufos	ug/l

CARBAMATE (Pesticide)

Carbaryl	ug/l
Carbofuran	ug/l
Maneb	ug/l

Norwest Holst Soil Engineering Ltd
R68474 Durham Rd Newport

Date Sampled					R68474
Lab Ref No	181622	181623	181624	181625	AQC
Customer Ref No					Lab Std
Sample Type	WS	WS	WS	WS	
Trial Pit / Borehole No	BH528	BH529	BH530	USK (River)	

PHENOL UREA HERBICIDES

Chlorotoluron	ug/l
Diuron	ug/l
Isoproturon	ug/l
Linuron	ug/l

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5-T	ug/l
2 4-D	ug/l
Chloro-o-tolxyoxyacetic acid	ug/l
Dicamba	ug/l
Dichloroprop	ug/l
Mecoprop	ug/l
Si ex	ug/l

TRIAZINES

Altrazine	ug/l
Simazine	ug/l

PCB s

PCB Congener 28	ug/l
PCB Congener 52	ug/l
PCB Congener 101	ug/l
PCB Congener 118	ug/l
PCB Congener 138	ug/l
PCB Congener 153	ug/l
PCB Congener 180	ug/l

Total PCB s	ug/l
-------------	------

342.20

ALCOHOLS

Butanol	ug/l
Ethanol	ug/l
Ethylene Glycol	ug/l
Methanol	ug/l
Propan-1-ol	ug/l
Propan-2-ol	ug/l

MISCELLANEOUS

Silver	ug/l
Tin	ug/l

1 2 Dichloropropane	ug/l
1 3 Dichloropropene	ug/l
2 4 Dinitrophenol	ug/l
Acetone	ug/l
Carbazole	ug/l
Carbon disulphide	ug/l
Creosote (TPH by GCFID)	ug/l
Cyclohexane	ug/l
Cyclohexanone	ug/l
Hexachlorocyclopentadiene	ug/l
Hydroquinone	ug/l
N-Nitrosodiphenylamine	ug/l
p-Chloroaniline	ug/l
Premethrin/Cypermethrin	ug/l
Pyridine	ug/l
Styrene	ug/l
Sulpholane	ug/l
Toluene Extractable Matter (H stonc)	ug/l
Toxaphene	ug/l
Tnbutyl Tin	ug/l
Trichloromethane	ug/l
Vinyl Acetate	ug/l

Norwest Holst Soil Engineering Ltd
R68474 Durham Rd Newport

Date Sampled	181622	181623	181624	181625	R68474
Lab Ref No					AQC
Customer Ref No					Lab Std
Sample Type	WS	WS	WS	WS	
Trial Pit / Borehole No	BH528	BH529	BH530	USK (River)	
Vinyl Acetate	ug/l				
BOD	mg/l			6	
COD	mg/l			104	
Dissolved Oxygen	mg/l			10.0	
Alkalinity	mg/l				
Iron (Fe ²⁺)	mg/l			<10	
Iron (Fe ³⁺)	mg/l			<10	

Notes
 Benzo(b)fluor
 2 Di-benzo(a,h)

ENVIRONMENTAL ANALYSIS LABORATORIES

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 Tel 01424 444433 Fax 01424 442299 Info@environmentalanalysis.com

ANALYTICAL REPORT No R68474

Location Durham Rd Newport

Your Project No F13041

Reporting Date 20/10/03

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
 Leeds LS11 5SX

Waters

	TP/BH Our ref	BH507 181612	BH508 181613	BH521 181617
<u>Aromatic</u>				
C ₅ C ₇	(µg/l) N	<100	<100	<100
>C ₇ C ₈	(µg/l) N	<100	<100	<100
>C ₈ C ₁₀	(µg/l) N	<100	<100	<100
>C ₁₀ C ₁₂	(µg/l) N	<100	<100	<100
>C ₁₂ C ₁₆	(µg/l) N	<100	<100	<100
>C ₁₆ C ₂₁	(µg/l) N	<100	<100	<100
>C ₂₁ C ₃₅	(µg/l) N	<100	<100	<100
<u>Aliphatic</u>				
C ₅ C ₈	(µg/l) N	<100	<100	<100
>C ₆ C ₈	(µg/l) N	<100	<100	<100
>C ₈ C ₁₀	(µg/l) N	<100	<100	<100
>C ₁₀ C ₁₂	(µg/l) N	<100	<100	<100
>C ₁₂ C ₁₆	(µg/l) N	<100	<100	<100
>C ₁₆ C ₂₁	(µg/l) N	<100	<100	<100
>C ₂₁ C ₃₄	(µg/l) N	<100	<100	<100

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t - not tested

M/B

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Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 11/10/03

ANALYTICAL REPORT No R68324

Location Durham Rd Newport

Your Project No F13041

The attached analytical results relate to samples received on 26 Sep 2003

The report is only valid if it contains the total number of pages indicated at the bottom of this page

Checked by

Authonsed by

If you have any quenes regarding this report please contact Steve Chapman or Steve Knight

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Registered Office Parkside Lane Dewsbury R ad Leeds LS11 5SX



Norwest Holst Soil Engineering Ltd
R68324 Durham Rd Newport

	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03
Dat S mpl d	180498	180499	180500	180501	180503	180504	180505	180506	180507
Lab R f N	3	6	10	13	3	6	10	3	7
C t me R f N	ES	ES	ES	ES	ES	ES	ES	ES	ES
S mpl Typ	TP625	TP625	TP625	TP625	TP645	TP645	TP645	TP646	TP646
Tri l Pit / Bo h l N	0.40	1.40	2.40	2.60	0.80	1.80	2.40	0.30	1.30
D pth (m)									
H dsta d g at S rf (Y/N)									

pH	Value	7.7		8.0		8.1			
/ L lg it	%								
/ M t	%								
% St	/								
Asb t	%	0.001				0.001		0.001	

PHENOLICS

Butyl Ph l	mg/kg								
Cat ch l	mg/kg	0.5		0.5		0.5		0.5	
Cre l (um)	mg/kg	0.5		0.5		0.5		0.5	
N phth l	mg/kg	0.5		0.5		0.5		0.5	
Phe l	mg/kg	0.5		0.5		0.5		0.5	
Res rc l	mg/kg	<0.5		0.5		0.5		0.5	
T methylphenol	mg/kg	0.5		0.5		0.5		0.5	
Xyl nol & Ethylphenol	mg/kg	0.5		0.5		0.5		0.5	
Tot l Ph ol	mg/kg	0.5		0.5		0.5		<0.5	

US EPA PRIORITY PAH

Ace phth ne	mg/kg	7.7		18.9		0.5			
Acen phthyl ne	mg/kg	5.2		11.9		0.5			
A thra ne	mg/kg	27.9		51.3		2.0			
Benz ()Anth cene	mg/kg	31.3		134.7		36.9			
Benz ()py	mg/kg	62.2		164.9		119.0			
Benz (b)fl ranthene	mg/kg								
Benzo(k)fl ranthene	mg/kg	25.1		83.5		61.2			
Benzo(g h)perylene	mg/kg	4.4		32.4		30.4			
Chrysene	mg/kg	19.6		110.1		25.9			
D-benzo(h)n thracene ⁻²	mg/kg								
l d no(1,2,3-cd)pyr ⁻²	mg/kg	4.2		37.0		25.4			
Fl ranthe	mg/kg	77.1		230.8		15.5			
Fl ne	mg/kg	15.9		35.6		3.0			
N phthal ne	mg/kg	15.1		15.3		0.5			
Ph nth ne	mg/kg	88.1		231.5		2.5			
Pyr ne	mg/kg	68.2		192.0		19.7			
T t l US EPA 16 PAH	mg/kg	452.0		1349.9		341.5			

OTHER PAH

A tha thr ne	mg/kg								
Benzo()pyrene	mg/kg								
Cycl pe t (cd)pyrene	mg/kg								

GENERAL INORGANICS

Compl Cya id	mg/kg								
Easily Liberatabl Cya id (free)	mg/kg								
Th ocyanat	mg/kg								
Total Cyanid	mg/kg	1		1		1			
S lph d	mg/kg	2		2		2			
Sulphur (free)	mg/kg	2070		2810		420			
Total Sulphat	mg/kg	4200		3900		100			
W t Sol bl S lphate	mg/kg	1960		1980					
Wate S l bi Chlo d	mg/kg								
Ph phat	mg/kg								
Ex h ng bl Ammo um	mg/kg	10.9		15.4		7.0			
Nitrat	mg/kg								
Nitrit	mg/kg								

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D t S mpled	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03
Lab R f N	180498	180499	180500	180501	180503	180504	180505	180506	180507
C st m Ref N	3	6	10	13	3	6	10	3	7
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tri l Pit / B h l N	TP625	TP625	TP625	TP625	TP645	TP645	TP645	TP646	TP646
Depth (m)	0.40	1.40	2.40	2.60	0.80	1.80	2.40	0.30	1.30
H dst d i g at S rfa (Y/N)									

HEAVY METALS/METALLOIDS

Al m m	mg/kg								
A tm ny	mg/kg								
Ars i	mg/kg	79.6				60.5		5	
Ba m	mg/kg								
B ryl um	mg/kg								
Bo o (W t S l bl)	mg/kg	13.3				5.0		0.5	
Cadm m	mg/kg	1.7				1.2		0.5	
Chrom m (T tal)	mg/kg	39				32		15	
Chrom m (H l nt)	mg/kg	2				2			
Cob lt	mg/kg								
Copper	mg/kg	224				348		21	
Germ m	mg/kg								
Lead	mg/kg	513				598		20	
M rcury	mg/kg	5.6				0.9		0.5	
M lybd m	mg/kg								
N k l	mg/kg	64				56		13	
Selen m	mg/kg	2.5				2.7		0.5	
V ad m	mg/kg								
Zi	mg/kg	687				4.9		32	

ESSENTIAL ELEMENTS

Caici m	mg/kg								
Iro	mg/kg								
M gne m	mg/kg								
M g nes	mg/kg								
Potas m	mg/kg								
Sod m	mg/kg								

MONOAROMATICS

Benzene	mg/kg					0.2			
T luene	mg/kg					0.2			
Ethylbenz	mg/kg					0.2			
Meta & P ra Xyl	mg/kg					0.2			
Ortho Xyl ne	mg/kg					0.2			
T t l Xyl es	mg/kg					<0.2			
MTBE	mg/kg								
1,2,4-T methylbenzene	mg/kg								
1,3,5-Trimethylbenzen	mg/kg								

TOTAL HYDROCARBONS

P lrol m R g Orga cs (C ₇ -C ₉)	mg/kg	5						5	
Des l Range Orga cs (C ₈ -C ₂₈)	mg/kg	434						191	
Hydrocarbo Scree (GC-FID)	mg/kg	1135						882	

VOC

1,1,1-T h l roethane	mg/kg								
1,1,2,2-T rachi roethane	mg/kg								
1,1,2-T hloro-1,2,2-t l l roeth ne	mg/kg								
1,1,2-Tri h l roethane	mg/kg								
1,1-Di hloroethane	mg/kg								
1,1-Dichl roethe	mg/kg								
1,2,3-T hloropropane	mg/kg								
1,2,3-Tn methylbenzene	mg/kg								
1,2,4-T chl robenze e	mg/kg								
1,2,4-T methylbenzene	mg/kg								
1,2-Dibromo-3-Chl ropropane	mg/kg								
1,2-Di h l robenz ne	mg/kg								
1,2-Dichloroethane	mg/kg								
1,2-D chloropropane	mg/kg								
1,2-D h l ropropene	mg/kg								
1,3,5-Tn methylbenzene	mg/kg								
1,3-Dichl benz ne	mg/kg								

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D t S mpl d	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03
Lab R f N	180498	180499	180500	180501	180503	180504	180505	180506	180507
C st m Ref N	3	6	10	13	3	6	10	3	7
S mpl Typ	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tri I PIt / B hol N	TP625	TP625	TP625	TP625	TP645	TP645	TP645	TP646	TP646
D pth (m)	0.40	1.40	2.40	2.60	0.80	1.80	2.40	0.30	1.30
H detandi g at S rf (Y/N)									

1,3-Di hl ropropa	mg/kg
1,4-D hl b nzene	mg/kg
1-Chl rot l	mg/kg
1-M thylpropylbenzene	mg/kg
2,2-D hl prop ne	mg/kg
2-Chl rot l	mg/kg
B nzene	mg/kg
Brom benze	mg/kg
B mochil rom tha	mg/kg
Bromod hl m th	mg/kg
Brom f rm	mg/kg
Carbo T trachi d (PCM)	mg/kg
Chl robenze (m)	mg/kg
Chl rodib m m thane	mg/kg
Chl roethane	mg/kg
Chl rof rm	mg/kg
s-1,2-Di hl oethyl ne	mg/kg
ci 1,3-Di hl prope	mg/kg
Dibromochl rom thane	mg/kg
D bromoethane	mg/kg
Dibrom m tha	mg/kg
D hl robenze	mg/kg
D hl methane	mg/kg
Ethylbenzene	mg/kg
H xa hl robutad ene	mg/kg
meta & para Xyl	mg/kg
M thyl i propylbenzene	mg/kg
Mo chlor benze	mg/kg
Monochl rophe ol (m)	mg/kg
Butylbenzen	mg/kg
Propylbenzene	mg/kg
ortho Xyl ne	mg/kg
Styrene	mg/kg
t ri Butylbenzen	mg/kg
T tra hlorobenzene	mg/kg
T trachi roethe (PCE)	mg/kg
Tetrahydrofu	mg/kg
Tol	mg/kg
tra s-1,2-Dichloroethe	mg/kg
trans 1,3-d hloropropene	mg/kg
T hl roeth ne (TCE)	mg/kg
T chl ofluorom th ne	mg/kg
T chio ometha	mg/kg
Vnyl Chl d	mg/kg

SVOC	
1,2,4-T hlo benze	mg/kg
1,4-D hl benz ne	mg/kg
2,3,4,6-T trachlorophe ol (um)	mg/kg
2,4,5-Trchloroph ol	mg/kg
2,4,6-Trchlorophenol	mg/kg
2,4-Dichl rophe l (um)	mg/kg
2,4-D m thylphe ol	mg/kg
2,4-D ltrotoluene	mg/kg
2,6-Dim thylphenol	mg/kg
2,6-D ltrotol ene	mg/kg
2-Chl ronaphthal ne	mg/kg
2-Chlorophen l (um)	mg/kg
2-Methylph nol	mg/kg
2-Nitrophenol	mg/kg
4-Chloro-3-m thylphenol	mg/kg
4-chl robenzylphenylether	mg/kg
4-Methylphenol	mg/kg
4-Nitrophenol	mg/kg
Azobenzen	mg/kg
b (2-chlo oethyl)eth	mg/kg

