

TEST DATE AND CONDITIONS			
Date		21/06/2023	
Atmospheric Pressure		995	mB
Ambient Temperature		21.9	°C
EnviroNics Serial No.		5089	

**GFM436 Final Inspection & Calibration
Check Certificate**

GAS DATA LTD

Unit 4, Fairfield Court

Seven Stars Estate

Wheler Rd

Coventry

CV3 4LJ

Tel 02476303311



Fax 02476307711

Customer	LMB Geosolutions Ltd
Certificate Number	124309
Order Number	335040

Serial Number	12102
Software Version	G436-00.0027/0009

Recalibration DUE Date
21/06/24

Instrument Checks					
Keyboard	✓		Display Contrast	✓	
Pump Flow In	500	Accept > 200 cc/min	Pump Flow @ -200mB	300	Accept > 200 cc/min
Clock Set / Running	✓		Labels Fitted	✓	

Gas Checks						
Sensor	CH ₄		CO ₂		O ₂	
	Instrument Gas	True Gas Value %	Instrument Gas	True Gas Value %	Instrument Gas	True Gas Value %
	Readings %		Readings %		Readings %	
	59.6	60	39.4	40	20.9	20.9
	Accept ±3.0		Accept ±3.0		Accept ±0.5	
	5.0	5	4.8	5	6.0	6
	Accept ±0.3		Accept ±0.3		Accept ±0.3	
Zero Reading 100% N2	0.0	0	0.0	0	0.0	0
	Accept ±0.0		Accept ±0.0		Accept ±0.1	

Optional Gas Checks						
Applied Gas & Range		Concentration Tested @ (ppm)	Instrument Readings (ppm)			
Gas Type	Range (ppm)		Zero Reading		Instrument Gas Reading	
H2S	5000	1500	0	Accept ±0.0	1500	Accept ±5.0%
CO	2000	1000	0	Accept ±0.0	1000	Accept ±5.0%
Hexane	2.0%	2.0%	0	Accept ±0.0	1.99	Accept ±10.0%

Cross Gas Effects									
Applied Gas (ppm)		Instrument Readings (ppm)							
Gas Type	Concentration	Toxic 1:	H2S	Toxic 2:	CO	Toxic 3:	Hex		
H2S	1500	1500		0		0			
CO	1000	120		1000		0			
Hexane	2.0%	0		0		1.99			

Pressure Checks			
Atmospheric Pressure [AP] (mB)			
Current Atmospheric Pressure (mB)		Instrument Atmospheric Pressure Reading (mB)	
AP Open Ports		995	Accept ± 2.0
AP Port (Internal)	+800 mB	800	Accept ± 5.0
	+1200mb	1200	Accept ± 5.0

Flow Checks					
Borehole Flow			Differential Pressure		
Applied Reading (l/h)	Instrument Reading (l/h)		Applied Pressure (Pa)	Instrument Reading (Pa)	
-30	-29.9	Accept ± 3.0	-426	-424	Accept ± 50
-3	-3.1	Accept ± 1.0	-18	-20	Accept ± 6.0
0	0.0	Accept ± 0.0	0.0	0.0	Accept ± 0.5
3	3.1	Accept ± 0.5	15	17	Accept ± 3.0
30	30.1	Accept ± 3.0	331	331	Accept ± 50
60	59.8	Accept ± 6.0	985	975	Accept ± 130
90	90.6	Accept ± 9.0	1923	1963	Accept ± 250

Temperature Checks		
Calibration Temperature	Instrument Temperature Reading $^{\circ}\text{C}$	
Applied Temperature $^{\circ}\text{C}$		
-10	-10.0	Accept ± 2.0
0	0.0	Accept ± 1.0
30	30.0	Accept ± 1.0
60	60.0	Accept ± 1.0
100	100.0	Accept ± 1.0

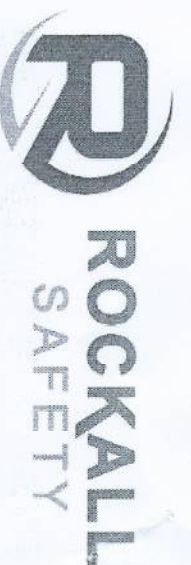
Technician:
James Williams

Date Tested:
21/06/2023

The instrument identified by the serial number stated above has been tested by Gas Data personnel for calibration accuracy on the date and under the ambient conditions stated. Gas Data Ltd internal BS EN ISO9001:2015, BS EN ISO14001:2015, BS EN ISO45001:2018 compliant workshop procedures were followed to apply known calibration test gases, gas flow rates, pressures and temperatures of the values stated. The results displayed on the instrument at each stage are recorded above.

Gas Data Ltd is certified to BS EN ISO9001:2015, BS EN ISO14001:2015, BS EN ISO45001:2018.

Portable Gas Monitor
Calibration Certificate



TYPE: QRAE MINIRAE LITE
REPAIR No: 1024515

SERIAL No: 595-002144
DATE OF SERVICE: 07/11/2023

INSTRUMENT CHECKS / RESULTS

1. VISUAL

COVERS / GASKETS / FIXING SCREWS / DISPLAY / BATTERY PASS

2. OPERATIONAL

AUDIBLE & VISUAL, VIBRATING ALARM / CONFIDENCE BLEEP / BACKLIGHT / LOG PASS

3. CALIBRATION & ALARM SETTINGS

* I = INITIAL, F = FINAL	CHANNEL 1	CHANNEL 2	CHANNEL 3	CHANNEL 4	CHANNEL 5	CHANNEL 6
SENSOR TYPE		Isobutylene				
GAS CYL S/No		WO378234-2				
CAL GAS USED		C4H8 100PPM				
RESULTS		I	F			
ZERO		0	0			
CALIBRATION		100	100			
A1 SET POINT		50000PPB				
A2 SET POINT		100000PPB				
A3 SET POINT						
STEL SET POINT		25000PPB				
TWA SET POINT		10000PPB				

