



CELSA™
GROUP



Hydrogeological Risk Assessment Celsa Manufacturing (UK) Ltd, Tremorfa New Melt Shop. Tremorfa Works, Seawall Road, Cardiff, CF24 5TH Permit Ref: **EPR/TP3639BH**

On behalf of:
Celsa Manufacturing (UK) Ltd

Project Reference:
021-1892

Revision:
REV00

Date:
July 2023

Earth & Marine Environmental Consultants Ltd
7th Floor, West One, Forth Banks,
Newcastle Upon Tyne, NE1 3PA, UK
enquiry@eame.co.uk | www.eame.co.uk

United Kingdom | Iraq | Kurdistan Region of Iraq | Guyana

Earth & Marine Environmental Consultants Ltd is a company registered in England and Wales.
Registered number: 7256990. Registered office: Fron Fawr Farm, Llanfairtalhaiarn, Abergele, Clwyd, Wales, LL22 8DJ, UK

Document Control Record				
Revision	Date	Author(s)	Authorised by	Reason for Change
00	24/07/22	MS	SPR	First Issue to Client

COMMERCIAL-IN-CONFIDENCE

This document and all the information contained within it are proprietary to Earth & Marine Environmental Consultants Ltd (hereinafter called EAME) and are supplied in confidence. This document is not to be reproduced in whole or in part nor disclosed to any third party without the prior written permission of EAME. Nor shall it be used otherwise than for the purpose for which it has been supplied.

Contents

	Page
1 Introduction	1
1.1 Background	1
1.2 Basis of the Assessment	1
1.3 Drainage Strategy	2
2 Environmental Setting	3
2.1 Location	3
2.2 Geology	3
2.3 Hydrogeology	4
3 Hydrogeological Conceptual Site Model	8
3.1 Introduction	8
3.2 Local Hydrology & Hydrometric Data	8
3.3 Infiltration & Recharge	8
3.4 Unsaturated Zone (UZ)	9
3.5 Aquifer Properties	9
3.6 Groundwater Flow	10
4 Hydrogeological Risk Assessment	11
4.1 Assessment Approach	11
4.2 Key Risk Drivers	12
4.3 Receptors and Compliance Point	13
4.4 Water Quality Standards	13
4.5 Risk Assessment	13
4.6 Conclusions & Recommendations	16
4.7 Recommendations	17

Figures

Figure 2-1: Summary of previous groundwater installations	4
--	---

Tables

Table 2-1: A summary of ground and groundwater conditions	6
Table 4-1: ConSim Input Parameters	14
Table 4-2: ConSim Results	16

Annex A: Figures and Plans

Annex B: ConSim Model Outputs

Abbreviations

AST	Above Ground Storage Tank
ASR	Application Site Report
BAT	Best Available Technique
BGS	British Geological Survey
BREF	Best Available Techniques Reference Documents
DEFRA	Department for Environment Food and Rural Affairs
EA	Environment Agency
EAME	Earth & Marine Environmental Consultants Ltd
EMS	Environmental Management System
EPR	Environmental Permit
FCA	Flood Consequences Assessment
FRA	Flood Risk Assessment
FPMP	Fire Prevention Mitigation Plan
IPPC	Integrated Pollution Prevention and Control
IBC	Intermediate Bulk Container
mg/l	milligrams per litre
NGR	National Grid Reference
NRW	Natural Resources Wales
Opra	Operational Risk Appraisal
PPE	Personal Protective Equipment
PPM	Planned Preventative Maintenance

Celsa Manufacturing (UK) Ltd

SAB	Sustainable Drainage Approval Body
SCR	Site Condition Report
SINC	Sites of Interest for Nature Conservation
SuDS	Sustainable Drainage Systems
SSSI	Site of Special Scientific Interest
µg/l	micrograms per litre
WFD	Water Framework Directive

1 Introduction

1.1 Background

This document has been prepared by Celsa Manufacturing (UK) Ltd (“Celsa”) and its environmental consultant Earth & Marine Environmental Consultants Ltd (“EAME”) in support of a substantial permit variation as required under Regulation 20 (variation) of the *Environmental Permitting (England and Wales) Regulations 2016* in relation to current activities and proposed activities to be undertaken at Tremorfa New Melt Shop. Tremorfa Works, Seawall Road, Cardiff, CF24 5TH (Permit No. EPR/TP3639BH).

Following a review of the proposed drainage strategy Natural Resources Wales (NRW) issued a Schedule 5 Notice requesting additional information (Ref. PAN-018725 (EPR/TP3639BH/V010), dated 23/06/2023).