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D t S mpl d	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03
Lab R f N	180498	180499	180500	180501	180503	180504	180505	180506	180507
C st m R f N	3	6	10	13	3	6	10	3	7
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES
Tri l Pit/ B h l N	TP625	TP625	TP625	TP625	TP645	TP645	TP645	TP646	TP646
D pth (m)	0.40	1.40	2.40	2.60	0.80	1.80	2.40	0.30	1.30
H d ta d g t S r f ce (Y/N)									

b (2-chloroxy)methane	mg/kg
b (chloropropyl)ether	mg/kg
Bisphenol A	mg/kg
Hexachloro-1,3-butadiene	mg/kg
Hexachlorobenzene	mg/kg
Hexachlorocyclopentadiene	mg/kg
Isophthalic acid	mg/kg
Nitrobenzene	mg/kg
n-tetradecyl n-propyl phosphoramide	mg/kg
Phthalic acid	mg/kg
Phthalic anhydride	mg/kg

Bis(2-ethylhexyl)phthalate	mg/kg
Butylbenzylphthalate	mg/kg
Dibutylphthalate	mg/kg
Dimethylphthalate	mg/kg
Dodecylphthalate	mg/kg
Dioctylphthalate	mg/kg

Total Phthalates	mg/kg
------------------	-------

ORGANO CHLORINE PESTICIDES

Aldrin	mg/kg
Beta HCH (Beta BHC)	mg/kg
Chlordane	mg/kg
DDD	mg/kg
Dieldrin	mg/kg
Ditelluride	mg/kg
Endosulfan I	mg/kg
Endosulfan II	mg/kg
Endosulfan Siphate	mg/kg
Endrin	mg/kg
Endrin Aldrin hyd	mg/kg
Gamma HCH (Lindane)	mg/kg
Heptachlor	mg/kg
Heptachlor epoxide	mg/kg
Heptachlor benzene	mg/kg
Methoxychlor	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	mg/kg
Demeton-methyl	mg/kg
Diazinon	mg/kg
Dichlorvos	mg/kg
Disulfoton	mg/kg
Difluthion	mg/kg
EPN Ethion	mg/kg
Methidathion	mg/kg
Methylphosphorothioic acid	mg/kg
Phosphorothioic acid	mg/kg
Tebufos	mg/kg

CARBAMATE (Pesticides)

Carbaryl	mg/kg
Carbofuran	mg/kg
Maneb	mg/kg

PHENOL UREA HERBICIDES

Chlorotoluron	mg/kg
Diflufenican	mg/kg
Isoproturon	mg/kg
Linuron	mg/kg

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	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03
D t S mpl d									
Lab R f No	180498	180499	180500	180501	180503	180504	180505	180506	180507
C st m R f N	3	6	10	13	3	6	10	3	7
S mpl Type	ES	ES	ES	ES	ES	ES	ES	ES	ES
Trn l Pit / Bo hol N	TP625	TP625	TP625	TP625	TP645	TP645	TP645	TP646	TP646
D pth (m)	0.40	1.40	2.40	2.60	0.80	1.80	2.40	0.30	1.30
H d ta d g t S rt (Y/N)									

CHLOROPHENOXY ACIDIC HERBICIDES

2,4,5-T	mg/kg
2,4-D	mg/kg
Chl ro-o-t lyl xya t d	mg/kg
D camb	mg/kg
Di hloroprop	mg/kg
Mec p p	mg/kg
SI	mg/kg

TRIAZINES

Altrazine	mg/kg
S mazi	mg/kg

PCB

PCB Co g 28	mg/kg
PCB Co g 52	mg/kg
PCB Co g ne 101	mg/kg
PCB Co g ne 118	mg/kg
PCB Co ge 138	mg/kg
PCB Cong 153	mg/kg
PCB Congene 180	mg/kg

Total PCB	mg/kg
-----------	-------

ALCOHOLS

Buta l	mg/kg
Eth nol	mg/kg
Ethyl Gly ol	mg/kg
M thanol	mg/kg
P p 1-ol	mg/kg
Pr pa 2-ol	mg/kg

MISCELLANEOUS

Calorif V lue	Cal/g
---------------	-------

Si	mg/kg
T	mg/kg

1,2-Dichl rop p	mg/kg
1,3-Di hlorop opene	mg/kg
2,4-D itrophenol	mg/kg
A et ne	mg/kg
Carbazol	mg/kg
Carbo dis lph d	mg/kg
Creo ote (TPH by GCFID)	mg/kg
Cycl h xa e	mg/kg
Cyclohe	mg/kg
H xa hlorocycl pentad en	mg/kg
Hyd oq no	mg/kg
N Nitrosod ph yl m ne	mg/kg
p-Chl ro nili	mg/kg
Premeth n/Cypermeth	mg/kg
Pyrid ne	mg/kg
Styrene	mg/kg
S lphol ne	mg/kg
T luene Extractabl M tie (Histo)	mg/kg
Toxaphene	mg/kg
T butyl Tin	mg/kg
T chl rom th	mg/kg
Vi yl Acet t	mg/kg

CONCRETE

Chlonde BS1377 Part 3 nclud g p parati	mg/kg
HAC (R pid det m nat of H gh Al m na Ceme	mg/kg
M Proport on Cement/Aggreg te Ratio-BS1881	mg/kg

Organic Matte	%	8.3
---------------	---	-----

PID	ppm	1	1	1	1	1	1	1	1
-----	-----	---	---	---	---	---	---	---	---

Notes

- Benzo(b)fluoranthene & Benzo(k)fluoranthene co-elute (reported as um)
- ** Di-benzo(h)anthracene & Indeno(1,2,3-cd)pyrene co-elute (reported as um)
- Labelled 0.80m
- ** Labelled 1.80m

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	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	R68324
D t S mpl d	180508	180508	180510	180511	180512	180513	180514	AQC
Lab R f N	10	3	6	9	3	6	9	Lab Std
C st m R f N	ES	ES	ES	ES	ES	ES	ES	
S mpl Type	TP646	TP665	TP665	TP665	TP666	TP666	TP666	
T i l Pit / B h i N	2.30	*0.40	**1.40	2.30	0.40	1.40	2.30	
D pth (m)								
H d t d g at S rf ce (Y/N)								
pH	Val	8.2				7.7		7.3
/ L ignit	%							
/ M t	%							
/ St nes	/							
Asbe t	%	0.001				0.001		
PHENOLICS								
Butyl Ph l	mg/kg							
C tech l	mg/kg	0.5				0.5		
Cres l (m)	mg/kg	0.5				0.5		
N phthol	mg/kg	0.5				0.5		
Phe l	mg/kg	0.5				0.5		
R sarc nol	mg/kg	0.5				0.5		
T m thyph nol	mg/kg	0.5				0.5		
Xyl i & Ethylphe l	mg/kg	0.5				<0.5		
T tal Ph l	mg/kg	0.5				<0.5		0.303
US EPA PRIORITY PAH								
A naphthe	mg/kg	5.9				0.5		
Ac naphthyle	mg/kg	2.9				0.5		
A thra	mg/kg	27.4				0.5		
Benzo()Anthracene	mg/kg	138.8				0.5		
B nzo()pyre	mg/kg	201.0				0.5		
B nzo(b)fluora thene	mg/kg							
B nzo(k)fl ra the e	mg/kg	102.4				<0.5		
Benzo(g h)peryl	mg/kg	37.7				0.5		
Chry	mg/kg	96.3				0.5		
Di b zo(h)antra ne ⁺²	mg/kg							
I d (1,2,3-cd)pyr ne ⁺²	mg/kg	44.5				0.5		
Fl ra then	mg/kg	164.2				0.5		
Fl ne	mg/kg	13.5				<0.5		
N phth lene	mg/kg	4.0				0.5		
Phen thre	mg/kg	114.0				0.5		
Pyre	mg/kg	130.9				0.5		
T t l US EPA 16 PAH	mg/kg	1083.5				0.5		3106.6
OTHER PAH								
Anth threne	mg/kg							
Benzo()pyr ne	mg/kg							
Cycl pe ta(d)pyr ene	mg/kg							
GENERAL INORGANICS								
Compl Cy d	mg/kg							
Ea ily L be t bi Cya d (fee)	mg/kg							
Thocy t	mg/kg							
T tal Cya d	mg/kg	1				1		1.9
Sulph d	mg/kg	2				2		0.7
S lph (free)	mg/kg	2260				130		670
Total S lphat	mg/kg	200				2000		6000
W t Sol bi S lphate	mg/kg							636
W t Sol ble Chl d	mg/kg							
Ph phate	mg/kg							
Ex hange bi Amm n m	mg/kg	7.7				25.0		148.5
N trat	mg/kg							
Nitrt	mg/kg							

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	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	R68324
Det S mpl d	180508	180509	180510	180511	180512	180513	180514	AQC
Lab Ref N	10	3	6	9	3	6	9	Lab Std
C st m R f N	ES	ES	ES	ES	ES	ES	ES	
S mpl Typ	TP646	TP665	TP665	TP665	TP666	TP666	TP666	
T l P t / B h i N	2.30	0.40	**1.40	2.30	0.40	1.40	2.30	
D pth (m)								
H d ta d g at S rface (Y/N)								

HEAVY METALS/METALLOIDS

Al m m	mg/kg							
A t m y	mg/kg							
Ar	mg/kg	31.8				87.3		20.5
B m	mg/kg							
B ryl m	mg/kg							
Bo (W t S i bl)	mg/kg	0.6				2.8		2.4
Cadm m	mg/kg	1.2				2.1		2.2
Chrom m (T tal)	mg/kg	22				40		24.7
Ch m m (H al nt)	mg/kg					2		11
Cob lt	mg/kg							
Coppe	mg/kg	62				437		76
Germa m	mg/kg							
L d	mg/kg	207				750		169
M rc ry	mg/kg	0.5				0.5		1.4
M lybd m	mg/kg							
N k l	mg/kg	26				95		38
S i m	mg/kg	0.8				3.3		1.5
V d m	mg/kg							
Zi	mg/kg	217				558		131

ESSENTIAL ELEMENTS

Cal m	mg/kg							
Iro	mg/kg							
M g m	mg/kg							
M g se	mg/kg							
P tas m	mg/kg							
Sod m	mg/kg							

MONOAROMATICS

Benz ne	mg/kg							
T i ne	mg/kg							
Ethylbenz	mg/kg							
M ta & P ra Xyl	mg/kg							
Orth Xyl	mg/kg							

T tal Xyl	mg/kg							
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MTBE	mg/kg							
1 2 4-T m thylbenz ne	mg/kg							
1 3 5-T methylbenz ne	mg/kg							

TOTAL HYDROCARBONS

P trol m R ge Orga cs (C ₇ -C ₁)	mg/kg	5				5		
D l R nge Org nics (C ₈ -C ₂₆)	mg/kg	1865				20		
Hyd carbo Scree (GC-FID)	mg/kg	5227				68		

VOC

1 1 1 T hl roethane	mg/kg							
1 1 2 T tra hl roethane	mg/kg							
1 1 2 Trichlo o-1 2 2 trfl oroethane	mg/kg							
1 1 2 T hl roethane	mg/kg							
1 1 D hl roethane	mg/kg							
1 1 Dichloroethen	mg/kg							
1 2 3-Trichl rop propane	mg/kg							
1 2 3-T m thylbenzene	mg/kg							
1 2 4-Trichlorobenze	mg/kg							
1 2 4-T m thylbenzene	mg/kg							
1 2 Dibromo-3-Chi rop propa	mg/kg							
1 2 Dichl obenzen	mg/kg							
1 2 Dichl roetha	mg/kg							
1 2-Dichl rop propane	mg/kg							
1 2 Dichloropropene	mg/kg							
1 3 5-T m thylbenz ne	mg/kg							
1 3-Dichl robenzene	mg/kg							

Norwest Holst Soil Engineering Ltd
R68324 Durham Rd Newport

Dat S mpl d	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	R68324
Lab R f N	180508	180509	180510	180511	180512	180513	180514	AQC
C st m R f N	10	3	6	9	3	6	9	Lab Std
S mpl Type	ES	ES	ES	ES	ES	ES	ES	
T i l Pnt / B h l N	TP646	TP665	TP665	TP665	TP666	TP666	TP666	
D pth (m)	2.30	0.40	**1.40	2.30	0.40	1.40	2.30	
H d ta d g t S rf (Y/N)								

1,3-Dichloropropane	mg/kg
1,4-Dichlorobenzene	mg/kg
1-Chlorobenzene	mg/kg
1-Methylpropylbenzene	mg/kg
2,2-Dichloropropane	mg/kg
2-Chlorotoluene	mg/kg
Benzene	mg/kg
Bromobenzene	mg/kg
Bromochlorobenzene	mg/kg
Bromodichlorobenzene	mg/kg
Bromofluorobenzene	mg/kg
Carbon tetrachloride (PCM)	mg/kg
Chlorobenzene (m)	mg/kg
Chlorobromomethane	mg/kg
Chloroethane	mg/kg
Chloroform	mg/kg
1,2-Dichloroethane	mg/kg
1,3-Dichloropropane	mg/kg
Dibromochloromethane	mg/kg
Dibromoethane	mg/kg
Dibromomethane	mg/kg
Dichlorobenzene	mg/kg
Dichloromethane	mg/kg
Ethylbenzene	mg/kg
Hexachlorobutadiene	mg/kg
m,p-Dichlorobenzene	mg/kg
Methylpropylbenzene	mg/kg
Monochlorobenzene	mg/kg
Monochlorobenzene (m)	mg/kg
Butylbenzene	mg/kg
Propylbenzene	mg/kg
o-Xylene	mg/kg
Styrene	mg/kg
tert-Butylbenzene	mg/kg
Tetrahydrobenzene	mg/kg
Tetrachloroethane (PCE)	mg/kg
Tetrahydrofuran	mg/kg
Toluene	mg/kg
trans-1,2-Dichloroethane	mg/kg
trans-1,3-Dichloropropane	mg/kg
Trichloroethene (TCE)	mg/kg
Trichlorofluoromethane	mg/kg
Trichloromethane	mg/kg
Vinyl Chloride	mg/kg

SVOC	
1,2,4-Trichlorobenzene	mg/kg
1,4-Dichlorobenzene	mg/kg
2,3,4-Trichlorobenzene (m)	mg/kg
2,4,5-Trichlorophenol	mg/kg
2,4,6-Trichlorophenol	mg/kg
2,4-Dichlorophenol (m)	mg/kg
2,4-Dimethylphenol	mg/kg
2,4-Dinitrotoluene	mg/kg
2,6-Dimethylphenol	mg/kg
2,6-Dinitrotoluene	mg/kg
2-Chloronaphthalene	mg/kg
2-Chlorophenol (m)	mg/kg
2-Methylphenol	mg/kg
2-Nitrophenol	mg/kg
4-Chloro-3-methylphenol	mg/kg
4-Chlorobenzophenone	mg/kg
4-Methylphenol	mg/kg
4-Nitrophenol	mg/kg
Azobenzene	mg/kg
bis(2-chloroethyl)ether	mg/kg