4. BATTERY

INITIAL STATE FULL FINAL STATE FULL

5. DATA LOGGER/PUMP N/A

5. CALIBRATION DUE DATE

06/05/2024

7. UNIT EXPIRY DATE

N/A

QRAE MONITOR TESTED AND COMPLIES TO SPECIFICATION. ALL TEST EQUIPMENT AND CALIBRATION GASES USED ARE TRACEABLE TO NATIONAL STANDARDS. REGISTERED TO BS EN ISO 9001 - 2008 CERTIFICATE NUMBER - 4083/A/0001/UK/EN

SIGNED:

[Signature]

PRINT: L. POWELL

DATE: 7-Nov-23

APPENDIX C

LABORATORY ASSESSMENT DATA

Job No:	151157																
Client:	TJ Morris																
Project:	Home Bargains, Newport																
Completed:	CH																
Checked:	JW																
Approved:	KW																
Test	Method	Units	LOD	GAC (mg/kg)	Check	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Heavy Metals																	
Arsenic *	TM30/PM15	mg/kg	<0.5	640	-	6.2	-	12.1	-	-	11.3	-	8.6	-	8.1	13.9	14.3
Barium *	TM30/PM15	mg/kg	<1	22000	-	1904	-	988	-	-	872	-	1280	-	705	132	94
Beryllium *	TM30/PM15	mg/kg	<0.5	12	-	1.3	-	2.1	-	-	1.5	-	0.8	-	0.9	1.6	1.7
Cadmium *	TM30/PM15	mg/kg	<0.1	190	-	3.5	-	0.5	-	-	1.4	-	2	-	0.7	<0.1	<0.1
Chromium *	TM30/PM15	mg/kg	<0.5	8600	-	32.7	-	45	-	-	44.1	-	57.9	-	49.6	49.2	47.2
Copper *	TM30/PM15	mg/kg	<1	68000	-	30	-	55	-	-	82	-	29	-	27	19	12
Lead *	TM30/PM15	mg/kg	<5	2330	-	613	-	61	-	-	97	-	78	-	117	41	23
Mercury *	TM30/PM15	mg/kg	<0.1	320	-	<0.1	-	<0.1	-	-	0.1	-	<0.1	-	0.2	<0.1	<0.1
Nickel *	TM30/PM15	mg/kg	<0.7	980	-	13.6	-	23.4	-	-	22.9	-	19.6	-	14.9	35.9	33.5
Selenium *	TM30/PM15	mg/kg	<1	12000	-	1	-	3	-	-	2	-	1	-	<1	2	1
Vanadium *	TM30/PM15	mg/kg	<1	9000	-	37	-	38	-	-	36	-	32	-	29	59	53
Water Soluble Boron *	TM74/PM32	mg/kg	<0.1	240000	-	1.1	-	1.3	-	-	0.5	-	2	-	2.1	2.5	1.8
Zinc *	TM30/PM15	mg/kg	<5	730000	-	209	-	143	-	-	214	-	168	-	181	128	115
VOC MS																	
1,1,1,2-Tetrachloroethane *	TM15/PM10	ug/kg	<3	110000	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
1,1,1-Trichloroethane *	TM15/PM10	ug/kg	<3	660000	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
1,1,2,2-Tetrachloroethane *	TM15/PM10	ug/kg	<3	270000	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
1,1,2-Trichloroethane *	TM15/PM10	ug/kg	<3	94000	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
1,1-Dichloroethane *	TM15/PM10	ug/kg	<3	26000	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
1,1-Dichloroethene (1,1 DCE) *	TM15/PM10	ug/kg	<6	26000	-	<6	-	<6	-	-	<6	-	<6	-	<6	<6	<6
1,1-Dichloropropene *	TM15/PM10	ug/kg	<3	-	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
1,2,3-Trichlorobenzene *	TM15/PM10	ug/kg	<7	102000	-	<7	-	<7	-	-	<7	-	<7	-	<7	<7	<7
1,2,3-Trichloropropene *	TM15/PM10	ug/kg	<7	-	-	<7	-	<7	-	-	<7	-	<7	-	<7	<7	<7
1,2,4-Trichlorobenzene *	TM15/PM10	ug/kg	<7	220000	-	<7	-	<7	-	-	<7	-	<7	-	<7	<7	<7
1,2,4-Trimethylbenzene *	TM15/PM10	ug/kg	<6	42000	-	55	-	11	-	-	<6	-	18	-	69	<6	<6
1,2-Dibromo-3-chloropropane *	TM15/PM10	ug/kg	<4	-	-	<4	-	<4	-	-	<4	-	<4	-	<4	<4	<4
1,2-Dibromomethane *	TM15/PM10	ug/kg	<3	-	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
1,2-Dichlorobenzene *	TM15/PM10	ug/kg	<4	2000000	-	<4	-	<4	-	-	<4	-	<4	-	<4	<4	<4
1,2-Dichloroethane *	TM15/PM10	ug/kg	<4	-	-	<4	-	<4	-	-	<4	-	<4	-	<4	<4	<4
1,2-Dichloropropene *	TM15/PM10	ug/kg	<6	3300	-	<6	-	<6	-	-	<6	-	<6	-	<6	<6	<6
1,3,5-Trimethylbenzene *	TM15/PM10	ug/kg	<3	-	-	5	-	6	-	-	<3	-	4	-	18	<3	<3
1,3-Dichlorobenzene *	TM15/PM10	ug/kg	<4	30000	-	<4	-	<4	-	-	<4	-	<4	-	<4	<4	<4
1,3-Dichloropropene *	TM15/PM10	ug/kg	<3	-	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
1,4-Dichlorobenzene *	TM15/PM10	ug/kg	<4	4400000	-	<4	-	<4	-	-	<4	-	<4	-	<4	<4	<4
2,2-Dichloropropene *	TM15/PM10	ug/kg	<4	-	-	<4	-	<4	-	-	<4	-	<4	-	<4	<4	<4
2-Chlorotoluene *	TM15/PM10	ug/kg	<3	-	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