The Groundwater Section of this notice requests the following:

Submit a detailed risk assessment on the proposed discharge to ground including a H1 assessment for the substances in line with the environment agencies guidance Groundwater risk assessment for your environmental permit - GOV.UK (www.gov.uk). This should also reference the possible contaminants that could be discharged to ground (with reference to BAT-AEL as described within in BAT 20 of the Waste Treatment BRef).

This document provides a Hydrogeological Risk Assessment (HRA) of the potential pollutant impact on the local water environment of the proposed drainage system based on site specific and literature information and several reasonable assumptions as set out in the relevant guidance i.e. Groundwater risk assessment for your environmental permit¹.

This assessment has been undertaken by Philip Lewis Bsc (Hons), Msc, FGS, CGeol (Director, LMB Geosolutions Ltd).

1.2 Basis of the Assessment

The following previous reports and/or assessments completed in relation to the site and wider area have been used as the basis for the hydrogeological risk assessment:

¹ <https://www.gov.uk/guidance/groundwater-risk-assessment-for-your-environmental-permit>

- EAME (ref. EAWML30093, dated July 2010). Mill Services Site. Site Condition Report (SCR). Application for Permit Variation for an Extension of Licensed Area under *The Environmental (England & Wales) Regulations 2010*.
- Zenith International Ltd (Ref. 10652/rl, dated 21/03/2014). Cardiff Groundwater Investigation Consent – operational testing. Celsa Manufacturing Ltd.
- Terra Firma (Wales) Ltd (Ref. 14958, dated January 2019). Geotechnical & Geo-Environmental Report. Celsa, Rover Way, Cardiff.
- Terra Firma (Wales) Ltd (Ref. 15264, dated April 2019). Geotechnical & Geo-Environmental Report. Aggregate Production Area, Celsa, Rover Way, Cardiff.
- Terra Firma (Ref. DE/17250/NEW ROAD5, dated 15th June 2022). Ground Conditions Assessment. New Road, Celsa, Rover Way.
- Terra Firma (Ref. DE/17250/SI, dated 14th March 2023). Groundwater Monitoring Boreholes: Celsa Scrap Handling and Mineral Site.
- James & Nicholas (Ref. 21.121, dated 17/02/23). SAB Drainage Strategy Report. Scrap Handling Facility, Tremorfa, Cardiff.

All information identified above has previously been provided to NRW. The Schedule 5(II) submission also includes a folder containing all previous reports organised by date.

1.3 Drainage Strategy

The area of the proposed new scrap metal shredder will comprise a new concrete slab. In brief, run-off from the slab will be directed into two filter strips (Northern & Southern) and will there after infiltrate to ground.

The filter strips will include a two clean stone layers separating two layers of treatment material (SDS Aqua-Xchange) that will capture and retain potential contaminants (e.g. metals, suspended solids, and hydrocarbons) to prevent potential impacts to sensitive water receptors. The filter strips will have a total depth of 1.25 metres below ground level and drain into 1.00-metre-deep cellular soakaways prior to discharge to ground.

The northern filter strip has been designed to deal with run-off over an area of 11,174m² and the southern filter strip an area of 13,050m².

Full details of the drainage strategy are outlined within the James & Nicholas (Ref. 21.121, dated 17/02/23) SAB Drainage Strategy Report. Scrap Handling Facility, Tremorfa, Cardiff.

2 Environmental Setting

2.1 Location

The information reviewed within the previous reports (*Section 1.2*) and reference to publicly available mapping suggests that in the context of the regional setting, the Site is located on approximately 15 hectares of former salt marshes that have been raised using reclaimed blast furnace and other steel making slag and residues from the East Moors Steel Works.

The Site is generally flat and slopes gently to the east, falling from approximately 10.0 metres above ordnance datum (AOD) to approximately 9.0 m AOD. The Severn Estuary is located approximately 50 m to the east of the site.

2.2 Geology

Reference to information provided within the existing site investigation reports (*Section 1.2*) along with British Geological Survey (BGS) online mapping, indicates that the ground conditions beneath the Site comprise Made Ground overlying Tidal Flat Deposits (formerly referred to as Alluvium) and the Mercia Mudstone Group. The Cardiff City Region model available via the BGS onshore Geindex suggests that Glaciofluvial deposits (typically sand and gravel, locally with lenses of silt, clay, or organic material) are present below the Tidal Flat Deposits.

The site investigation data suggests that the Made Ground typically comprises dense to very dense sandy concrete, brick and slag gravel i.e. materials that is consistent with the use of reclaimed blast furnace and other steel making slag and residues to raise site levels.