Norwest Holst Soil Engineering Ltd
R68324 Durham Rd Newport

	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	R68324
Dat S mpl d	180508	180509	180510	180511	180512	180513	180514	AQC
Lab R f N	10	3	6	9	3	6	9	Lab Std
C t m R f N	ES	ES	ES	ES	ES	ES	ES	
S mpl Typ	TP646	TP665	TP665	TP665	TP666	TP666	TP666	
T l Pht / B hol N	2 30	0 40	**1 40	2 30	0 40	1 40	2 30	
D pth (m)								
H dsta dl gat S rf (Y/N)								

bi (2-chl oethy y)metha	mg/kg
b (hl ro propyl)eth	mg/kg
B m phe yph yleth	mg/kg
H hl o-1 3-butad	mg/kg
H chl benze	mg/kg
H hl oeth	mg/kg
I phor	mg/kg
Nitrobenz	mg/kg
it od-n-propyl i p pa m	mg/kg
P ta hl rob nzen	mg/kg
P t hl rophe l	mg/kg

B (2-ethyl xy)phthal t	mg/kg
Butylb nzyphth i te	mg/kg
Di thylphth i t	mg/kg
D m thylphth i t	mg/kg
D-n b tylphthal t	mg/kg
D -octyl phth i t	mg/kg

T tal Phth i te	mg/kg
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ORGANO CHLORINE PESTICIDES

Ald	mg/kg
Beta HCH (B t BHC)	mg/kg
Chi rd	mg/kg
DDD	mg/kg
D ld	mg/kg
D (t t l)	mg/kg
E d if l	mg/kg
E d if ll	mg/kg
E dos if Sulphat	mg/kg
E d	mg/kg
End End Ald hyd	mg/kg
G mm HCH (Lind)	mg/kg
H pta hl	mg/kg
H pta hl po d	mg/kg
H pta hl robenz ne	mg/kg
M th xy hlo	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azi phos m thyl	mg/kg
Dem t n- m thyl	mg/kg
D az	mg/kg
D hl rvos	mg/kg
D xath	mg/kg
D lf ton	mg/kg
EPN Eth o	mg/kg
M lath on	mg/kg
M thyl P rath on	mg/kg
P rath	mg/kg
T rbufo	mg/kg

CARBAMATE (Pesti id)

C rb ryl	mg/kg
Carbof	mg/kg
M eb	mg/kg

PHENOL UREA HERBICIDES

Chl t l on	mg/kg
D ron	mg/kg
Is pr t ron	mg/kg
L ron	mg/kg

Norwest Holst Soil Engineering Ltd
R68324 Durham Rd Newport

D t S mpl d	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	23/09/03	R68324
Lab R f N	180508	180509	180510	180511	180512	180513	180514	AQC
Custom R f N	10	3	6	9	3	6	9	Lab Std
S mpl Type	ES	ES	ES	ES	ES	ES	ES	
T i l P t / B reh l N	TP646	TP665	TP665	TP665	TP666	TP666	TP666	
D pth (m)	2 30	0 40	**1 40	2 30	0 40	1 40	2 30	
H dst d g t S rf (Y/N)								

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5-T	mg/kg
2 4-D	mg/kg
Chl o-o-t lyl xyacet d	mg/kg
D camba	mg/kg
D hl p op	mg/kg
Mec prop	mg/kg
Silvex	mg/kg

TRIAZINES

Altrazine	mg/kg
S mazi	mg/kg

PCB

PCB Co g ne 28	mg/kg
PCB Cong ne 52	mg/kg
PCB Co gen 101	mg/kg
PCB Cong 118	mg/kg
PCB Cong ne 138	mg/kg
PCB Co g ne 153	mg/kg
PCB Congene 180	mg/kg

Total PCB

	mg/kg
--	-------

ALCOHOLS

Buta l	mg/kg
Eth ol	mg/kg
Ethyl Glycol	mg/kg
M tha l	mg/kg
Propan-1-ol	mg/kg
Prop n-2-ol	mg/kg

MISCELLANEOUS

Calonfc V lue	Cal/g
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Sil	mg/kg
T	mg/kg

1 2 D hl ropropane	mg/kg
1 3-D hl p pene	mg/kg
2 4-D it phe l	mg/kg
Acet	mg/kg
C rbazole	mg/kg
C rbon d lph d	mg/kg
Creo t (TPH by GCFID)	mg/kg
Cycl hex ne	mg/kg
Cycl hexa on	mg/kg
H xachl rocycl pentad ne	mg/kg
Hydroq ne	mg/kg
N N trosod ph yl m ne	mg/kg
p-Chloroa iline	mg/kg
Prem th n/Cypermethan	mg/kg
Pynd ne	mg/kg
Styr ne	mg/kg
S lphol ne	mg/kg
Toluene Extractable Matte (Hst)	mg/kg
T xaphene	mg/kg
Tributyl T	mg/kg
Trnchl rom th ne	mg/kg
V yl Ac tat	mg/kg

CONCRETE

Chl de BS1377 P rt 3 ncl d g preparation	mg/kg
HAC (Rap d determinati of H gh Alumina Cem	mg/kg
Mix Proport ons-Cemenl/Aggregat Ratio-BS1881	mg/kg

Org ic M tie	%							8 3
--------------	---	--	--	--	--	--	--	-----

PID	ppm	1	<1	1	1	1	1	1
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Notes

- Benzo(b)fluor
- ⁻² Di-benzo(a,h)
- Labelled a 0
- ** Labelled a 1

Norwest Holst Soil Engineering Ltd
R68324 Durham Rd Newport

Date Sampled	23/09/03	29/09/03	R68324
Lab Ref No	180502	180515	AQC
Customer Ref No	14	11	Lab Std
Sample Type	ES	ES	
Trial Pit / Borehole No	TP625	TP666	

pH	Value	7.0	8.3
TOC	mg/l		
Suspended Solids	mg/l		
Electrical Cond (µS/cm)	µS/cm		

PHENOLICS

Butyl Phenols	ug/l		
Catechol	ug/l	<0.5	
Cresols (sum)	ug/l	<0.5	
Naphthols	ug/l	0.5	
Phenol	ug/l	0.5	
Resorcinol	ug/l	0.5	
Trimethylphenol	ug/l	0.5	
Xylenols & Ethylphenols	ug/l	0.5	
Total Phenols	ug/l	0.5	303

US EPA PRIORITY PAH s

Acenaphthene	ug/l	0.2	
Acenaphthylene	ug/l	0.2	
Anthracene	ug/l	0.2	
Benzo(a)Anthracene	ug/l	<0.2	
Benzo(a)pyrene	ug/l	<0.2	14.9
Benzo(b)fluoranthene	ug/l	0.2	
Benzo(k)fluoranthene	ug/l	0.2	
Benzo(g,h,i)perylene	ug/l	0.2	
Chrysene	ug/l	7.0	
D benzo(a,h)anthracene ⁻²	ug/l	0.2	
Indeno(1,2,3-cd)pyrene ⁻²	ug/l	0.2	
Fluoranthene	ug/l	7.4	
Fluorene	ug/l	0.2	
Naphthalene	ug/l	0.2	15.2
Phenanthrene	ug/l	0.2	
Pyrene	ug/l	7.8	
Total US EPA 16 PAH	ug/l	22.2	

OTHER PAH s

Anthanthrene	ug/l		
Benzo(e)pyrene	ug/l		
Cyclopenta(cd)pyrene	ug/l		

GENERAL INORGANICS

Complex Cyanide	ug/l		
Easily Liberatable Cyanide (free)	g/l		
Thiocyanate	ug/l		
Total Cyanide	ug/l	5	1947
Sulphide	ug/l	353	725
Sulphur (free)	ug/l		
Sulphate	ug/l	281255	102938
Chloride	ug/l		
Phosphate	ug/l		
Exchangeable Ammonium	ug/l	2983	100273
Nitrate	ug/l		
Nitrite	ug/l		

Norwest Holst Soil Engineering Ltd
R68324 Durham Rd Newport

Date Sampled	23/09/03	29/09/03	R68324
Lab Ref No	180502	180515	AQC
Composite Ref No	14	11	Lab Std
Sample Type	ES	ES	
Trial Pit / Borehole No	TP625	TP666	

HEAVY METALS/METALLOIDS

Aluminium	ug/l		
Antimony	ug/l		
Arsenic	ug/l	<10	60
Barium	ug/l		
Beryllium	ug/l		
Boron	ug/l	1444	170
Cadmium	ug/l	<1	12
Chromium (Dissolved)	ug/l	<20	55
Chromium (Hexavalent)	ug/l		
Cobalt	ug/l		
Copper	ug/l	<5	138
Germanium	ug/l		
Lead	ug/l	<20	36
Mercury	ug/l	<0.1	7.2
Molybdenum	ug/l		
Nickel	ug/l	<20	49
Selenium	ug/l	10	40
Vanadium	ug/l		
Zinc	ug/l	87	417

ESSENTIAL ELEMENTS

Calcium	ug/l		
Iron	ug/l		
Magnesium	ug/l		
Manganese	ug/l		
Potassium	ug/l		
Sodium	ug/l		

MONOAROMATICS

Benzene	ug/l		
Toluene	ug/l		
Ethylbenzene	ug/l		
Meta & Para Xylene	ug/l		
Ortho Xylene	ug/l		

Total Xylenes ug/l

MTBE ug/l

1,2,4-Trimethylbenzene ug/l

1,3,5-Trimethylbenzene ug/l

TOTAL HYDROCARBONS

Petroleum Range Organics (C ₆ -C ₁₀)	ug/l	<20	
Diesel Range Organics (C ₈ -C ₂₈)	ug/l	519	
Hydrocarbon Screen (GC FID)	ug/l	1046	

VOCs

1,1,1-Trichloroethane	ug/l		
1,1,2,2-Tetrachloroethane	ug/l		
1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l		
1,1,2-Trichloroethane	ug/l		
1,1-Dichloroethane	ug/l		
1,1-Dichloroethene	ug/l		
1,2,3-Trichloropropane	ug/l		
1,2,3-Trimethylbenzene	ug/l		
1,2,4-Trichlorobenzene	ug/l		
1,2,4-Trimethylbenzene	ug/l		
1,2-Dibromo-3-Chloropropane	ug/l		
1,2-Dichlorobenzene	ug/l		
1,2-Dichloroethane	ug/l		
1,2-Dichloropropane	ug/l		
1,2-Dichloropropene	ug/l		
1,3,5-Trimethylbenzene	ug/l		
1,3-Dichlorobenzene	ug/l		
1,3-Dichloropropane	ug/l		
1,4-Dichlorobenzene	ug/l		
1-Chlorotoluene	ug/l		

Norwest Holst Soil Engineering Ltd
R68324 Durham Rd Newport

Date Sampled	23/09/03	29/09/03	R68324
Lab Ref No	180502	180515	AQC
Customer Ref No	14	11	Lab Std
Sample Type	ES	ES	
Trial Pit / Borehole No	TP625	TP666	

1 Methylpropylbenzene	ug/l
2,2 Dichloropropane	ug/l
2-Chlorotoluene	ug/l
Benzene	ug/l
Bromobenzene	ug/l
Bromochloromethane	ug/l
Bromodichloromethane	ug/l
Bromoform	ug/l
Carbon Tetrachloride (PCM)	ug/l
Chlorobenzene (sum)	ug/l
Chlorodibromomethane	ug/l
Chloroethane	ug/l
Chloroform	ug/l
cis-1,2-Dichloroethylene	ug/l
cis-1,3-Dichloropropene	ug/l
Dibromochloromethane	ug/l
Dibromoethane	ug/l
Dibromomethane	ug/l
Dichlorobenzene	ug/l
Dichloromethane	ug/l
Ethylbenzene	ug/l
Heptachlorobutadiene	ug/l
meta & para Xylene	ug/l
Methyl isopropylbenzene	ug/l
Monochlorobenzene	ug/l
Monochlorophenols (sum)	ug/l
n-Butylbenzene	ug/l
n-Propylbenzene	ug/l
ortho Xylene	ug/l
Styrene	ug/l
tert-Butylbenzene	ug/l
Tetrachlorobenzene	ug/l
Tetrachloroethene (PCE)	ug/l
Tetrahydrofuran	ug/l
Toluene	ug/l
trans-1,2-Dichloroethene	ug/l
trans-1,3-dichloropropene	ug/l
Trichloroethene (TCE)	ug/l
Trichlorofluoromethane	ug/l
Trichloromethane	ug/l
Vinyl Chloride	ug/l

SVOCs

1,2,4-Trichlorobenzene	ug/l
1,4-Dichlorobenzene	ug/l
2,3,4,6-Tetrachlorophenol (sum)	ug/l
2,4,5-Trichlorophenol	ug/l
2,4,6-Trichlorophenol	ug/l
2,4-Dichlorophenol (sum)	ug/l
2,4-Dimethylphenol	ug/l
2,4-Dinitrotoluene	ug/l
2,6-Dimethylphenol	ug/l
2,6-Dinitrotoluene	ug/l
2-Chloronaphthalene	ug/l
2-Chlorophenol (sum)	ug/l
2-Methylphenol	ug/l
2-Nitrophenol	ug/l
4-Chloro-3-methylphenol	ug/l
4-chlorobenzylphenylether	ug/l
4-Methylphenol	ug/l
4-Nitrophenol	ug/l
Azobenzene	ug/l
bis(2-chloroethyl)ether	ug/l
bis(2-chloroethoxy)methane	ug/l
bis(chloroisopropyl)ether	ug/l
Bromophenylphenylether	ug/l
Hexachloro-1,3-butadiene	ug/l
Hexachlorobenzene	ug/l
Hexachloroethane	ug/l

Norwest Holst Soil Engineering Ltd
R68324 Durham Rd Newport

Date Sampled	23/09/03	29/09/03	R68324
Lab Ref No	180502	180515	AQC
Customer Ref No	14	11	Lab Std
Sample Type	ES	ES	
Trial Pit / Borehole No	TP625	TP666	

Isophorone ug/l
Nitrobenzene ug/l
n nit osod n propyl 1 propanam ne ug/l
Pentachlorobenzene ug/l
Pentachlorophenol ug/l

Bis(2-ethylhexyl)phthalate ug/l
Butylbenzylphthalate ug/l
Diethylphthalate ug/l
Dimethylphthalate ug/l
D n butylphthalate ug/l
D n-octyl phthalate ug/l