4-Chlorotoluene *	TM15/PM10	ug/kg	<3	-	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
4-Isopropyltoluene *	TM15/PM10	ug/kg	<4	-	-	<4	-	<4	-	-	<4	-	<4	-	12	<4	<4
Benzene *	TM15/PM10	ug/kg	<3	27000	-	<3	-	23	-	-	<3	-	7	-	69	<3	<3
Bromobenzene *	TM15/PM10	ug/kg	<2	97000	-	<2	-	<2	-	-	<2	-	<2	-	<2	<2	<2
Bromochloromethane *	TM15/PM10	ug/kg	<3	2100	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
Bromodichloromethane *	TM15/PM10	ug/kg	<3	-	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
Bromoform *	TM15/PM10	ug/kg	<3	760000	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
Bromomethane *	TM15/PM10	ug/kg	<1	-	-	<1	-	<1	-	-	<1	-	<1	-	<1	<1	<1
Carbon tetrachloride *	TM15/PM10	ug/kg	<4	-	-	<4	-	<4	-	-	<4	-	<4	-	<4	<4	<4
Chlorobenzene *	TM15/PM10	ug/kg	<3	56000	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
Chloroethane *	TM15/PM10	ug/kg	<2	59	-	<2	-	<2	-	-	<2	-	<2	-	<2	<2	<2
Chloroform *	TM15/PM10	ug/kg	<3	-	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
Chloromethane *	TM15/PM10	ug/kg	<3	1000	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
cis-1,2-Dichloroethene *	TM15/PM10	ug/kg	<3	14000	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
cis-1,3-Dichloropropene *	TM15/PM10	ug/kg	<4	-	-	<4	-	<4	-	-	<4	-	<4	-	<4	<4	<4
Dibromochloromethane *	TM15/PM10	ug/kg	<3	-	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
Dibromomethane *	TM15/PM10	ug/kg	<3	-	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
Dichlorodifluoromethane *	TM15/PM10	ug/kg	<2	-	-	<2	-	<2	-	-	<2	-	<2	-	<2	<2	<2
Dichloromethane (DCM) *	TM15/PM10	ug/kg	<7	-	-	<7	-	10	-	-	<7	-	<7	-	<7	<7	<7
Ethylbenzene *	TM15/PM10	ug/kg	<3	5700000	-	<3	-	<3	-	-	<3	-	<3	-	13	<3	<3
Hexachlorobutadiene *	TM15/PM10	ug/kg	<4	31000	-	<4	-	<4	-	-	<4	-	<4	-	<4	<4	<4
Isopropylbenzene *	TM15/PM10	ug/kg	<3	1400000	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
m,p-Xylene *	TM15/PM10	ug/kg	<5	-	-	10	-	39	-	-	13	-	19	-	90	<5	<5
Methyl Tertiary Butyl Ether *	TM15/PM10	ug/kg	<2	-	-	<2	-	<2	-	-	<2	-	<2	-	<2	<2	<2
Naphthalene *	TM15/PM10	ug/kg	<27	190000	-	<27	-	38	-	-	<27	-	<27	-	147	<27	<27
n-Butylbenzene *	TM15/PM10	ug/kg	<4	-	-	<4	-	<4	-	-	<4	-	<4	-	<4	<4	<4
o-Xylene *	TM15/PM10	ug/kg	<3	6600000	-	<3	-	8	-	-	<3	-	5	-	24	<3	<3
Propylbenzene *	TM15/PM10	ug/kg	<4	-	-	<4	-	<4	-	-	<4	-	<4	-	<4	<4	<4
sec-Butylbenzene *	TM15/PM10	ug/kg	<4	-	-	<4	-	<4	-	-	<4	-	<4	-	<4	<4	<4
Styrene *	TM15, A/PM10	ug/kg	<3	4100000	-	<3	-	<3	-	-	<3	-	<3	-	6	<3	<3
Surrogate Recovery Toluene D8	TM15/PM10	%	<0	-	-	70	-	34	-	-	41	-	78	-	62	84	86
tert-Butylbenzene *	TM15/PM10	ug/kg	<5	-	-	<5	-	<5	-	-	<5	-	<5	-	<5	<5	<5
Tetrachloroethene (PCE) *	TM15/PM10	ug/kg	<3	19000	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
Toluene *	TM15/PM10	ug/kg	<3	56000000	-	8	-	30	-	-	6	-	19	-	78	6	<3
trans-1,2-Dichloroethene *	TM15/PM10	ug/kg	<3	22000	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
trans-1,3-Dichloropropene *	TM15/PM10	ug/kg	<3	-	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
Trichloroethene (TCE) *	TM15/PM10	ug/kg	<3	1200	-	<3	-	<3	-	-	<3	-	<3	-	<3	<3	<3
Trichlorofluoromethane *	TM15/PM10	ug/kg	<2	-	-	<2	-	<2	-	-	<2	-	<2	-	<2	<2	<2
Vinyl Chloride *	TM15, A/PM10	ug/kg	<2	-	-	<2	-	<2	-	-	<2	-	<2	-	<2	<2	<2
Surrogate Recovery 4-Bromofluorobenzene	TM15/PM10	%	<0	-	-	63	-	47	-	-	46	-	67	-	54	74	83
MTBE (BTEX)																	
Methyl Tertiary Butyl Ether *	TM15/PM10	ug/kg	<2	-	-	<2	-	<2	-	-	<2	-	<2	-	<2	<2	<2
Benzene *	TM15/PM10	ug/kg	<3	27000	-	<3	-	23	-	-	<3	-	7	-	69	<3	<3
Toluene *	TM15/PM10	ug/kg	<3	56000000	-	8	-	30	-	-	6	-	19	-	78	6	<3
Ethylbenzene *	TM15/PM10	ug/kg	<3	5700000	-	<3	-	<3	-	-	<3	-	<3	-	13	<3	<3
m,p-Xylene *	TM15/PM10	ug/kg	<5	-	-	10	-	39	-	-	13	-	19	-	90	<5	<5
o-Xylene *	TM15/PM10	ug/kg	<3	6600000	-	<3	-	8	-	-	<3	-</					

