

Job NO.

(j) amdel

4E2321

Quali	fier Codes	Description
	*	PQLs are raised due to matrix interference.
	@	PQLs are raised due to insufficient sample provided for analysis.
	S	The mass imbalance indicates the presence of other ions not measured as part of this procedure.
	nd	<pql< td=""></pql<>
	<u></u>	Not applicable
	LNR	The sample was listed on the COC, but not received.
	IS	Insufficient sample was supplied to conduct this analysis.
	AN	The analysis indicates the presences of an analyte that has been 'tentatively' identified, and the
		associated numerical value represents it's approximate concentration.
	Α	Sample results are reported on an 'as received' basis (not moisture corrected).
	В	The sample was not received in a suitable timeframe to allow completion within the recommended holding time.
retes.	C	This sample was received with headspace.
	D	This sample was received with the incorrect preservation for this analysis.
	E	The raw data indicates the absence of 0.055g of Copper Sulphate in the sample.
)	F	This sample contained significant amounts of solids and was therefore analysed by settling and decanting the
		aqueous phase to avoid including the solid in the analysis portion.
	G	This test was performed outside the recommended holding time.
	H	This sample contained significant material >5mm which was removed prior to analysis.
	ISD	Insufficient sample was supplied to conduct duplicate analyses.
	ISM	Insufficient sample was supplied to conduct matrix spike analyses.
	W	The spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.
	J	The duplicate %RPD is outside the recommended acceptance criteria. Further analysis indicates sample heterogeneity as the cause.
	K	The matrix spike concentration is less than five times the background concentration in the sample, and therfore the spike recovery can not be determined.
	L -	The surrogate recovery is outside of the recommended acceptance criteria, due to matrix interference.
	М	The surrogate recovery is outside of the recommended acceptance criteria. Insufficent sample remains to perform re-analysis.
	N	Results are expressed in mg/L (ppm) due to the high concentration of the analyte.
eria.	0	The results reported are 'recoverable organics' for this fraction, as the chromatogram and peak shape indicates the presence of a significant concentration of polar compounds.
***	P	The concentration reported is mainly due to a single peak.
)	Q	This samples contains volatile halogenated oxygenated or other compounds that are included and quantitated as part of TPH C6-9.
	R	Theoretically the total result should be greater or equal to the dissolved concentration. However the difference reported is within the uncertainty of the individual tests.
	S	The mass imbalance was equal to or less than 0.2 milli-equivalents.
	T	During Kjeldahl digestion, nitrate (>10mg/L) can oxidise ammonia resulting in a negative TKN interference, which may have occurred for this sample.
	U	Theoretically the TKN result should be greater or equal to ammonia concentration. However the difference reported is within the uncertainty of the individual tests.
	V	This sample contained significant amounts of sediment which was included in the analysis portion as requested.
	SUR	Surrogate recoveries could not be determined due to the dilution required to quantify the analyte.



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QAQC: Matrix Spike(s)

	Spike	Level De	tected	Recovery Details			
Analyte	Level	Spike 1	Spike 2	Rec 1 (%)	Rec 2 (%)	Average (%)	RPD (%)
E1010 BTEX (P&T) in Soil (E164612)		1 11 -12-					
Benzene	10	9.4	-01	94%			
Toluene	10	9	7777	93%			
Ethylbenzene	10	9	-=	89%		=1	
m&p-Xylene	- 20	19		93%		<u> </u>	
o-Xylene	10	9	Son Breit	91%			
	-						
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PQL nd --Practical Quantitation Limit
 PQL
 Not Applicable

(S) Soils : mg/kg (ppm) dry weight (W) Waters : mg/L (ppm) unless otherwise specified

The number in brackets after the method header identifies the sample tested.



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QAQC: Laboratory Control Sample(s)

	- 1- 1	Leve	I Detecte	Recovery Details			
Analyte	Level	Result1	Result2	Result3	Rec 1 (%)	Rec 2 (%)	Rec 3 (%)
E1010 BTEX (P&T) in Soil	7 1-2						
Benzene	10	10			99%		
Toluene	10	11			107%		
Ethylbenzene	10	11			105%		
m&p-Xylene	~ 20	20			101%		
o-Xylene	10	10			104%		
<u> </u>							
		-					
						W.C-24C-11	

 $\begin{array}{ll} PQL &= Practical \ Quantitation \ Limit \\ -- &= Not \ Applicable \\ nd &= < PQL \end{array}$ 

(S) Soils : mg/kg (ppm) dry weight (W) Waters : mg/L (ppm) unless otherwise specified



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QAQC: Laboratory Duplicate(s)

Analyte	Dupl A	Dupl B	Average	RPD (%)	Dupl A	Dupl B	Average	RPD (%)
E1010 BTEX (P&T) in Soil (E164612)	å					1-1-1-1	EA Am	2 0/1
Benzene	nd	nd			70.00			<b>1</b> 11 7 11
Toluene	- nd	nd	_ : 10					- 4-
Ethylbenzene	nd	nd					341	1374.25
m&p-Xylene	nd	nd		-			A _lineak	2020
o-Xylene	nd	nd						54 Se.
II ii								
								3
2								
- 1/4								

PQL nd Practical Quantitation Limit
 PQL
 Not Applicable

(S) Soils : mg/kg (ppm) dry weight (W) Waters : mg/L (ppm) unless otherwise specified

The number in brackets after the method header identifies the sample tested.



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QAQC: Method Blank(s)

ANALYTE	Sample ID PQL	Blank1	Blank2	Blank3	Blank4	Blank5
E1010 BTEX (P&T) in Soil						
Benzene	0.2	nd				
Toluene	1	nd				
Ethylbenzene	-1	nd	- 11			
n&p-Xylene	2	nd				
o-Xylene	. 1	nd				
						V
<del>las 2</del>						
				V		N CONTRACT
<u> </u>	2					2.1
			*			
		r8				

Practical Quantitation Limit
 PQL
 Not Applicable

(S) Soils : mg/kg (ppm) dry weight (W) Waters : mg/L (ppm) unless otherwise specified



## Appendix F Field Equipment Calibration & Insitu Permeability Test Documentation

## PID Calibration Record

PID lamp: Minirae 2000

Calibration gas: Isobutylene

Calibration Concentration: 100ppm

Project	Date		oration (ppn	
		Background	Before	After
EN01732	05/06/2004			103
EN01752	30/06/2004	0	99.7	99.8
EN01770	26/08/2004	0	100	
EN01717	15/09/2004	0	99.8	100
EN01717	16/09/2004	0	99.9	100
EN01717	17/09/2004	0	99.7	100
EN01717	21/09/2004	0	99.8	100
EN01669	07/12/2004	0	98.2	100
EN01787	15/12/2004	4	100	100
EN01787	15/12/2004	2	100	100
EN01855	08/02/2005	0	92.7	100
EN01855	09/02/2005	0	100	100
EN01855	10/02/2005	0	101	100
		100		
			72	
			<del></del>	
			9.	
				-



## PID HNU Calibration Sheet Form ET17 August 96

ALTER TO MOST CONTOUR TO	MacDonald	4.1.	F 110			Haldan
perator (Nar	me & Signature):	Mores				
	7/12/04					
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		TO COMPANIE AND				Unio 2013 (IoS 1013 143 143 163 163
enzene Equ	ivalent:		(	multiply cal	ibrant concentra	ation by 70% if isobutylene)
			CALIBRATION TA	BLE		a v
Time	Background Reading	Span E	Before Reading	A Span	fter Reading	Comments
4PM	Organ	Opan				Fresh Air
70M			98-200 m	************	100ppm	695
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