Total Phthalates ug/l

ORGANO CHLORINE PESTICIDES

Aldrin ug/l
Beta HCH (Beta BHC) ug/l
Chlordane ug/l
DDD ug/l
Dieldrin ug/l
Dinns (total) ug/l
Endosulfan I ug/l
Endosulfan II ug/l
Endosulfan Sulphate ug/l
Endrin ug/l
Endrin Endrin Aldehyde ug/l
Gamma HCH (Lindane) ug/l
Heptachlor ug/l
Heptachlor epoxide ug/l
Heptachlorobenzene ug/l
Methoxychlor ug/l
pp DDE ug/l
pp DDT ug/l
pp TDE ug/l

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl ug/l
Demeton s methyl ug/l
Diazinon ug/l
Dichlorvos ug/l
Doxathion ug/l
Disulfoton ug/l
EPN Ethion ug/l
Malathion ug/l
Methyl Parathion ug/l
Parathion ug/l
Terbufos ug/l

CARBAMATE (Pesticide)

Carbaryl ug/l
Carbofuran ug/l
Maneb ug/l

Norwest Holst Soil Engineering Ltd
R68324 Durham Rd Newport

Date Sampled	23/09/03	29/09/03	R68324
Lab Ref No	180502	180515	AQC
Customer Ref No	14	11	Lab Std
Sample Type	ES	ES	
Trial Pit / Borehole No	TP625	TP666	

PHENOL UREA HERBICIDES

Chlorotoluron	ug/l
D uron	ug/l
Isop oturon	ug/l
Linuron	ug/l

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5 T	ug/l
2 4 D	ug/l
Chlo o-o-tolyoxyacetic acid	ug/l
Dicamba	ug/l
Dichloroprop	ug/l
Mecoprop	g/l
Silvex	ug/l

TRIAZINES

Atiaz ne	ug/l
S mazine	ug/l

PCB s

PCB Congene 28	ug/l
PCB Congener 52	ug/l
PCB Congener 101	ug/l
PCB Congene 118	ug/l
PCB Congener 138	ug/l
PCB Congene 153	g/l
PCB Conge er 180	ug/l

Total PCB s ug/l

ALCOHOLS

Butanol	ug/l
Ethanol	ug/l
Ethylene Glycol	ug/l
Methanol	ug/l
Propan 1-ol	ug/l
Propan 2-ol	ug/l

MISCELLANEOUS

Silver	ug/l
T n	ug/l

1 2 Dichloropropane	ug/l
1 3-Dichlo opropene	ug/l
2 4 D n trophenol	ug/l
Acetone	ug/l
Carbazole	ug/l
Carbon disulphide	ug/l
Creosole (TPH by GC/FID)	ug/l
Cyclohexane	ug/l
Cyclohexanone	ug/l
Hexachlorocyclopentad ene	ug/l
Hydroquinone	ug/l
N N trosodiphenylamine	ug/l
p Chloroanil ne	ug/l
Premethnn/Cypermethnn	ug/l
Pyrid ne	ug/l
Styrene	ug/l
Sulpholane	ug/l
Toluene Extractable Matter (Historic)	ug/l
Toxaphene	ug/l
Tributyl T	ug/l
Tnchloromethane	ug/l
Vinyl Acetate	ug/l
Vinyl Acetate	ug/l

Notes

Benzo(b)fluoranthene & Benzo(k)fluoranthene co-elute (reported as sum)
 2 Di benzo(a,h)anthracene & Indeno(1 2 3-cd)pyrene co-elute (reported as sum)

ENVIRONMENTAL ANALYSIS LABORATORIES

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Tel 01424 444433 Fax 01424 442299 info@environmentalanalysis.com

ANALYTICAL REPORT No R68324

Location Durham Rd Newport

Your Project No F13041

Reporting Date 08/10/03

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
Leeds LS11 5SX

Soils

Date Sampled 23/09/03
Lab Ref No 180504
Customer Ref No 6
Sample Type ES
Trial Pit / Borehole No TP645
Depth (m) 1.80

Aromatic

C ₅ C ₇	(mg/kg)	N	<5
>C ₇ C ₈	(mg/kg)	N	<5
>C ₈ C ₁₀	(mg/kg)	N	<5
>C ₁₀ C ₁₂	(mg/kg)	N	<5
>C ₁₂ C ₁₆	(mg/kg)	N	14
>C ₁₆ C ₂₁	(mg/kg)	N	10
>C ₂₁ C ₃₅	(mg/kg)	N	<5

Aliphatic

C ₅ C ₆	(mg/kg)	N	<5
>C ₆ C ₈	(mg/kg)	N	<5
>C ₈ C ₁₀	(mg/kg)	N	<5
>C ₁₀ C ₁₂	(mg/kg)	N	<5
>C ₁₂ C ₁₆	(mg/kg)	N	17
>C ₁₆ C ₂₁	(mg/kg)	N	8
>C ₂₁ C ₃₄	(mg/kg)	N	6

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t - not tested

MJB

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Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 14/10/03

ANALYTICAL REPORT No R68433

Location Durham Rd Newport

Your Project No F13041

The attached analytical results relate to samples received on 22 Sep 2003

The report is only valid if it contains the total number of pages indicated at the bottom of this page

Checked by

Authorised by

If you have any queries regarding this report please contact Steve Chapman or Steve Knight

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A Division of Norwest Holst Soil Engineering Ltd
Registered in England No 980795
Registered Office Parkside Lane Dewsbury Road Leeds LS11 5SX



Norwest Holst Soil Engineering Ltd
R68433 Durham Rd Newport

Date Sampled	Lab Ref No	181312	181313	181314	181315	181316	181317	181318	181319	181320
Client Ref No	Sample Type	—	3	3	3	2	3	7	4	4
Sample Type	Trinity/Borehole No	WS	WS	WS	WS	WS	WS	WS	WS	WS
Trinity/Borehole No		R R1	BH401	BH402	BH403	BH406	BH408	BH501	BH502	BH503
pH	V1	7.8	8.2	7.4	8.0	8.5	7.8	7.6	8.1	
TOC	mg/l									
Suspended Solids	mg/l									
Electrical Conductivity (µS/cm)	µS/cm									
PHENOLICS										
Butyl Phenols	ug/l									
Catechol	ug/l	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Cresol (sum)	ug/l	<0.5	0.5	<0.5	0.5	0.5	0.5	0.5	0.5	
Nitrophenols	ug/l	0.5	<0.5	0.5	<0.5	<0.5	0.5	0.5	0.5	
Phenol	ug/l	0.5	0.5	0.5	0.5	0.5	<0.5	0.5	0.5	
Resorcinol	ug/l	0.5	0.5	0.5	0.5	0.5	0.5	0.5	<0.5	
2-methylphenol	ug/l	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Xylenols & Ethylphenols	ug/l	0.5	<0.5	0.5	0.5	0.5	0.5	0.5	0.5	
Total Phenols	ug/l	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
US EPA PRIORITY PAH										
Acenaphthene	ug/l	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Acenaphthylene	ug/l	0.2	0.2	0.2	0.2	0.2	0.2	0.2	<0.2	
Anthracene	ug/l	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Benzo(a)anthracene	ug/l	0.2	<0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Benzo(a)pyrene	ug/l	0.2	0.2	<0.2	0.2	0.2	0.2	0.2	0.2	
Benzo(b)fluoranthene	ug/l	0.2	<0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Benzo(k)fluoranthene	ug/l	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Benzo(g,h,i)perylene	ug/l	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Chrysene	ug/l	<0.2	0.2	<0.2	0.2	<0.2	0.2	0.2	0.2	
Dibenz(a,h)anthracene	ug/l	0.2	<0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Indeno(1,2,3-cd)pyrene	ug/l	0.2	<0.2	0.2	0.2	0.2	0.2	<0.2	0.2	
Fluoranthene	ug/l	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Fluorene	ug/l	0.2	0.2	<0.2	<0.2	0.2	0.2	0.2	0.2	
Naphthalene	ug/l	<0.2	0.2	<0.2	0.2	0.2	0.2	0.2	0.2	
Phenanthrene	ug/l	0.2	0.2	0.2	0.2	0.2	<0.2	0.2	0.2	
Pyrene	ug/l	0.2	<0.2	<0.2	0.2	0.2	0.2	<0.2	0.2	
Total US EPA 16 PAH	ug/l	0.2	0.2	<0.2	0.2	0.2	0.2	<0.2	0.2	
OTHER PAH										
Anthracene	ug/l									
Benzo(a)pyrene	ug/l									
Cycl penta(cd)py	ug/l									
GENERAL INORGANICS										
Complex Cyanide	ug/l									
Easily Liberatable Cyanide (free)	ug/l									
Thiocyanate	ug/l									
Total Cyanide	ug/l	<5	<5	<5	<5	<5	<5	<5	5	<5
Sulphide	ug/l	107	547	417	100	100	100	100	100	
Sulphate (free)	ug/l									
Sulphate	ug/l	46483	51006	51318	495052	117088	114575	457762	246382	
Chloride	ug/l									
Phosphate	ug/l									
Exchangeable Ammonium	ug/l	476	538	2357	589	885	486	3200	100	100
Nitrate	ug/l									
Nitrite	ug/l									

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Date Sampled	Lab Ref No	181312	181313	181314	181315	181316	181317	181318	181319	181320
Client Ref No	—	3	3	3	2	3	7	4	4	
Sample Type	WS	WS	WS	WS	WS	WS	WS	WS	WS	WS
Topsoil/Bottomsoil	R R er	BH401	BH402	BH403	BH406	BH408	BH501	BH502	BH503	

HEAVY METALS/METALLOIDS

Aluminium	ug/l								
Antimony	ug/l								
Arsenic	ug/l	10	10	10	10	11	10	25	10
Bismuth	ug/l								
Boron	ug/l	57	717	1134	1898	1487	1457	1508	1541
Cadmium	ug/l	1	1	1	1	1	1	1	1
Chromium (Dissolved)	ug/l	20	<20	20	20	20	<20	20	20
Chromium (Total)	ug/l								
Cobalt	ug/l								
Copper	ug/l	6	9	<5	16	11	5	13	<5
Germanium	ug/l								
Lead	ug/l	20	<20	<20	<20	<20	<20	<20	<20
Mercury	ug/l	0.1	<0.1	0.1	0.1	<0.1	<0.1	0.1	<0.1
Molybdenum	ug/l								
Nickel	ug/l	20	<20	<20	<20	20	<20	<20	<20
Selenium	ug/l	10	10	10	10	10	10	10	10
Vanadium	ug/l								
Zinc	ug/l	<50	84	<50	<50	<50	<50	<50	<50

ESSENTIAL ELEMENTS

Calcium	ug/l								
Iron	ug/l								
Magnesium	ug/l								
Manganese	ug/l								
Phosphorus	ug/l								
Sodium	ug/l								

MONOAROMATICS

Benzene	ug/l							<20	
Toluene	ug/l							20	
Ethylbenzene	ug/l							<20	
Meta & Para Xylene	ug/l							<20	
Ortho Xylene	ug/l							<20	
Total Xyl	ug/l								
MTBE	ug/l								
1,2,4-Trimethylbenzene	ug/l								
1,3,5-Trimethylbenzene	ug/l								

TOTAL HYDROCARBONS

Petroleum Range Organics (C ₆ -C ₁₀)	ug/l	<20	<20	<20	<20	<20	<20	<20	<20
Diesel Range Organics (C ₉ -C ₂₈)	ug/l	100	100	100	1849	100	100	100	100
Hydrocarbon Screen (GC-FID)	ug/l	100	100	100	2374	100	100	100	100

VOC

1,1,1-Trichloroethane	ug/l							1	
1,1,2-Trichloroethane	ug/l							1	
1,1,2,2-Tetrafluoroethane	ug/l							1	
1,1,2-Trichloroethane	ug/l							1	
1,1-Dichloroethane	ug/l							1	
1,1-Dichloroethane	ug/l							1	
1,2-Dichloroethane	ug/l							1	
1,2,3-Trimethylbenzene	ug/l							1	
1,2,4-Trichlorobenzene	ug/l							1	
1,2,4-Trimethylbenzene	ug/l							1	
1,2-Dibromo-3-Chloropropane	ug/l							1	
1,2-Dichlorobenzene	ug/l							1	
1,2-Dichloroethane	ug/l							1	
1,2-Dichloropropane	ug/l							1	
1,2-Dichloropropene	ug/l							1	
1,3,5-Trimethylbenzene	ug/l							1	
1,3-Dichlorobenzene	ug/l							1	
1,3-Dichloropropane	ug/l							1	
1,4-Dichlorobenzene	ug/l							1	
1-Chlorotoluene	ug/l							1	
1-Methylpropylbenzene	ug/l							1	
2,2-Dichloropropane	ug/l							1	
2-Chlorotoluene	ug/l							1	
Benzene	ug/l							1	
Bromobenzene	ug/l							1	
Bromochloromethane	ug/l							1	
Bromodichloromethane	ug/l							1	
Bromofluoromethane	ug/l							1	
Carbo-Tetrachloride (PCM)	ug/l							1	
Chlorobenzene (sum)	ug/l							1	
Chlorodibromomethane	ug/l							1	
Chloroethane	ug/l							1	
Chloroform	ug/l							1	
cis-1,2-Dichloroethyl	ug/l							1	