Job No:	151157
Client:	GJ Morris
Project:	Home Bargains, Newport
Compiled:	CH
Checked:	JW
Approved:	KW

Sample ID	BH103	BH103	TP104	TP105	TP101	BH102	BH104
Sample	MG	MG	MG	MG	MG	MG	MG
Depth	0.45	2.00	0.40	2.70	0.40	0.50	1.00
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Sample Date	10/01/2024	10/01/2024	10/01/2024	11/01/2024	11/01/2024	11/01/2024	16/01/2024
Received Date	13/01/2024	13/01/2024	13/01/2024	13/01/2024	13/01/2024	13/01/2024	22/01/2024

Test	Method	Units	LOD	PE	PVC	Check	✓	✓	✓	✓	✓	✓	✓
VOC													
1,1,1,2-Tetrachloroethane *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
1,1,1-Trichloroethane *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
1,1,2,2-Tetrachloroethane *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
1,1,2-Trichloroethane *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
1,1-Dichloroethane *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
1,1-Dichloroethene (1,1 DCE) *	TM15/PM10	ug/kg	<6	0.0005	0.000125		<6	<6	<6	<6	<6	<6	<6
1,1-Dichloropropene *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
1,2,3-Trichlorobenzene	TM15/PM10	ug/kg	<7	0.0005	0.000125		<7	<7	<7	<7	<7	<7	<7
1,2,3-Trichloropropane *	TM15/PM10	ug/kg	<4	0.0005	0.000125		<4	<4	<4	<4	<4	<4	<4
1,2,4-Trichlorobenzene	TM15/PM10	ug/kg	<7	0.0005	0.000125		<7	<7	<7	<7	<7	<7	<7
1,2,4-Trimethylbenzene *	TM15/PM10	ug/kg	<6	0.0005	0.000125		55	<6	11	<6	<6	18	69
1,2-Dibromo-3-chloropropane	TM15/PM10	ug/kg	<4	0.0005	0.000125		<4	<4	<4	<4	<4	<4	<4
1,2-Dibromoethane *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
1,2-Dichlorobenzene *	TM15/PM10	ug/kg	<4	0.0005	0.000125		<4	<4	<4	<4	<4	<4	<4
1,2-Dichloroethane *	TM15/PM10	ug/kg	<4	0.0005	0.000125		<4	<4	<4	<4	<4	<4	<4
1,2-Dichloropropane *	TM15/PM10	ug/kg	<6	0.0005	0.000125		<6	<6	<6	<6	<6	<6	<6
1,3,5-Trimethylbenzene *	TM15/PM10	ug/kg	<3	0.0005	0.000125		5	5	8	<3	<3	4	18
1,3-Dichlorobenzene *	TM15/PM10	ug/kg	<4	0.0005	0.000125		<4	<4	<4	<4	<4	<4	<4
1,3-Dichloropropane *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
1,4-Dichlorobenzene *	TM15/PM10	ug/kg	<4	0.0005	0.000125		<4	<4	<4	<4	<4	<4	<4
2,2-Dichloropropane	TM15/PM10	ug/kg	<4	0.0005	0.000125		<4	<4	<4	<4	<4	<4	<4
2-Chlorotoluene	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
4-Chlorotoluene	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
4-Isopropyltoluene	TM15/PM10	ug/kg	<4	0.0005	0.000125		<4	<4	<4	<4	<4	<4	12
Benzene *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	23	<3	<3	7	69
Bromobenzene	TM15/PM10	ug/kg	<2	0.0005	0.000125		<2	<2	<2	<2	<2	<2	<2
Bromochloromethane *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
Bromodichloromethane *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
Bromofom	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
Bromomethane	TM15/PM10	ug/kg	<1	0.0005	0.000125		<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride *	TM15/PM10	ug/kg	<4	0.0005	0.000125		<4	<4	<4	<4	<4	<4	<4
Chlorobenzene *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
Chloroethane *	TM15/PM10	ug/kg	<2	0.0005	0.000125		<2	<2	<2	<2	<2	<2	<2
Chloroform *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
Chloromethane *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
cis-1,2-Dichloroethene *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
cis-1,3-Dichloropropene	TM15/PM10	ug/kg	<4	0.0005	0.000125		<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
Dibromomethane *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
Dichlorodifluoromethane	TM15/PM10	ug/kg	<2	0.0005	0.000125		<2	<2	<2	<2	<2	<2	<2
Dichloromethane (DCM) *	TM15/PM10	ug/kg	<7	0.0005	0.000125		<7	<7	10	<7	<7	<7	<7
Ethylbenzene *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	13