Below the Made Ground, the soils were typically found to be consistent with Tidal Flat Deposits (Alluvium) and to comprise soft grey Clays with local gravel layers.

In locations BH01D and BH02D (northern site area, Annex A – Figure A2) a silty sand with gravel and cobbles unit was observed between the base of the Made Ground and top of the Clay. The descriptions are based on drillers logs and so it is possible that the granular deposits are part of the Made Ground, but they have been identified as possible channel deposits by Terra Firma and reference to the historical mapping does show a stream/river channel crossing the site in roughly the same area.

In locations BH01D (18.30-19.00m) in the north of the site and locations BH03/22D (15.80-16.20m) and BH04/22D (16.20-17.20m) near the proposed alignment of southern filter strip (Annex A – Figure A2), soils described as silty sandy Gravel and Alluvium with Gravel were

observed. It is not known if these granular soils are reflective of Glaciofluvial Deposits or granular units within the Tidal Flat Deposits (Alluvium).

Below the Tidal Flat Deposits (Alluvium) soils consistent with the Mercia Mudstone Group were observed.

2.3 Hydrogeology

The Tidal Flat Deposits and Mercia Mudstone Group are designated Secondary Undifferentiated and Secondary (B) Aquifers respectively. Secondary aquifers can be important on a local scale as a resource and for providing baseflow to local water courses. The Tidal Flat Deposits are not included in the relevant River basin management plan (RBMP) but the Mercia Mudstone is within the SE Valleys Southern Devonian Old Red Sandstone & Triassic Mercia Mudstone groundwater body which has been assigned an overall good quality.

According to the Data Map Wales website the Site is not located within a designated groundwater Source Protection Zone (SPZ – Merged)².

Figure 2-1: Summary of previous groundwater installations

Location	Date	Screened Section	Screened Lithology	Groundwater Monitored Depth (m bgl)
BH01D	12/2018	13.0 – 19.0	Alluvium with gravels / silty sandy Gravel	c. 10 ⁽¹⁾
BH01S		3.50 – 6.50	Made Ground	Dry ⁽¹⁾
BH02D		14.0 – 17.0	Alluvium / red-brown Clay	c. 10 ⁽¹⁾
BH02S		3.0 – 3.50	Made Ground	Dry ⁽¹⁾
BH03D		20.5 – 23.5	Clay / Marl	c. 10 ⁽¹⁾
BH03S		3.0 – 6.0	Made Ground	c. 5.50 ⁽¹⁾
BH01	04/2019	18.0 -20.0	Weathered Marl	4.61
BH01A		1.50 – 7.80	Made Ground / Alluvium	7.62
BH02		15.0 – 18.0	Weathered Marl	7.52
BH02A		1.50 – 7.50	Made Ground	4.65
BH03		18.0 – 20.0	Weathered Marl	7.54

² https://datamap.gov.wales/layers/inspire-nrw:NRW_Source_Protection_Zones

Location	Date	Screened Section	Screened Lithology	Groundwater Monitored Depth (m bgl)	
BH03A		1.50 – 7.50	Made Ground / Alluvium	4.59	
BH01/22D	11/2022	15.50 – 17.20	Alluvium	7.68	
BH01/22S		2.50 – 5.50	Made Ground	2.82	
BH02/22D		16.0 – 18.20	Alluvium	4.80	
BH02/22S		1.50 – 4.50	Made Ground	2.53	
BH03/22D		15.80 – 16.20	Alluvium with Gravel	6.97	
BH03/22S		2.50 – 5.50	Made Ground	4.11	
BH04/22D		16.20 – 17.20	Alluvium with Gravel	6.85	
BH04/22S		2.50 – 5.50	Made Ground	3.92	
Notes					
(1) Based on information within report text and on logs.					

2.3.1 Perched Water in Made Ground

The information reviewed suggests that monitored perched water levels within the Made Ground vary between approximately 2.53 m and 5.50 m bgl. However, further review of information within the existing site investigation reports suggests that during fieldworks the Made Ground deposits beneath the site were found to be dry with only localised perched water possibly present.

This conclusion is further augmented by the groundwater sampling records which describe BH1S/22, BH2S/22 and BH3S/22 running dry during purging with groundwater not recovering sufficiently to enable sampling.

2.3.2 Groundwater within Tidal Flat Deposits (TFD)

The information reviewed suggests that monitored groundwater levels within the TFD vary between approximately 4.80 m and 10.0 m bgl. Appraisal of the depth of the monitoring well screened sections with the monitored water levels suggests that groundwater within the TFD is confined and it is considered likely that it is present as discrete groundwater units within more localised granular deposits.