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D i S m p l d	181312	181313	181314	181315	181316	181317	181318	181319	181320
L b R f N	—	3	3	3	2	3	7	4	4
C t m R f N	—	3	3	3	2	3	7	4	4
S m p l T y p e	WS	WS	WS	WS	WS	WS	WS	WS	WS
T r i P l t / B r e h I N	Reen R	BH401	BH402	BH403	BH406	BH408	BH501	BH502	BH503
s-1 3-D chl roprop	ug/l						1		
D brom hl rom th	ug/l						1		
D brom eth	ug/l						1		
D brom m th	ug/l						1		
D chl robenz	ug/l						1		
D chl rometh	ug/l						1		
Ethylbenz	ug/l						1		
Hex chl robuted	ug/l						1		
met & p Xyl	ug/l						1		
M thyl-sopropylbenzen	ug/l						1		
Monochlorob nz	ug/l						1		
M nochl rop h nol (m)	ug/l						1		
Butylb nzene	ug/l						1		
Propylb nz	ug/l						1		
rtho Xyl	ug/l						1		
Styrene	ug/l						1		
t rt Butylbenz	ug/l						1		
Tetrachl robenz	ug/l						1		
T trachl roethe (PCE)	ug/l						1		
Tetrahydrof ra	ug/l						1		
T lue	ug/l						1		
trans-1 2-D hl ro thene	ug/l						1		
t ns-1 3-d chl propene	ug/l						1		
T chl roethe (TCE)	ug/l						1		
T chlrofluorom th ne	ug/l						1		
T chl rom th ne	ug/l						1		
V yl Chl d	ug/l						1		
SVOC									
1 2 4-T chl rob nze	ug/l								
1 4-D chlorobenz	ug/l								
2 3 4 6-Tetra hl rop h nol (sum)	ug/l								
2 4 5-T chl rophenol	ug/l								
2 4 6-T chl rop h nol	ug/l								
2 4-D chl rop h nol (sum)	ug/l								
2 4 D methylph nol	ug/l								
2 4-D itrot luene	ug/l								
2 6-D m thylphen l	ug/l								
2 6-D itrot luene	ug/l								
2-Chl ro phthal	ug/l								
2-Chl rop h nol (sum)	ug/l								
2-Methylph nol	ug/l								
2-Nitroph nol	ug/l								
4-Chl ro-3-methylphenol	ug/l								
4-chlo benzylphenylether	ug/l								
4-Methylph nol	ug/l								
4-Nitroph nol	ug/l								
Azobenz	ug/l								
b s(2-chl ethyl)ether	ug/l								
b s(2-chl roethyo y)methane	ug/l								
bis(chl sopropyl)eth	ug/l								
Brom phe ylphenylether	ug/l								
Hex chloro-1 3-butad ene	ug/l								
Hex chl robenz	ug/l								
Hexachl roethane	ug/l								
isophoro	ug/l								
N trobenz ne	ug/l								
n- itrosodi-n-propyl-1-propanamine	ug/l								
P nt chl robenz ne	ug/l								
P nt chlorophenol	ug/l								
B s(2-ethylhexyl)phthalat	ug/l								
Butylbenzylphthalat	ug/l								
D ethylphthalat	ug/l								
Dimethylphthalat	ug/l								
Di-n-butylphth lat	ug/l								
Di-n-octyl phthalat	ug/l								
Tot l Phthalates	ug/l								
ORGANO CHLORINE PESTICIDES									
Ald	ug/l								
Beta-HCH (Beta BHC)	ug/l								
Chlordan	ug/l								
DDD	ug/l								
Diieldrf	ug/l								
D ns (i t l)	ug/l								
Endo sulf l	ug/l								
Endosuffen II	ug/l								
Endosuffen S lphat	ug/l								
End	ug/l								
Endnm End Aldehyde	ug/l								
Gamm HCH (Lindane)	ug/l								

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D t S mpl d	181312	181313	181314	181315	181316	181317	181318	181319	181320
L b R f N	—	3	3	3	2	3	7	4	4
C t m R f N	—	3	3	3	2	3	7	4	4
S mpl Type	WS	WS	WS	WS	WS	WS	WS	WS	WS
T ! Pit / B reh ! N	R R	BH401	BH402	BH403	BH406	BH408	BH501	BH502	**BH503
H pt chl									
H pt hl po d									
H pt hl robenz									
M tho ychl									
pp DDE									
pp DDT									
pp TDE									
ORGANO PHOSPHOROUS PESTICIDES									
Azi pho methyl									
D met n-s-m thyl									
D azino									
D hl rv									
D athwa									
D llot									
EPN Eth									
M leth									
M thyl P eth									
P eth									
T rbuf									
CARBAMATE (P ti d)									
Carbaryl									
Carbof									
M b									
PHENOL UREA HERBICIDES									
Chi rot i ro									
D ro									
Isoprot ro									
L ro									
CHLOROPHENOXY ACIDIC HERBICIDES									
2 4 5-T									
2 4-D									
Chi ro-o-l tyl y t cid									
D camb									
D chlorop p									
Mecoprop									
SI ex									
TRIAZINES									
Altraz									
S mazine									
PCB									
PCB Congen 28									
PCB C ng ne 52									
PCB C ngen 101									
PCB C ngen 118									
PCB Congene 138									
PCB Congener 153									
PCB Congener 180									
T t ! PCB									
ALCOHOLS									
Butanol									
Ethanol									
Ethylen Glycol									
Methanol									
Prop n-1-ol									
Propan-2-ol									
MISCELLANEOUS									
SI er									
T									
1 2 D hl ropropene									
1 3-D chloropropene									
2 4-D nitrophenol									
Acet ne									
C rbazole									
C rbo disulphid									
Creosot (TPH by GCFID)									
Cycl hexane									

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D t S mpled	181312	181313	181314	181315	181316	181317	181318	181319	181320
L b R f N	—	3	3	3	2	3	7	4	4
C st me R f N	WS	WS	WS	WS	WS	WS	WS	WS	WS
S mpl Type	Reen River	BH401	BH402	BH403	BH406	BH408	BH501	BH502	**BH503

Cy l h no	ug/l
H hl rocy l pe t d	g/l
Hydroq none	ug/l
N N l sod ph nyl m	ug/l
p-Chl roan l ne	g/l
Prem th n/Cypermeth	ug/l
Pynd	ug/l
Styren	ug/l
S lphol	ug/l
T l Extract bl Matt (H st)	ug/l
T ph	g/l
T butyl T	g/l
T hl rom th	ug/l
V yl A etat	ug/l
V yl A tat	g/l

BOD	mg/l	15
COD	mg/l	630
Dissol ed Oxyg	mg/l	6.1
Alkal ity	mg/l	1050
Iro (F ²⁺)	mg/l	10
Iro (F ³⁺)	mg/l	10

Notes

- B nzo(b)fluo anth & B nzo(k)fluo ntheno co-elut (reported as sum)
- ² D -benzo(h)anth ce & lnd no(1 2 3-od)pyren co-elut (reported as sum)
- W chester brok not ecei ed

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D i S m p l d		181321	181322	181323	181324	181325	181326	181327	181328	181329	181330
L b R f No		5	3	2	3	3	7	4	3	3	2
C s t m e R f N		WS	WS	WS	WS	WS	WS	WS	WS	WS	WS
S m p l T y p e		BH504	BH505	BH509	**BH510	BH512	BH513	BH514	**BH515	BH16	BH517
T I P l t / B r e h i l N											
V l	mg/l	8.0	8.3	7.7		8.2	8.2	8.0		7.8	7.8
DC	mg/l										
pended S l d	mg/l										
ct cal C nd (µS/ m)	µS/cm										
NDLICS											
Ph nols	ug/l										
hol	ug/l	0.5	<0.5	0.5		0.5	0.5	0.5		0.5	0.5
is (sum)	g/l	<0.5	0.5	0.5		0.5	0.5	0.5		0.5	<0.5
hol	ug/l	0.5	0.5	0.5		0.5	0.5	0.5		<0.5	0.5
Ph, l	ug/l	0.5	0.5	0.5		<0.5	<0.5	0.5		0.5	<0.5
Reso nol	ug/l	<0.5	0.5	0.5		0.5	0.5	0.5		0.5	0.5
T m thylphenol	ug/l	0.5	<0.5	0.5		0.5	<0.5	0.5		<0.5	0.5
Xyl nol & Ethylph nol	g/l	0.5	<0.5	0.5		0.5	0.5	0.5		<0.5	0.5
Tot l Ph l	ug/l	0.5	0.5	0.5		0.5	0.5	<0.5		0.5	0.5
US EPA PRIORITY PAH											
A phth ne	g/l	0.2	0.2	0.2		0.2	0.2	0.2		0.2	0.2
Ace phthylene	ug/l	0.2	0.2	0.2		0.2	0.2	0.2		0.2	0.2
Anth ce	ug/l	<0.2	0.2	0.2		<0.2	<0.2	0.2		0.2	0.2
Benzo()Anthracene	ug/l	<0.2	0.2	0.2		0.2	<0.2	0.2		<0.2	0.2
B nzo()pyr ne	g/l	0.2	<0.2	0.2		<0.2	0.2	<0.2		0.2	0.2
B nzo(b)fluo nth ne	ug/l	0.2	0.2	0.2		0.2	0.2	0.2		<0.2	0.2
Benzo(k)fluo nth ne	g/l	<0.2	<0.2	0.2		<0.2	0.2	0.2		<0.2	<0.2
B nzo(g h)peryl	g/l	0.2	<0.2	0.2		0.2	0.2	0.2		<0.2	0.2
Chryse	ug/l	0.2	0.2	0.2		0.2	0.2	0.2		<0.2	0.2
D benzo(h)nthracene ²	ug/l	0.2	0.2	0.2		0.2	0.2	<0.2		<0.2	0.2
Ind no(1 2 3-cd)py	ug/l	0.2	0.2	0.2		0.2	0.2	0.2		0.2	0.2
Fluo nthne	ug/l	<0.2	<0.2	<0.2		0.2	0.2	0.2		0.2	0.2
Fluo	ug/l	0.2	<0.2	0.2		0.2	<0.2	0.2		0.2	0.2
N phthal ne	ug/l	0.2	<0.2	0.2		0.2	0.2	0.2		<0.2	0.2
Ph nanth ne	g/l	<0.2	0.2	0.2		0.2	0.2	0.2		0.2	<0.2
Pyr ne	ug/l	0.2	0.2	0.2		0.2	0.2	<0.2		0.2	0.2
T t l US EPA 16 PAH	ug/l	0.2	<0.2	0.2		0.2	0.2	0.2		<0.2	0.2
OTHER PAH											
Anth nth ne	ug/l										
B nzo()pyr ne	ug/l										
Cycl penta(cd)pyr ne	ug/l										
GENERAL INORGANICS											
Complex Cyanid	ug/l										
Easily Libe atabl Cyanid (free)	ug/l										
Thiocy nat	g/l										
T tal Cy d	ug/l	<5	<5	<5		<5	<5	5		<5	<5
S lph d	ug/l	100	100	100		100	100	100		100	100
S lph (f)	ug/l										
S lphat	ug/l	45205	45743	45695		67287	128581	115158		133882	53832
Chl d	ug/l										
Phosphat	ug/l										
Ex hangeabl Ammo um	ug/l	2890	100	1117	2319	374	1131	997	6806	2902	100
N t at	ug/l										
Nitrit	ug/l										

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D t S mpl d	181321	181322	181323	181324	181325	181326	181327	181328	181329	181330
L b R f N	5	3	2	3	3	7	4	3	3	2
C st me R f N	WS	WS	WS	WS	WS	WS	WS	WS	WS	WS
S mpl Typ	BH504	BH505	BH509	**BH510	BH512	BH513	BH514	**BH515	BH16	BH517
T l Pit/B reh l N										

HEAVY METALS/METALLOIDS

Al m m	ug/l									
A t m y	ug/l									
A	g/l	59	10	10	10	10	10		10	10
B m	ug/l									
B ryl m	g/l									
B ro	ug/l	1441	122	607	392	618	953		903	451
Cadm m	ug/l	1	1	1	1	1	1		1	1
Chrom m (Dissol ed)	ug/l	20	20	20	<20	<20	<20		<20	20
Chrom m (Hex l nt)	ug/l									
Cob lt	ug/l									
Coppe	g/l	9	<5	<5	<5	<5	5		<5	93
G m m	ug/l									
L ad	ug/l	<20	<20	<20	20	20	20		20	20
M ry	g/l	<0.1	0.1	0.1	0.1	0.1	0.1		0.1	0.1
Molybd um	ug/l									
N k l	ug/l	<20	<20	<20	20	20	<20		20	<20
S l m	g/l	10	10	10	10	10	10		10	10
V ad m	ug/l									
Zi	ug/l	<50	<50	50	206	<50	<50		<50	<50

ESSENTIAL ELEMENTS

Calci m	ug/l
Iro	ug/l
M g esi m	ug/l
M ng nese	g/l
P tassi m	ug/l
Sod m	g/l

MONOAROMATICS

B nzene	ug/l	<20		<20		<20	<20			20
T l	g/l	<20		<20		<20	20			<20
Ethylbenz ne	ug/l	20		<20		<20	20			20
Met & P Xyl	ug/l	20		<20		<20	20			<20
Ortho Xyl ne	ug/l	<20		<20		<20	20			20

Tot l Xyl

MTBE

1 2 4-T methylbenz	ug/l
1 3 5-T methylbenz ne	ug/l

TOTAL HYDROCARBONS

Petroleum Rang Org cs (C ₆ -C ₁₀)	ug/l	<20	<20		20		<20		20	
Diesel R ng Org nics (C ₉ -C ₂₆)	ug/l	100	100		100		100		100	
Hydrocarbo Scree (GC-FID)	ug/l	100	100		100		100		100	

VOC*

1 1 1 T chloroethan	ug/l	1		1		1	1			<1
1 1 2,2 Tetrachl ethane	ug/l	1		1		1	1			1
1 1 2 T chloro-1,2,2-trifluoroethan	ug/l	1		1		1	1			1
1 1 2 T chloro thane	ug/l	1		1		1	1			1
1 1-D chloroethane	ug/l	1		1		1	1			1
1 1 D chloroeth ne	ug/l	1		1		1	1			1
1 2 3-T chl ropropane	ug/l	1		1		1	1			1
1 2 3-T methylbenzene	ug/l	1		1		1	1			1
1 2 4 T chl robenzene	ug/l	<1		1		1	1			1
1 2 4-T methylbenz ne	ug/l	1		1		1	1			1
1 2 Dibromo-3-Chl roprop ne	ug/l	1		1		1	1			1
1 2-Dichl robenzene	ug/l	1		1		1	1			1
1 2-D chl roethane	ug/l	1		1		1	1			1
1 2-Dichloropropane	ug/l	1		1		1	1			1
1,2 D chloroprope	ug/l	1		<1		1	1			1
1 3 5-T methylbenzene	ug/l	1		<1		1	1			1
1 3-D chl robenzene	ug/l	1		1		1	1			1
1 3-D chl ropropane	ug/l	1		1		1	1			1
1 4-D chlorobenz	ug/l	1		1		1	1			1
1-Chl roluene	ug/l	1		1		1	1			1
1 Methylpropylbenzene	ug/l	1		1		1	1			1
2 2-Dichl ropropane	ug/l	1		1		1	1			1
2-Chlorol ene	ug/l	1		1		1	1			1
B nz ne	ug/l	1		1		1	1			1
Bromobenzene	ug/l	1		<1		1	1			1
Bromochlorometh ne	ug/l	1		1		1	1			1
Bromodichl romethane	g/l	1		1		1	1			1
Bromof m	ug/l	1		1		1	1			1
Carbon Tetrachloride (PCM)	ug/l	1		1		1	1			1
Chl robenzene (sum)	ug/l	1		<1		1	1			1
Chlorodibrom methane	ug/l	<1		1		1	1			1
Chl roethane	ug/l	1		1		1	1			1
Chlorof m	ug/l	1		1		1	1			1
cis-1,2-D chloroethyl	ug/l	1		1		1	1			1