Hexachlorobutadiene	TM15/PM10	ug/kg	<4	0.0005	0.000125		<4	<4	<4	<4	<4	<4	<4
Isopropylbenzene *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
m,p-Xylene *	TM15/PM10	ug/kg	<5	0.0005	0.000125		10	<5	39	<5	13	19	90
Methyl Tertiary Butyl Ether *	TM15/PM10	ug/kg	<2	0.0005	0.000125		<2	<2	<2	<2	<2	<2	<2
Naphthalene	TM15/PM10	ug/kg	<27	0.0005	0.000125		<27	<27	38	<27	<27	<27	147
n-Butylbenzene	TM15/PM10	ug/kg	<4	0.0005	0.000125		<4	<4	<4	<4	<4	<4	<4
o-Xylene *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	8	<3	<3	5	24
Propylbenzene *	TM15/PM10	ug/kg	<4	0.0005	0.000125		<4	<4	<4	<4	<4	<4	<4
sec-Butylbenzene *	TM15/PM10	ug/kg	<4	0.0005	0.000125		<4	<4	<4	<4	<4	<4	<4
Styrene	TM15_A/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	6
Surrogate Recovery Toluene DB	TM15/PM10	%	<0	0.0005	0.000125		70	84	34	86	41	78	62
tert-Butylbenzene *	TM15/PM10	ug/kg	<5	0.0005	0.000125		<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene (PCE) *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
Toluene *	TM15/PM10	ug/kg	<3	0.0005	0.000125		8	6	30	<3	6	19	78
trans-1,2-Dichloroethene *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
trans-1,3-Dichloropropene	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
Trichloroethene (TCE) *	TM15/PM10	ug/kg	<3	0.0005	0.000125		<3	<3	<3	<3	<3	<3	<3
Trichlorofluoromethane *	TM15/PM10	ug/kg	<2	0.0005	0.000125		<2	<2	<2	<2	<2	<2	<2
Vinyl Chloride	TM15_A/PM10	ug/kg	<2	0.0005	0.000125		<2	<2	<2	<2	<2	<2	<2
MTBE (BTEX)													
Methyl Tertiary Butyl Ether *	TM15/PM10	ug/kg	<2	0.0001	0.00003		<2	<2	<2	<2	<2	<2	<2
Benzene *	TM15/PM10	ug/kg	<3	0.0001	0.00003		<3	<3	23	<3	<3	7	69
Toluene *	TM15/PM10	ug/kg	<3	0.0001	0.00003		8	6	30	<3	6	19	78
Ethylbenzene *	TM15/PM10	ug/kg	<3	0.0001	0.00003		<3	<3	<3	<3	<3	<3	13
m,p-Xylene *	TM15/PM10	ug/kg	<5	0.0001	0.00003		10	<5	39	<5	13	19	90
o-Xylene *	TM15/PM10	ug/kg	<3	0.0001	0.00003		<3	<3	8	<3	<3	5	24
SVOCs													
1,2-Dichlorobenzene	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10	<10	<10
1,2,4-Trichlorobenzene *	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10	<10	<10
1,3-Dichlorobenzene	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10	<10	<10
1,4-Dichlorobenzene	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10	<10	<10
2-Nitroaniline	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10	<10	<10
2,4-Dinitrotoluene	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10	<10	<10
2,6-Dinitrotoluene	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10	<10	<10
3-Nitroaniline	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10	<10	<10
4-Bromophenylphenylether *	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10	<10	<10
4-Chloroaniline	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10	<10	<10
4-Chlorophenylphenylether	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10	<10	<10
4-Nitroaniline	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10	<10	<10
Azobenzene	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10	<10	<10
Bis(2-chloroethoxy)methane	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10	<10	<10
Bis(2-chloroethyl)ether	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10	<10	<10
Carbazole	TM16/PM8	ug/kg	<10	0.002	0.0014		92	<10	317	<10	113	1983	343
Dibenzofuran *	TM16/PM8	ug/kg	<10	0.002	0.0014		103	<10	276	<10	131	2056	517
Hexachlorobenzene	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10	<10	<10
Hexachlorobutadiene *	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10	<10	<10
Hexachlorocyclopentadiene	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10	<10	<10
Hexachloroethane	TM16/PM8	ug/kg	<10	0.002	0.0014		<10	<10	<10	<10	<10		

CONTROLLED WATERS RISK ASSESSMENT

149544
HB Newport

Water Quality Standard (WQS) Selection Hierarchy:	
Level 1	UK DWS
Level 2	EQS FW
Level 3	WHO DWS

Average CaCO₃:
50 µg/l

Data Source: Environment Agency H1 Environmental Risk
Assessment – Annex J, v2.0, April 2010 & Petroleum
Products in Drinking-Water, WHO
(WHO/SDE/WSH/05.08/123)

DETERMINAND	UNITS	MINIMUM	AVERAGE	MAXIMUM	No. of TESTS	UK DWS	No. > AC	EQS FW	No. > AC	Sample Ref		115307	115308	115309	115310
										WHO	No. > AC	BH1S	BH1D	BH2D	BH4
												02/08/2024	02/07/2024	02/07/2024	02/07/2024
pH	NA	7.10	7.33	7.80	4	No criteria	0	No criteria	0	No criteria	0	7.1	7.2	7.2	7.8
Total Cyanide	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	No criteria	0	<LOD	<LOD	<LOD	<LOD
Sulphate as SO ₄	µg/l	2250	39520	141000	4	250000	0	400000	0	250000	0	3030	2250	11800	141000
Total Organic Carbon (TOC)	µg/l	5.71	11.30	18.70	4	No criteria	0	No criteria	0	No criteria	0	5.71	6.58	14.2	18.7
Arsenic (dissolved)	µg/l	3.20	6.21	10.50	4	10.00	1	50.00	0	10.00	1	6.54	3.2	4.59	10.5
Copper (dissolved)	µg/l	0.80	1.10	1.60	4	2000.00	0	1.00	1	2000.00	0	<LOD	0.9	1.6	0.8
Lead (dissolved)	µg/l	0.30	0.30	0.30	4	10.00	0	50.00	0	10.00	0	<LOD	<LOD	<LOD	0.3
Mercury (dissolved)	µg/l	<LOD	<LOD	<LOD	4	1.00	0	1.00	0	1.00	0	<LOD	<LOD	<LOD	<LOD
Nickel (dissolved)	µg/l	0.80	1.20	1.50	4	20.00	0	50.00	0	20.00	0	1.5	1.4	0.8	1.1
Selenium (dissolved)	µg/l	1.70	2.53	3.10	4	10.00	0	No criteria	0	10.00	0	1.7	2.2	3.1	3.1
Zinc (dissolved)	µg/l	1.70	2.93	5.80	4	5000.00	0	75.00	0	3000.00	0	1.8	2.4	1.7	5.8
Total Phenols (monohydric)	µg/l	<LOD	<LOD	<LOD	4	0.50	0	30.00	0	No criteria	0	<LOD	<LOD	<LOD	<LOD
TPH C10 - C40	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	300.00	0	<LOD	<LOD	<LOD	<LOD
TPH-CWG - Aliphatic >C10 - C12	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	300.00	0	<LOD	<LOD	<LOD	<LOD
TPH-CWG - Aliphatic >C12 - C16	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	300.00	0	<LOD	<LOD	<LOD	<LOD
TPH-CWG - Aliphatic >C16 - C21	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	300.00	0	<LOD	<LOD	<LOD	<LOD
TPH-CWG - Aliphatic >C21 - C35	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	300.00	0	<LOD	<LOD	<LOD	<LOD
TPH-CWG - Aliphatic >C5 - C6	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	15000.00	0	<LOD	<LOD	<LOD	<LOD
TPH-CWG - Aliphatic >C6 - C8	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	15000.00	0	<LOD	<LOD	<LOD	<LOD
TPH-CWG - Aliphatic >C8 - C10	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	300.00	0	<LOD	<LOD	<LOD	<LOD
TPH-CWG - Aromatic >C10 - C12	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	100.00	0	<LOD	<LOD	<LOD	<LOD
TPH-CWG - Aromatic >C12 - C16	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	100.00	0	<LOD	<LOD	<LOD	<LOD
TPH-CWG - Aromatic >C16 - C21	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	90.00	0	<LOD	<LOD	<LOD	<LOD
TPH-CWG - Aromatic >C21 - C35	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	90.00	0	<LOD	<LOD	<LOD	<LOD
TPH-CWG - Aromatic >C5 - C7	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	10.00	0	<LOD	<LOD	<LOD	<LOD
TPH-CWG - Aromatic >C7 - C8	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	50.00	0	300.00	0	<LOD	<LOD	<LOD	<LOD
TPH-CWG - Aromatic >C8 - C10	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	20.00	0	300.00	0	<LOD	<LOD	<LOD	<LOD
Anthracene	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	0.02	0	No criteria	0	<LOD	<LOD	<LOD	<LOD
Fluoranthene	µg/l	0.26	0.26	0.26	4	No criteria	0	0.02	1	No criteria	0	0.26	<LOD	<LOD	<LOD
Naphthalene	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	10.00	0	No criteria	0	<LOD	<LOD	<LOD	<LOD
Benzo(a)pyrene	µg/l	<LOD	<LOD	<LOD	4	0.01	0	0.03	0	0.70	0	<LOD	<LOD	<LOD	<LOD
Benzo(b)fluoranthene	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	No criteria	0	<LOD	<LOD	<LOD	<LOD
Benzo(ghi)perylene	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	No criteria	0	<LOD	<LOD	<LOD	<LOD
Benzo(k)fluoranthene	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	No criteria	0	<LOD	<LOD	<LOD	<LOD
Indeno(1,2,3-cd)pyrene	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	No criteria	0	<LOD	<LOD	<LOD	<LOD
MTBE (Methyl Tertiary Butyl Ether)	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	No criteria	0	<LOD	<LOD	<LOD	<LOD
Benzene	µg/l	<LOD	<LOD	<LOD	4	1.00	0	30.00	0	10.00	0	<LOD	<LOD	<LOD	<LOD
Ethylbenzene	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	300.00	0	<LOD	<LOD	<LOD	<LOD
Toluene	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	50.00	0	700.00	0	<LOD	<LOD	<LOD	<LOD
p & m-xylene	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	No criteria	0	<LOD	<LOD	<LOD	<LOD
o-xylene	µg/l	<LOD	<LOD	<LOD	4	No criteria	0	No criteria	0	No criteria	0	<LOD	<LOD	<LOD	<LOD
Ammonia (NH3 as N)	µg/l	2700.00	2950.00	3200.00	2	No criteria	0	1500.00	2	15.00	2	2700	-	-	3200

GAS MONITORING & GROUNDWATER LEVEL LOG

RND 1	Project No.:	151157	Date:	26.01.24	Weather:	Sunny, cold
	Project Name:	HB Newport	Initials:	CH	24 hr Pressure:	Rising

[illegible]

NOTES: Flow is recorded for a minimum of 60 seconds. If flow remains variable then monitoring continued to a maximum of 120 seconds.

NOTES: Gas concentrations and PID headspace is monitored for a minimum of 160 seconds. If concentrations remains variable then monitoring continued to a maximum of 300 seconds.

COMMENTS	Close to Low tide, tide rising.
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GAS MONITORING & GROUNDWATER LEVEL LOG

RND 2	Project No.:	151157	Date:	07.02.24	Weather:	Dry, cloudy
	Project Name:	HB Newport	Initials:	CH	24 hr Pressure:	Falling

[illegible]

NOTES: Flow is recorded for a minimum of 60 seconds. If flow remains variable then monitoring continued to a maximum of 120 seconds.

NOTES: Gas concentrations and PID headspace is monitored for a minimum of 160 seconds. If concentrations remains variable then monitoring continued to a maximum of 300 seconds.