Norwest Holst Soil Engineering Ltd
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Dat S mpl d	181321	181322	181323	181324	181325	181326	181327	181328	181329	181330
L b R f N	5	3	2	3	3	7	4	3	3	2
C st m R f N	WS	WS	WS	WS	WS	WS	WS	WS	WS	WS
S mpl Typ	BH504	BH505	BH509	**BH510	BH512	BH513	BH514	**BH515	BH116	BH517
T I PIt / B h i N										
cis-1 3-D hloropropene	ug/l	1		1		1	1			1
Dib m chi rometh	ug/l	1		1		1	1			1
D bromoeth	ug/l	1		1		1	1			1
Dibrom m th	ug/l	1		1		1	1			1
Dichl robenz	ug/l	1		1		1	1			1
D chl rom tha	ug/l	1		1		1	1			1
Ethylbenz ne	ug/l	1		<1		1	1			1
H chl robutad	ug/l	1		1		1	1			1
m l & p Xylen	ug/l	1		1		1	1			1
M thyl-isopropyb nz	ug/l	1		1		1	1			1
Mo hl robenz	ug/l	1		1		1	1			1
Monochl rophenol (sum)	ug/l	1		1		1	1			1
Butylbenz	ug/l	1		1		1	1			1
Propylbenz ne	ug/l	1		1		1	1			1
rtho Xyl ne	ug/l	1		1		1	1			1
Styre	ug/l	1		1		1	1			1
t ri Butylbenz	ug/l	1		1		1	1			1
Tet chl robenz	ug/l	1		1		1	1			1
Tet chl roeth ne (PCE)	ug/l	1		1		1	1			1
Tetr hyd fur	ug/l	1		1		1	1			1
T luene	ug/l	1		1		1	1			1
trans-1 2 D chl roeth ne	ug/l	1		1		1	1			1
trans-1 3-d chl ropropene	ug/l	1		1		1	1			1
T chl roeth (TCE)	ug/l	1		1		1	1			1
T chlrofluorom thane	ug/l	1		1		1	1			1
T chl rom th	ug/l	1		1		1	1			1
V nyl Chi d	ug/l	1		1		1	1			1
		1		1		1	1			1
SVOC										
1 2 4 T hl robenz	ug/l									
1 4-D chl robenz	ug/l									
2 3 4 6-Tet chl rophenol (sum)	ug/l									
2 4 5-T hl roph nol	ug/l									
2 4 6-T chl roph nol	ug/l									
2 4-D chl phenol (m)	ug/l									
2 4-D methylphenol	ug/l									
2 4-D trol l ne	ug/l									
2 6-D methylphenol	ug/l									
2 6-D trol l	ug/l									
2 Chl ro phth l ne	ug/l									
2 Chloroph nol (sum)	ug/l									
2 Methylphenol	ug/l									
2 N troph nol	ug/l									
4-Chl ro-3-methylph nol	ug/l									
4-chl robenzylphe ylether	ug/l									
4-Methylphenol	ug/l									
4-N trophenol	ug/l									
Azobenz	ug/l									
bis(2-chl roethyl)eth	ug/l									
b s(2-chloroethyo y)meth	ug/l									
bis(chl ro sopropyl)eth	ug/l									
Bromophe ylphenylethe	ug/l									
Hex chloro-1 3-butad	ug/l									
Hex chl robenz ne	ug/l									
Hex chloroethane	ug/l									
Isophorone	ug/l									
Nitrobenz ne	ug/l									
n-n trosod -n-propyl 1-propa m ne	ug/l									
Pent chl robenz ne	ug/l									
Pent chl rophenol	ug/l									
Bis(2-ethyl yl)phth lat	ug/l									
Butylbenzylphth lat	ug/l									
D ethylphthalat	ug/l									
D m thylphthalat	ug/l									
Di-n-butylphthalat	ug/l									
D -n-octyl phthalat	ug/l									
Tot l Phthalates	ug/l									
ORGANO CHLORINE PESTICIDES										
Aldri	ug/l									
Beta-HCH (Beta BHC)	ug/l									
Chlordane	ug/l									
DDD	ug/l									
Dieid	ug/l									
Dnns (total)	ug/l									
End sulfan I	ug/l									
Endosulfan II	ug/l									
Endosulfan Sulphat	ug/l									
Endri	ug/l									
End End n Aldehyd	ug/l									
Gamm HCH (Lindane)	ug/l									

Norwest Holst Soil Engineering Ltd
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Det S mpl d L b R f N C st m R f N S mpl Type Tri Pit / B reh l N	181321	181322	181323	181324	181325	181326	181327	181328	181329	181330
	5	3	2	3	3	7	4	3	3	2
	WS	WS	WS	WS	WS	WS	WS	WS	WS	WS
	BH504	BH505	BH508	**BH510	BH512	BH513	BH514	**BH515	BH16	BH517
H pt chl										
H pt chl po d										
H pt chl robenz ne										
Meth ychl										
pp-DDE										
pp-DDT										
pp TDE										
ORGANO PHOSPHOROUS PESTICIDES										
Azi pho methyl										
Demet n-s-m thyl										
D no										
Dichl rv										
D ath										
Dis lf i										
EPN Ethvo										
Malathio										
Methyl P ath										
P rath										
T rbuf										
CARBAMATE (P ti id)										
Carbaryl										
Carbofura										
M b										
PHENOL UREA HERBICIDES										
Chl rot l ro										
D uro										
Isoprot ro										
Li ro										
CHLOROPHENOXY ACIDIC HERBICIDES										
2 4 5-T										
2 4-D										
Chl ro-o-tolylo yaceti cid										
D camb										
D chl roprop										
Mecoprop										
Si ex										
TRIAZINES										
Altrazine										
Simazi										
PCB										
PCB Cong ner 28										
PCB C ng ne 52										
PCB Cong ne 101										
PCB Congene 118										
PCB Cong ner 138										
PCB Congene 153										
PCB Cong ne 180										
Tot l PCB										
		44 10				46 30		<0 05		
ALCOHOLS										
Butanol										
Elhanol										
Ethylene Glycol										
Meth nol										
Propan-1-ol										
Propan-2-ol										
MISCELLANEOUS										
Si										
T										
1,2-D chloropropane										
1 3-D chloropropan										
2 4-D itrophenol										
Aceto										
Carbazol										
Carbo disulphid										
Creosot (TPH by GCFID)										
Cyclohexane										

Norwest Hoist Soil Engineering Ltd
R68433 Durham Rd Newport

Date Sampled	181321	181322	181323	181324	181325	181326	181327	181328	181329	181330
L b R f N	5	3	2	3	3	7	4	3	3	2
C st m R f N	WS	WS	WS	WS	WS	WS	WS	WS	WS	WS
S mpI Typ	BH504	BH505	BH508	**BH510	BH512	BH513	BH514	**BH515	BH16	BH517

Cycl hex no	ug/l									
Hex chl ro cycl pentad en	ug/l									
Hydroquino	ug/l									
N-Nitrosod phenyl m ne	ug/l									
p-Chl ro l	ug/l									
P m th n/Cypermethr	ug/l									
Pyrid ne	ug/l									
Styren	ug/l									
S lphol ne	ug/l									
T l ne Ext ct bl Matt (Hsto)	ug/l									
T phen	ug/l									
Tributyl T	ug/l									
Trichlorometh ne	ug/l									
V yl Acetat	ug/l									
V yl Acetat	ug/l									
BOD	mg/l									
COD	mg/l									
D ssol ed O yg	mg/l									
Alkal nity	mg/l		250			667	662			622
Iro (F ^)	mg/l									
Iro (F ^)	mg/l									

Notes
 Benzo(b)fluor
 ^2 D benzo(h)
 ** W chester br

D t S mpl d		
L b R f N		AQC
C st m R f N		Lab Std
S mpl Typ		
Tri I PR / B reh I N		
pH	V l	8.3
TOC	mg/l	
Suspended S l d	mg/l	
El ct cal Cond (µS/cm)	µS/cm	
PHENOLICS		
Butyl Ph l	g/l	
Catechol	ug/l	
C esols (m)	ug/l	
N phthols	ug/l	
Ph nol	ug/l	
Reso cinol	ug/l	
T methylph nol	g/l	
Xyl nols & Ethylph l	g/l	
Tot I Ph l	ug/l	212
US EPA PRIORITY PAH		
Ace phth ne	ug/l	
Acenaphthylene	ug/l	
Anthrace	ug/l	
B nzo()Anthrace	ug/l	
B nzo()py ene	ug/l	15.7
Benzo(b)fluo nth	ug/l	
B nzo(k)fluo nthene	ug/l	
B nzo(g h l)perylene	ug/l	
Chryse	ug/l	
D-benzo(h)anth cene ⁻²	ug/l	
I d no(1,2,3-cd)py ⁻²	ug/l	
Fluoranth	g/l	
Fluorene	ug/l	
Naphthal ne	ug/l	15.6
Ph nanth	ug/l	
Pyrene	ug/l	
Tot I US EPA 16 PAH	ug/l	
OTHER PAH		
Anthanth ne	ug/l	
Benzo()pyre	ug/l	
Cycl penta(cd)pyrene	ug/l	
GENERAL INORGANICS		
Complex Cyan d	ug/l	
Easily Liberat bl Cy id (f ee)	ug/l	
Thu cy nat	ug/l	
T t I Cy d	ug/l	1980
S lphid	g/l	710
S lph (f)	ug/l	
S lphat	g/l	101104
Chl d	ug/l	
Phosphat	ug/l	
Exchangeabl Ammonsum	ug/l	100068
Nitrat	ug/l	
Nitrit	ug/l	

Dat S m p l d
L b R f N
C t m R f N
S m p l T y p e
T i P l t / B h i N

AQC
L b Std
|

HEAVY METALS/METALLOIDS

Al m m	g/l	
Ant m y	ug/l	
Arse	g/l	81
B m	ug/l	
B r y l l m	ug/h	
B	ug/l	157
Cadm m	ug/l	13
Ch m m (Dissol ed)	ug/l	57
Chrom m (Hex i nt)	ug/l	
C b ll	ug/l	
Coppe	ug/l	146
G m n i m	ug/l	
L ad	ug/l	36
M ury	ug/l	6.3
Molybd um	ug/l	
N ck l	ug/l	53
S i m	ug/l	44
V d m	ug/l	
Zi	ug/l	412

ESSENTIAL ELEMENTS

Calci m	g/l	
Iro	ug/l	
Mag esi m	ug/h	
Man g es	ug/l	
P t s s i m	ug/l	
Sod m	ug/l	

MONOAROMATICS

B n z e	ug/l	
T l n e	ug/l	
Ethylbenzen	ug/l	
Met & P Xyl ne	ug/l	
Ortho Xyl	g/l	
Tot l Xyl	ug/l	
MTBE	ug/l	
1,2,4-T methylbe ze	ug/l	
1,3,5-Trim thylbenz	ug/l	

TOTAL HYDROCARBONS

P trol m R ng Org cs (C ₆ -C)	g/l	
D esel R ng Org cs (C -C ₂₆)	ug/l	
Hydrocarbo Scree (GC FID)	ug/l	

VOC

1,1,1-T chl eoethane	ug/l	
1,1,2,2-Tet chloroeth ne	ug/l	
1,1,2-T hloro-1,2,2-trifluo eoethane	ug/l	
1,1,2-T chl rothane	ug/l	
1,1-D chl rothane	ug/l	
1,1-D chl eth	ug/l	
1,2,3-T chl roprop ne	ug/l	
1,2,3-T methylbenz ne	ug/l	
1,2,4-T hl robenz ne	ug/l	
1,2,4-T methylbenzene	ug/l	
1,2-D bromo-3-Chl roprop ne	ug/l	
1,2-D chl robenz ne	ug/l	
1,2-D chl rothan	ug/l	
1,2-D hlorop pane	ug/l	
1,2-D chl ropropene	ug/l	
1,3,5-T methylbenz	ug/l	
1,3-D chl robenz ne	ug/l	
1,3-Di hl roprop ne	ug/l	
1,4-D chl robenzen	ug/l	
1-Chl rot luene	ug/l	
1-Methylpropylbenz ne	ug/l	
2,2-D chl roprop ne	ug/l	
2-Chl rot i ne	ug/l	
Benzene	ug/l	
Brom benz	ug/l	
Bromochlorom tha	ug/l	
Bromod chloromethane	ug/l	
Bromof rm	ug/l	
Carbon Tetrachlorid (PCM)	ug/l	
Chl robenz ne (sum)	ug/l	
Chlorod bromomethane	ug/l	
Chl roethane	ug/l	
Chl rof rm	ug/l	
cis-1,2-Dichl roethylene	ug/l	

D t S mpl d
L b R f N
C t m R f N
S mpl Type
T i Pk / B h i N

AQC
Lab Std

s-1 3-D chl rop pe ug/l
D brom hi metha ug/l
D brom th ug/l
D bromom thane g/l
D hl rob nz ug/l
D chl rometh ug/l
Ethylbenzen g/l
H hl butad ne ug/l
m t & p Xyl g/l
M thyl sopropylbenz g/l
Monochl rob nz ne ug/l
Monochl roph nol (m) ug/l
Butylb nz ug/l
Propylb nz ug/l
rtho Xyl ug/l
Sty ug/l
t rt Butylb ug/l
T t hl benz ne ug/l
T tr chl roeth ne (PCE) g/l
Tet hyd f g/l
T l ug/l
t ns-1 2 D chl ro thene ug/l
t s-1 3-d chl ropropene ug/l
T hl oeth (TCE) g/l
T chlrofluo m thane ug/l
T chl rometh g/l
V yl Chl d ug/l

SVOC

1 2 4 T hl rob nz g/l
1 4 D hl robenz g/l
2 3 4 6-Tet chl roph nol (sum) ug/l
2 4 5-T hl roph nol ug/l
2 4 6-T hloroph nol ug/l
2 4-D chl ph nol (m) ug/l
2 4-D methylph nol ug/l
2 4 D it t l ug/l
2 6-D m thylph nol ug/l
2 6-D itrot l ne g/l
2-Chloro pthalen ug/l
2 Chl rophenol (sum) ug/l
2 Methylph nol ug/l
2-Nitroph nol ug/l
4-Chloro 3-m thylphenol ug/l
4-chlorob nzylph yl ether g/l
4-M thylph nol ug/l
4-N itroph nol ug/l
Azobenz ug/l
b s(2-chl ro thyl) ether g/l
b s(2-chl ro ethyo y) meth ne g/l
bis(hl ro sop yl) ether g/l
Brom ph nylphe yl ether ug/l
Hexachi ro-1 3-butad ne ug/l
Hex chlorobenz ne ug/l
Hex chl roethane ug/l
Isopho ne ug/l
N t benz ne ug/l
n-nitrosod n-propyl-1-propanam ne ug/l
P ntachi robenzen ug/l
P nt chl rophenol ug/l