COMMENTS	Close to Low tide, tide rising.
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GAS MONITORING & GROUNDWATER LEVEL LOG

RND 3	Project No.:	151157	Date:	28.02.24	Weather:	Cloudy, raining
	Project Name:	HB Newport	Initials:	CH	24 hr Pressure:	Falling

[illegible]

NOTES: Flow is recorded for a minimum of 60 seconds. If flow remains variable then monitoring continued to a maximum of 120 seconds.

NOTES: Gas concentrations and PID headspace is monitored for a minimum of 160 seconds. If concentrations remains variable then monitoring continued to a maximum of 300 seconds.

COMMENTS	Close to high tide, tide rising.
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GAS MONITORING & GROUNDWATER LEVEL LOG

RND 4	Project No.:	151157	Date:	14.03.24	Weather:	Cloudy, raining
	Project Name:	HB Newport	Initials:	CH	24 hr Pressure:	Falling

[illegible]

NOTES: Flow is recorded for a minimum of 60 seconds. If flow remains variable then monitoring continued to a maximum of 120 seconds.

NOTES: Gas concentrations and PID headspace is monitored for a minimum of 160 seconds. If concentrations remains variable then monitoring continued to a maximum of 300 seconds.

COMMENTS	Close to low tide, tide falling.
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GAS MONITORING & GROUNDWATER LEVEL LOG

RND 5	Project No.:	151157	Date:	05.04.24	Weather:	Cloudy, dry
	Project Name:	HB Newport	Initials:	CH	24 hr Pressure:	Steady

[illegible]

NOTES: Flow is recorded for a minimum of 60 seconds. If flow remains variable then monitoring continued to a maximum of 120 seconds.

NOTES: Gas concentrations and PID headspace is monitored for a minimum of 160 seconds. If concentrations remains variable then monitoring continued to a maximum of 300 seconds.

COMMENTS	Mid to low tide, tide falling.
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GAS MONITORING & GROUNDWATER LEVEL LOG

RND 6	Project No.:	151157	Date:	12.04.24	Weather:	Dry, sunny
	Project Name:	HB Newport	Initials:	CH	24 hr Pressure:	Steady

[illegible]

NOTES: Flow is recorded for a minimum of 60 seconds. If flow remains variable then monitoring continued to a maximum of 120 seconds.

NOTES: Gas concentrations and PID headspace is monitored for a minimum of 160 seconds. If concentrations remains variable then monitoring continued to a maximum of 300 seconds.

COMMENTS	Close to low tide, tide falling.
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GROUND GAS SUMMARY

151157

HB Newport

TABLE SHOWING SUMMARY MONITORING DATA

MONITORING ID	MAXIMUM FLOW (l/hr)	MAXIMUM METHANE (% v/v)	MAXIMUM CO2 (% v/v)	MINIMUM O2 (% v/v)	MAXIMUM PID	NO. OF ROUNDS MONITORED
BH101(s)	25	54.9	5	5.5	0	6
BH102(s)	13	6.2	1.4	0	0.9	6
BH102(d)	17.4	25.4	5.7	-0.1	0	6
BH103(s)	0	1.4	2.1	17.3	6.7	2
MAXIMUM*	25	54.9	5.7	-0.1	6.7	6

* Reported value for oxygen in minimum.

TABLE SHOWING GROUND GAS ASSESSMENT PER ROUND

ROUND NO.	MAX FLOW	METHANE GSV	CO2 GSV	CHARACTERISTIC SITUATION	NHBC CLASSIFICATION	> ADVISORY THRESHOLD
1	0.1	0.0067	0.0043	1	Green	YES
2	25	13.725	1.425	4	Red	YES
3	0.1	0.0204	0.0047	1	Green	YES
4	0.1	0.0243	0.0055	1	Green	YES
5	13	3.302	0.728	3	Amber II	YES
6	0.1	0.0232	0.0053	1	Green	YES

TABLE SHOWING OVERALL GROUND GAS ASSESSMENT

		METHANE	CO2			
GAS SCREENING VALUE (GSV)		13.725	1.425	RECOMMENDATION		
MODIFIED WILSON & CARD	CHARACTERISTIC SITUATION	4	3	High gas regime identified. It is considered that standard residential housing would not normally be acceptable without a further Gas Risk Assessment and / or possible remedial mitigation measures to reduce and / or remove the sources of gas.		
	COMBINED:	4				
NHBC - LOW RISE RESIDENTIAL	CLASSIFICATION	Red	Amber II	The specific details of the gas protection measures will depend on the foundation solution for the building(s), the subfloor ventilation and ground floor slab arrangement, as well as ground floor use-type.		
	COMBINED:	Red				
Advisory Threshold Exceeded?		METHANE	YES	CO2	YES	Consider application of CS2

Analytical Report Number: 24-79892
Project / Site name: Home Bargains, Newport

Lab Sample Number				2937531	2937533	2937536
Sample Reference				TP101	TP102	TP105
Sample Number				None Supplied	None Supplied	None Supplied
Ground Level				7.24	7.59	7.48
Depth (m bgl)				0.50	1.00	1.50
Depth (m AOD)				6.74	6.59	5.98
Strata				MG	MG	MG
Date Sampled				Deviating	Deviating	Deviating
Time Taken				None Supplied	None Supplied	None Supplied
Schedule Check				✓	✓	✓
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Stone Content	%	0.1	NONE	55	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	6.7	8.9	20
Total mass of sample received	kg	0.001	NONE	0.5	0.5	0.5

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.4	9.4	8.1
Total Sulphate as SO4	%	0.005	MCERTS	0.063	0.178	0.032
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0234	0.344	0.0173
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	23.4	344	17.3
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	9.5	40	16
Total Sulphur	%	0.005	MCERTS	0.05	0.095	0.023
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	< 2.0	< 2.0
Total Potential Sulfate	%			0.15	0.285	0.069
Oxidisable Sulfides				0.087	0.107	0.037

Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	15	7.8	14
Magnesium (leachate equivalent)	mg/l	2.5	NONE	7.2	3.9	6.8