Bis(2-ethylhexyl) pthalat ug/l
Butylbenzyl pthalat ug/l
Diethyl pthalat ug/l
D methyl pthalat ug/l
Di-n-butyl pthalat ug/l
D-n-octyl pthalat ug/l

T t ! Phth lates ug/l

ORGANO CHLORINE PESTICIDES

Ald ug/l
Beta-HCH (Beta BHC) ug/l
Chlordan ug/l
DDD ug/l
D eldrn ug/l
Drns (total) ug/l
Endosulf I ug/l
Endosulfan II ug/l
Endosulf S lphat ug/l
End ug/l
End End Ald hyd ug/l
G mm HCH (Lind ne) ug/l

D i S m p l e d
L a b R f N
C o n t a m i n a n t
S a m p l e T y p e
T i t l e / B e h a v i o u r

AQC
Lab Std

H p t h l u g / l
H p t h l p o d u g / l
H p t c h l r o b e n z u g / l
M e t h y c h l g / l
p p - D D E g / l
p p D D T g / l
p p T D E u g / l

ORGANO PHOSPHOROUS PESTICIDES

A z p h o m t h y l u g / l
D m t n - s - m e t h y l u g / l
D i a z n o u g / l
D h l r v o s u g / l
D t h u g / l
D i f l g / l
E P N E t h g / l
M i a t h u g / l
M t h y l P a t h u g / l
P t h u g / l
T r b u f u g / l

CARBAMATE (P e s t i c i d e s)

C a r b a r y l u g / l
C r b o f u g / l
M e b g / l

PHENOL UREA HERBICIDES

C h l r a t a l r o u g / l
D r o u g / l
I s o p t r o u g / l
L u r o u g / l

CHLOROPHENOXY ACIDIC HERBICIDES

2 4 5 - T u g / l
2 4 - D u g / l
C h l r o - o - t l y l y c e t a c i d u g / l
D c a m b u g / l
D c h l r o p r o p u g / l
M c a p r o p u g / l
S l e x u g / l

TRIAZINES

A t r i z i n e u g / l
S m a z i u g / l

PCB

P C B C o n g e n 2 8 u g / l
P C B C o n g 5 2 u g / l
P C B C o n g n e r 1 0 1 g / l
P C B C o n g n e r 1 1 8 u g / l
P C B C o n g 1 3 6 g / l
P C B C o n g e r 1 5 3 u g / l
P C B C o n g n e r 1 8 0 u g / l

T o t a l P C B u g / l

ALCOHOLS

B u t n o l u g / l
E t h a n o l u g / l
E t h y l e n e G l y c o l u g / l
M e t h n o l u g / l
P r o p n - 1 - o l u g / l
P r o p a n - 2 - o l u g / l

MISCELLANEOUS

S i u g / l
T u g / l

1 2 - D c h l r o p r o p u g / l
1 3 - D i c h l o r o p r o p e n e u g / l
2 4 - D n i t r o p h e n o l u g / l
A c e t o n e u g / l
C a r b a z o l u g / l
C a r b o n d i s u l p h i d u g / l
C r e o s o t (T P H b y G C F - I D) u g / l
C y c l o h e x a n e u g / l

Dat S mpl d
L b R f N
C t m R f N
S mpl Typ
T l Pst / B reh l N

AQC
L b Std

Cycl hex no	ug/l
H chl rocycl p tad	ug/l
Hydroq no	ug/l
N-Nitrosod ph yl m	ug/l
p-Chl ro ine	ug/l
Premeth n/Cypermeth	ug/l
Pynd	ug/l
Styrene	ug/l
S lphol ne	ug/l
T l Extr ct bl Matt (Hist)	ug/l
T ph	ug/l
T butyl T	ug/l
T hl meth ne	ug/l
V yl A tet	ug/l
V nyl Acetat	ug/l
BOD	mg/l
COD	mg/l
Dissol ed Oxygen	mg/l
Alk l lty	mg/l
Iro (F)	mg/l
Iro (F)	mg/l

Notes

- B nzo(b)fluo
- 2 D benzo(h);
- ** W chest br

ENVIRONMENTAL ANALYSIS LABORATORIES

15 Burgess Road Ivyhouse Lane Industrial Estate Hastings East Sussex TN35 4NR
 Tel 01424 444433 Fax 01424 442299 info@environmentalanalysis.com

ANALYTICAL REPORT No R68433

Location Durham Rd Newport

Your Project No F13041

Reporting Date 14/10/03

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
 Leeds LS11 5SX

Waters

Lab Ref No	181318	181322	181324	181326	181327	181330
Sample Type	WS	WS	WS	WS	WS	WS
Trial Pit / Borehole No	BH501	BH505	BH510	BH513	BH514	BH517

Aromatic

C ₅ C ₇	(µg/l) N	<100	<100	<100	<100	<100	<100
>C ₇ C ₈	(µg/l) N	<100	<100	<100	<100	<100	<100
>C ₈ C ₁₀	(µg/l) N	<100	<100	<100	<100	<100	<100
>C ₁₀ C ₁₂	(µg/l) N	<100	<100	<100	<100	<100	<100
>C ₁₂ C ₁₆	(µg/l) N	<100	<100	<100	<100	<100	<100
>C ₁₆ C ₂₁	(µg/l) N	<100	<100	<100	<100	<100	<100
>C ₂₁ C ₃₅	(µg/l) N	<100	<100	<100	<100	<100	<100

Aliphatic

C ₅ C ₆	(µg/l) N	<100	<100	<100	<100	<100	<100
>C ₆ C ₉	(µg/l) N	<100	<100	<100	<100	<100	<100
>C ₉ C ₁₀	(µg/l) N	<100	<100	<100	<100	<100	<100
>C ₁₀ C ₁₂	(µg/l) N	<100	<100	<100	<100	<100	<100
>C ₁₂ C ₁₆	(µg/l) N	<100	<100	<100	<100	<100	<100
>C ₁₆ C ₂₁	(µg/l) N	<100	<100	<100	<100	<100	<100
>C ₂₁ C ₃₄	(µg/l) N	<100	<100	<100	<100	<100	<100

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t not tested

µB

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Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 23/10/03

ANALYTICAL REPORT No R68638


Location Durham Rd Newport

Your Project No F13041

The attached analytical results relate to samples received on 17 Oct 2003

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If you have any queries regarding this report please contact Steve Chapman or Steve Knight

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www.soil-engineering.co.uk
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A Division of Norwest Holst Soil Engineering Ltd
Registered in England No 980795
Registered Office Parkside Lane Dewsbury Road Leeds LS11 5SX

Norwest Holst Soil Engineering Ltd
R68638 Durham Rd Newport

	R68638			
Date Sampled				
Lab Ref No	178605	178852	179265	179354A
Customer Ref No	10	7	10	6
Sample Type	ES	ES	ES	ES
Trial Pit / Borehole No	TP688	TP692	TP630	TP656A
Depth (m)	1.40	1.30	1.50	1.60
Hardstanding at Surface (Y/N)				

	Value
pH	
/ Loss on Ignition	/
/ Moisture	/
/ Stones	/
Asbestos	/

PHENOLICS

B ty l Phenols	mg/kg
Catechol	mg/kg
Cresols (s m)	mg/kg
Naphthols	mg/kg
Phenol	mg/kg
Resorcinol	mg/kg
Tn methylphenol	mg/kg
Xylenols & Ethylphenols	mg/kg

Total Phenols mg/kg

US EPA PRIORITY PAH s

Acenaphthene	mg/kg
Acenaphthylene	mg/kg
Anthracene	mg/kg
Benzo(a)Anthracene	mg/kg
Benzo(a)pyrene	mg/kg
Benzo(b)fluoranthene	mg/kg
Benzo(k)fluoranthene	mg/kg
Benzo(g h i)perylene	mg/kg
Chrysene	mg/kg
D benzo(a h)anthracene ⁻²	mg/kg
Indeno(1 2 3 cd)pyrene ⁻²	mg/kg
Fl oranthene	mg/kg
Fluore e	mg/kg
Naphthalene	mg/kg
Phenanth ene	mg/kg
Pyrene	mg/kg

Total US EPA 16 PAH mg/kg

OTHER PAH s

Anthanthrene	mg/kg
Benzo(e)pyrene	mg/kg
Cyclopenta(cd)pyrene	mg/kg

GENERAL INORGANICS

Complex Cyan de	mg/kg
Easily Liberatable Cyanide (free)	mg/kg
Thiocyanate	mg/kg
Total Cyanide	mg/kg

Sulphide	mg/kg
Sulphur (free)	mg/kg
Total Sulphate	mg/kg
Wate Soluble Sulphate	mg/kg

Water Soluble Chloride	mg/kg
Phosphate	mg/kg

Exchangeable Ammonium	mg/kg
N trate	mg/kg
Nitrite	mg/kg

Norwest Holst Soil Engineering Ltd
R68638 Durham Rd Newport

Date Sampled					R68638
Lab Ref No	178605	178852	179265	179354A	AQC
Customer Ref No	10	7	10	6	Lab Std
Sample Type	ES	ES	ES	ES	
Trial Pit / Borehole No	TP688	TP692	TP630	TP656A	
Depth (m)	1.40	1.30	1.50	1.60	
Hardstanding at Surface (Y/N)					

HEAVY METALS/METALLOIDS

Aluminium	mg/kg
Antimony	mg/kg
Arsenic	mg/kg
Barium	mg/kg
Beryllium	mg/kg
Boron (Water Soluble)	mg/kg
Cadmium	mg/kg
Chromium (Total)	mg/kg
Chromium (Hexavalent)	mg/kg
Cobalt	mg/kg
Copper	mg/kg
Germanium	mg/kg
Lead	mg/kg
Mercury	mg/kg
Molybdenum	mg/kg
Nickel	mg/kg
Selenium	mg/kg
Vanadium	mg/kg
Zinc	mg/kg

ESSENTIAL ELEMENTS

Calcium	mg/kg
Iron	mg/kg
Magnesium	mg/kg
Manganese	mg/kg
Potassium	mg/kg
Sodium	mg/kg

MONOAROMATICS

Benzene	mg/kg
Toluene	mg/kg
Ethylbenzene	mg/kg
Meta & Para Xylene	mg/kg
Ortho Xylene	mg/kg

Total Xylenes mg/kg

MTBE	mg/kg
1,2,4-Trimethylbenzene	mg/kg
1,3,5-Trimethylbenzene	mg/kg

TOTAL HYDROCARBONS

Petroleum Range Organics (C ₆ -C ₁₀)	mg/kg
Diesel Range Organics (C ₁₀ -C ₂₈)	mg/kg
Hydrocarbon Screen (GC FID)	mg/kg

VOCs

1,1,1-Trichloroethane	mg/kg
1,1,2-Tetrachloroethane	mg/kg
1,1,2-Trichloro-1,2,2-trifluoroethane	mg/kg
1,1,2-Trichloroethane	mg/kg
1,1-Dichloroethane	mg/kg
1,1-Dichloroethene	mg/kg
1,2,3-Trichloropropane	mg/kg
1,2,3-Trimethylbenzene	mg/kg
1,2,4-Trichlorobenzene	mg/kg
1,2,4-Trimethylbenzene	mg/kg
1,2-Dibromo-3-Chloropropane	mg/kg
1,2-Dichlorobenzene	mg/kg

Norwest Holst Soil Engineering Ltd
R68638 Durham Rd Newport

Date Sampled	178605	178852	179265	179354A	R68638
Lab Ref No	10	7	10	6	AQC
Customer Ref No	ES	ES	ES	ES	Lab Std
Sample Type	TP688	TP692	TP630	TP656A	
Trial Pit / Borehole No	1.40	1.30	1.50	1.60	
Depth (m)					
Hardstanding at Surface (Y/N)					

1,2-Dichloroethane	mg/kg
1,2-Dichloropropane	mg/kg
1,2-Dichloropropene	mg/kg
1,3,5-Trimethylbenzene	mg/kg
1,3-Dichlorobenzene	mg/kg
1,3-Dichloropropane	mg/kg
1,4-Dichlorobenzene	mg/kg
1-Chlorotoluene	mg/kg
1-Methylpropylbenzene	mg/kg
2,2-Dichloropropane	mg/kg
2-Chlorotoluene	mg/kg
Benzene	mg/kg
Bromobenzene	mg/kg
Bromochloromethane	mg/kg
Bromodichloromethane	mg/kg
Bromoform	mg/kg
Carbon Tetrachloride (PCM)	mg/kg
Chlorobenzene (sum)	mg/kg
Chlorodibromomethane	mg/kg
Chloroethane	mg/kg
Chloroform	mg/kg
cis-1,2-Dichloroethylene	mg/kg
cis-1,3-Dichloropropene	mg/kg
Dibromochloromethane	mg/kg
Dibromoethane	mg/kg
Dibromomethane	mg/kg
Dichlorobenzene	mg/kg
Dichloromethane	mg/kg
Ethylbenzene	mg/kg
Hexachlorobutadiene	mg/kg
meta & para Xylene	mg/kg
Methyl isopropylbenzene	mg/kg
Monochlorobenzene	mg/kg
Monochlorophenols (sum)	mg/kg
n-Butylbenzene	mg/kg
n-Propylbenzene	mg/kg
ortho Xylene	mg/kg
Styrene	mg/kg
tert-Butylbenzene	mg/kg
Tetrachlorobenzene	mg/kg
Tetrachloroethene (PCE)	mg/kg
Tetrahydrofuran	mg/kg
Toluene	mg/kg
trans-1,2-Dichloroethene	mg/kg
trans-1,3-dichloropropene	mg/kg
Trichloroethene (TCE)	mg/kg
Trichlorobromomethane	mg/kg
Trichloromethane	mg/kg
Vinyl Chloride	mg/kg

SVOCs	
1,2,4-Trichlorobenzene	mg/kg
1,4-Dichlorobenzene	mg/kg
2,3,4,6-Tetrachlorophenol (sum)	mg/kg
2,4,5-Trichlorophenol	mg/kg
2,4,6-Trichlorophenol	mg/kg
2,4-Dichlorophenol (sum)	mg/kg
2,4-Dimethylphenol	mg/kg
2,4-Dinitrotoluene	mg/kg
2,6-Dimethylphenol	mg/kg
2,6-Dinitrotoluene	mg/kg

Norwest Holst Soil Engineering Ltd
R68638 Durham Rd Newport

Date Sampled					R68638
Lab Ref No	178605	178852	179265	179354A	AQC
Customer Ref No	10	7	10	6	Lab Std
Sample Type	ES	ES	ES	ES	
Trial Pit / Borehole No	TP688	TP692	TP630	TP656A	
Depth (m)	1.40	1.30	1.50	1.60	
Hardstanding at Surface (Y/N)					