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Characteristic Values	Made Ground			Tidal Flat Deposit		
	Min	Max	Mean highest two	Min	Max	Mean highest two
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	17.30	344.00	183.7	57.4	685	465
pH	8.1	-	-	7.8	-	-
Total Potential Sulfate	-	-	0.2175	-	-	1.924

Concrete Classification

Design Sulfate Class (Table C2)	DS-1	DS-4
ACEC Class (Table C2)	AC1	AC-4

Analytical Report Number: 24-79892
Project / Site name: Home Bargains, Newport

Lab Sample Number				2937547	2937548	2937550
Sample Reference				BH103	BH103	BH103
Sample Number				None Supplied	None Supplied	None Supplied
Ground Level				7.26	7.26	7.26
Depth (m bgl)				4	8.5	10.5
Depth (m AOD)				3.26	-1.24	-3.24
Strata				TFD	TFD	TFD
Date Sampled				10/01/2024	10/01/2024	10/01/2024
Time Taken				None Supplied	None Supplied	None Supplied
Schedule Check				✓	✓	✓
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	22	21	17
Total mass of sample received	kg	0.001	NONE	0.6	1.2	0.5

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	8.9	8.3
Total Sulphate as SO4	%	0.005	MCERTS	0.09	0.128	0.184
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.14	0.245	0.685
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	140	245	685
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	30	89	130
Total Sulphur	%	0.005	MCERTS	0.197	0.418	1.31
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	< 2.0	< 2.0
Total Potential Sulfate	%			0.591	1.254	3.93
Oxidisable Sulfides				0.501	1.126	3.746

Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	31	16	36
Magnesium (leachate equivalent)	mg/l	2.5	NONE	16	7.9	18

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Characteristic Values	Made Ground			Gravel		
	Min	Max	Mean highest two	Min	Max	Mean highest two
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	17.30	344.00	183.7	199	199	199
pH	8.1	-	-	8.4	-	-
Total Potential Sulfate	-	-	0.2175	-	-	0.567

Concrete Classification

Design Sulfate Class (Table C2)	DS-1	DS-2
ACEC Class (Table C2)	AC1	AC-2

Analytical Report Number: 24-79892
Project / Site name: Home Bargains, Newport

Lab Sample Number	2937534			2937540	2937552	
Sample Reference	TP103			BH101	BH104	
Sample Number	None Supplied			None Supplied	None Supplied	
Ground Level	7.28			7.16	7.44	
Depth (m bgl)	0.60			6.00	3	
Depth (m AOD)	6.68			1.16	4.44	
Strata	TFD			TFD	TFD	
Date Sampled	Deviating			08/01/2024	15/01/1024	
Time Taken	None Supplied			None Supplied	None Supplied	
Schedule Check	✓			✓	✓	
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Stone Content	%	0.1	NONE	57	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7.8	31	21
Total mass of sample received	kg	0.001	NONE	0.5	1.2	1.1

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.3	8.7	7.8
Total Sulphate as SO4	%	0.005	MCERTS	0.094	0.153	0.048
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.0875	0.451	0.0574
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	87.5	451	57.4
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	18	120	59
Total Sulphur	%	0.005	MCERTS	0.09	1.79	0.043
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	< 2.0	< 2.0
Total Potential Sulfate	%			0.27	5.37	0.129
Oxidisable Sulfides				0.176	5.217	0.081

Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	26	37	37
Magnesium (leachate equivalent)	mg/l	2.5	NONE	13	19	19

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Characteristic Values	Made Ground			Weathered Mercia Mudstone		
	Min	Max	Mean highest two	Min	Max	Mean highest two
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	17.30	344.00	183.7	59.8	59.8	59.8
pH	8.1	-	-	9.5	-	-
Total Potential Sulfate	-	-	0.2175	-	-	0.108

Concrete Classification

Design Sulfate Class (Table C2)	DS-1	DS-1
ACEC Class (Table C2)	AC1	AC-1

Analytical Report Number: 24-79892
Project / Site name: Home Bargains, Newport

Lab Sample Number				2937541	2937551	2937542
Sample Reference				BH101	BH103	BH101
Sample Number				None Supplied	None Supplied	None Supplied
Ground Level				7.16	7.26	7.16
Depth (m bgl)				12	15	16.5
Depth (m AOD)				-4.84	-7.74	-9.34
Strata				G	WMM	MM
Date Sampled				08/01/2024	10/01/2024	08/01/2024
Time Taken				None Supplied	None Supplied	None Supplied
Schedule Check				✓	✓	✓
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status			
Stone Content	%	0.1	NONE	42	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	13	9.2
Total mass of sample received	kg	0.001	NONE	1.2	0.5	0.5

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	8.4	9.5	9.3
Total Sulphate as SO4	%	0.005	MCERTS	0.043	0.059	0.048
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.199	0.0598	0.0835
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	199	59.8	83.5
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	57	47	38
Total Sulphur	%	0.005	MCERTS	0.189	0.036	0.026
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	< 2.0	< 2.0
Total Potential Sulfate	%			0.567	0.108	0.078
Oxidisable Sulfides				0.524	0.049	0.03

Heavy Metals / Metalloids

Magnesium (water soluble)	mg/kg	5	NONE	22	5.7	5.7
Magnesium (leachate equivalent)	mg/l	2.5	NONE	11	2.8	2.8

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Characteristic Values	Made Ground			Mercia Mudstone		
	Min	Max	Mean highest two	Min	Max	Mean highest two
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	17.30	344.00	183.7	83.5	83.5	83.5
pH	8.1	-	-	9.3	-	-
Total Potential Sulfate	-	-	0.2175	-	-	0.078

Concrete Classification

Design Sulfate Class (Table C2)	DS-1	DS-1
ACEC Class (Table C2)	AC1	AC-1