2-Chloronaphthalene	mg/kg
2-Chlorophenol (sum)	mg/kg
2-Methylphenol	mg/kg
2-Nitrophenol	mg/kg
4-Chloro-3-methylphenol	mg/kg
4-chlorobenzylphenylether	mg/kg
4-Methylphenol	mg/kg
4-Nitrophenol	mg/kg
Azobenzene	mg/kg
bis(2-chloroethyl)ether	mg/kg
bis(2-chloroethoxy)methane	mg/kg
bis(chloro isopropyl)ether	mg/kg
Bromophenylphenylether	mg/kg
Hexachloro-1,3-butadiene	mg/kg
Hexachlorobenzene	mg/kg
Hexachloroethane	mg/kg
Isophorone	mg/kg
Nitrobenzene	mg/kg
n-nitrosodipropylpropanamine	mg/kg
Pentachlorobenzene	mg/kg
Pentachlorophenol	mg/kg

Bis(2-ethylhexyl)phthalate	mg/kg
Butylbenzylphthalate	mg/kg
Diethylphthalate	mg/kg
Dimethylphthalate	mg/kg
D-n-butylphthalate	mg/kg
Di-n-octylphthalate	mg/kg

Total Phthalates mg/kg

ORGANO CHLORINE PESTICIDES

Aldrin	mg/kg
Beta HCH (Beta BHC)	mg/kg
Chlordane	mg/kg
DDD	mg/kg
Dieldrin	mg/kg
Dnns (total)	mg/kg
Endosulfan I	mg/kg
Endosulfan II	mg/kg
Endosulfan Sulphate	mg/kg
Endrin	mg/kg
Endrin Aldehyde	mg/kg
Gamma HCH (Lindane)	mg/kg
Heptachlor	mg/kg
Heptachlor epoxide	mg/kg
Heptachlorobenzene	mg/kg
Methoxychlor	mg/kg
pp DDE	mg/kg
pp DDT	mg/kg
pp TDE	mg/kg

ORGANO PHOSPHOROUS PESTICIDES

Azinphos methyl	mg/kg
Demeton s-methyl	mg/kg
Diazinon	mg/kg
Dichlorvos	mg/kg
Disulfoton	mg/kg
EPN Ethion	mg/kg
Malathion	mg/kg
Methyl Parathion	mg/kg
Parathion	mg/kg
Terbufos	mg/kg

CARBAMATE (Pesticide)

Carbaryl	mg/kg
----------	-------

Norwest Holst Soil Engineering Ltd
R68638 Durham Rd Newport

Date Sampled					R68638
Lab Ref No	178605	178852	179265	179354A	AQC
Custom Ref No	10	7	10	6	Lab Std
Sample Type	ES	ES	ES	ES	
Trial Pit / Borehole No	TP688	TP692	TP630	TP656A	
Depth (m)	1.40	1.30	1.50	1.60	
Has standing water at Surface (Y/N)					
Carbofuran	mg/kg				
Maneb	mg/kg				
PHENOL UREA HERBICIDES					
Chlorotoluron	mg/kg				
Diuron	mg/kg				
Isoproturon	mg/kg				
Linuron	mg/kg				
CHLOROPHENOXY ACIDIC HERBICIDES					
2,4,5-T	mg/kg				
2,4-D	mg/kg				
Chloro-o-toloxycetic acid	mg/kg				
Dicamba	mg/kg				
Dichloroprop	mg/kg				
Mecoprop	mg/kg				
Silene	mg/kg				
TRIAZINES					
Altrazine	mg/kg				
Simazine	mg/kg				
PCBs					
PCB Congener 28	mg/kg	<0.005	0.005	10.339	0.005
PCB Congener 52	mg/kg	0.005	0.005	40.389	0.018
PCB Congener 101	mg/kg	0.025	0.011	106.839	0.065
PCB Congener 118	mg/kg	0.019	0.010	69.207	0.037
PCB Congener 138	mg/kg	0.017	0.007	71.606	0.059
PCB Congener 153	mg/kg	0.027	0.015	95.674	0.087
PCB Congener 180	mg/kg	0.005	0.005	21.581	0.005
Total PCBs	mg/kg	0.541	0.188	1912.328	1.513
ALCOHOLS					
Butanol	mg/kg				
Ethanol	mg/kg				
Ethylene Glycol	mg/kg				
Methanol	mg/kg				
Propan-1-ol	mg/kg				
Propan-2-ol	mg/kg				
MISCELLANEOUS					
Calorific Value	Cal/g				
Silica	mg/kg				
Tin	mg/kg				
1,2-Dichloropropane	mg/kg				
1,3-Dichloropropane	mg/kg				
2,4-Dinitrophenol	mg/kg				
Acetone	mg/kg				
Carbazole	mg/kg				
Carbon disulphide	mg/kg				
Creosote (TPH by GC/FID)	mg/kg				
Cyclohexane	mg/kg				
Cyclohexanone	mg/kg				
Hexachlorocyclopentadiene	mg/kg				
Hydroquinone	mg/kg				
N,N-Dimethylphenylamine	mg/kg				
p-Chloroaniline	mg/kg				
Premethrin/Cypermethrin	mg/kg				
Pyridine	mg/kg				
Styrene	mg/kg				
Sulpholane	mg/kg				
Toluene Extractable Matter (Historic)	mg/kg				
Toxaphene	mg/kg				
Tributyl Tin	mg/kg				

Norwest Holst Soil Engineering Ltd
R68638 Durham Rd Newport

Date Sampled					R68638
Lab Ref No	178605	178852	179265	179354A	AQC
Customer Ref No	10	7	10	6	Lab Std
Sample Type	ES	ES	ES	ES	
Trial Pit / Borehole No	TP688	TP692	TP630	TP656A	
Depth (m)	1.40	1.30	1.50	1.60	
Headed into Surface (Y/N)					

Trichloromethane	mg/kg
Vinyl Acetate	mg/kg

CONCRETE

Chloride BS1377 Part 3 including preparation	mg/kg
HAC (Rapid determination of High Alumina Cem)	mg/kg
Mix proportions Cement/Aggregate Ratio-BS188	mg/kg

Notes

Benzo(b)fluoranthene & Benzo(k)fluoranthene co-elute (reported as sum)
² D benzo(a,h)anthracene & Indeno(1,2,3-cd)pyrene co-elute (reported as sum)

SUPPORTING FACTUAL DATA

SECTION C

LABORATORY TESTING

ASBESTOS MONITORING RESULTS



Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 10/10/03

ANALYTICAL REPORT No R68240

Location Durham Rd Newport

Your Project No F13041

The attached analytical results relate to samples received on 19 Sep 2003

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Authorised by

If you have any queries regarding this report please contact Steve Chapman or Steve Knight.

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Tel 01424 444433 Fax 01424 442299 info@environmentalanalysis.com

ANALYTICAL REPORT No R68240

Location Durham Rd Newport

Your Project No F13041

Reporting Date 10/10/03

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
Leeds LS11 5SX

Filters

	Sample ref	Trial Pits	Trial Pits	BH505	Trial Pits	Trial Pits	Control
	Sample number	110	207	114	156	208	219
	Date sampled	16/09/03	16/09/03	16/09/03	17/09/03	17/09/03	17/09/03
	Our ref	179759	179760	179761	179762	179763	179764
Asbestos Fibres	(fibres/mL) N	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t - not tested

m

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Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 10/10/03

ANALYTICAL REPORT No R68129

Location Durham Rd Newport

Your Project No F13041

The attached analytical results relate to samples received on 12 Sep 2003

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If you have any queries regarding this report please contact Steve Chapman or Steve Knight.

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ANALYTICAL REPORT No R68129

Location Durham Rd Newport

Your Project No F13041

Reporting Date 10/10/03

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
Leeds LS11 5SX

Filters

	Sample number	108	109	115	158
	Our ref	178863	178864	178865	178866
Asbestos Fibres	(fibres/mL) N	<0.02	<0.02	<0.02	<0.02

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t = not tested

MJB

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Tel 01424 444433 Fax 01424 442299 info@environmentalanalysis.com

ANALYTICAL REPORT No R68186

Location Durham Rd Newport

Your Project No F13041

Reporting Date 10/10/03

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
Leeds LS11 5SX

Filters

	Sample ref	Office Area	Trial Pits	Trial Pits	BH504	Blank
	Sample number	117	103	152	206	200
	Date sampled	15/09/03	15/09/03	15/09/03	15/09/03	15/09/03
	Our ref	179249	179250	179251	179252	179253
Asbestos Fibres	(fibres/mL) N	<0.02	<0.02	<0.02	<0.02	<0.02

Backing paper still on filter

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t = not tested

MJB

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Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 17/10/03

ANALYTICAL REPORT No R68597

Location Durham Rd Newport

Your Project No F13041

The attached analytical results relate to samples received on 14 Oct 2003

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ENVIRONMENTAL ANALYSIS LABORATORIES

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ANALYTICAL REPORT No R68597

Location Durham Rd Newport

Your Project No F13041

Reporting Date 17/10/03

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
Leeds LS11 5SX

Filters

	Sample number	104	113	154	204	211
	Our ref	179018	179019	179021	179022	179023
Asbestos Fibres	(fibres/mL) N	<0.02	0.074	<0.02	<0.02	0.223

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t = not tested

MJB

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Client Norwest Holst Soil Engineering Ltd
Parkside Lane Dewsbury Road
Leeds LS11 5SX

Reporting Date 13/11/03

ANALYTICAL REPORT No R68937

Location Durham Rd Newport

Your Project No F13041

The attached analytical results relate to samples received on 07 Nov 2003

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Authorised by

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ENVIRONMENTAL ANALYSIS LABORATORIES

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Tel 01424 444433 Fax 01424 442299 info@environmentalanalysis.com

ANALYTICAL REPORT No R68937

Location Durham Rd Newport

Your Project No F13041

Reporting Date 13/11/03

CLIENT Norwest Holst Soil Engineering Ltd

Parkside Lane Dewsbury Road
Leeds LS11 5SX

Filters

	TP/BH	BH510	Trial Pit	Trial Pit
Sample number	151	111	201	
Date sampled	18/09/03	19/09/03	22/09/03	
Our ref	184144	184145	184146	
Asbestos Fibres (fibres/mL) N	0.048	<0.02	<0.02	

Descriptions of methods available on request (V8)

Y UKAS accredited test

N Non accredited test

n/t = not tested

MJB

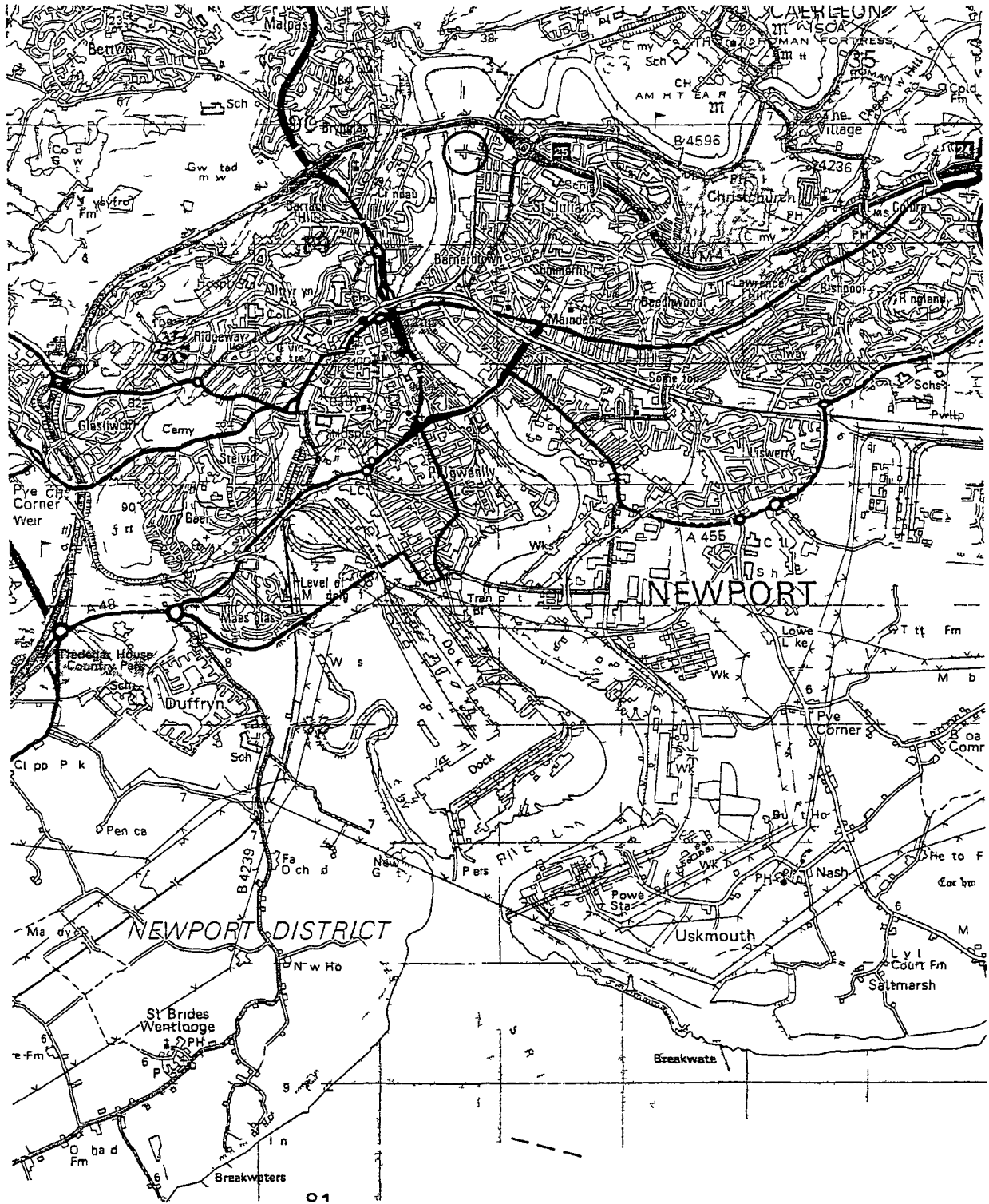
www.environmentalanalysis.com

SUPPORTING FACTUAL DATA

SECTION D

SITE PLANS

SITE LOCATION PLAN



○ Denotes Site Location

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SITE DURHAM ROAD, NEWPORT

**CONTRACT No
F13041**

**SCALE
1 50,000**

TITLE SITE LOCATION PLAN

DATE 13/10/2003

**FIGURE
02**

SUPPORTING FACTUAL DATA

SECTION D

SITE PLANS

**EXPLORATORY HOLE
LOCATION PLAN**