It is notable that in monitoring wells BH03/22d and BH04/22d groundwater levels of between 6.97 m and 6.85 m bgl respectively were recorded, which results in an elevation of 2.25 m

AOD in both locations. This could be suggestive of a laterally continuous groundwater unit in this area of the Site.

2.3.3 Groundwater within Mercia Mudstone Group (MMG)

The information reviewed suggests that monitored groundwater levels within the MMG vary between approximately 4.61 m and 10.0 m bgl. As with the TFD, appraisal of the depth of the monitoring well screened sections with the monitored water levels suggests that groundwater within the MMG is confined.

Reference to Jones, H.K. *et al* (2000)³ indicates that the Mercia Mudstone, ‘has traditionally been regarded as predominantly impermeable and at best a poor aquifer.’ It is suggested that the groundwater bearing sections of the MMG are related to occasional thin and impersistent siltstones and sandstones (referred to as *skerries*), which are interbedded between the effectively impermeable mudstones. These ‘skerries’ may, ‘contain and transmit limited quantities of groundwater through fractures.’

2.3.4 Summary of Ground & Groundwater Conditions

A summary of the ground and groundwater conditions encountered based on the review of site-specific investigation data is outlined in **Table 2-1**.

Table 2-1: A summary of ground and groundwater conditions

Stratum		Summary Description	Monitored Depth to Groundwater (m bgl)	Recorded Thickness (m)	Aquifer Designation
Made Ground		Dense to very dense sandy slag, concrete and brick gravel with boulders.	Not encountered during fieldworks 2.53 – 5.50 (post SI)	4.70 – 8.70	N/A
Tidal Flat Deposits (Alluvium)	Cohesive	Typically, very soft to soft grey Clay with some localised granular units and	4.80 – 10.0	7.1 – 17.60	Secondary Undifferentiated

³ The Physical Properties of Minor Aquifers in England and Wales (Jones, H.K. et al, 2000)

Stratum		Summary Description	Monitored Depth to Groundwater (m bgl)	Recorded Thickness (m)	Aquifer Designation
	Possible Channel Deposits	Silty sand with gravel fragments (BH01D & BH02D)	Not installed	2.70 – 2.80	
	Basal Gravel Unit (possible Glaciofluvial Deposits)	Silty sandy Gravel (BH01D) an Alluvium with Gravel (BH04/22d & BH03/22d)	6.85 – 10.0	0.40 – 1.0	
Mercia Mudstone		Red brown Clay and red-brown weathered Marl	4.61 – 10.0	>50	Secondary (B)

3 Hydrogeological Conceptual Site Model

3.1 Introduction

The information summarised in the earlier sections of this report has been used to compile a Hydrogeological Conceptual Site Model (HCSM) that has been used as the basis for the subsequent Hydrogeological Risk Assessment (HRA) presented in the next section (Annex A – Figure A3).

3.2 Local Hydrology & Hydrometric Data

As outlined, the closest surface water course is the Severn Estuary and reference to the NRW interactive Cycle 3 (2021) Rivers and Waterbodies Map indicates that in this location the water body is part of the lower Severn transitional waters operational catchment which has been assigned an overall moderate quality.

Information relating to the Welsh region within the UK Hydrometric Register indicates that the average annual rainfall in the region is 1380 mm. Closer to the site the River Rhymney (Llannedeyrn gauging station) records an average annual rainfall of 1461 mm with mean annual run-off and losses of 993 mm and 468 mm respectively.

3.3 Infiltration & Recharge

Recharge across the Site will vary according to the ground cover and unsaturated zone geology and at present the majority of the ground surface is understood to comprise the upper soils of the Made Ground deposits (imported to raise Site levels) with some limited areas of hard surfacing.

In the areas directly underlain by the Made Ground, rainfall infiltration will be controlled by the Soil Moisture Deficit and rates of evapotranspiration. In the limited areas of hard cover rates of run-off will be relatively high and rainfall infiltration will be limited to localised cracks in hard standing and inputs from artificial mechanisms such as leaking drains. Given the nature of the Made Ground soils and general lack of vegetation it is considered likely that rainfall infiltration is relatively high.

Following the proposed development, the Site will comprise hard surfacing and rainfall will be directed to the proposed drainage system (filter drains).

It is considered likely that direct rainfall recharge of groundwater beneath the site will largely be controlled by the TFD which are primarily cohesive in nature and are likely to act as a leaky

unit with slow transmission into any deeper granular units, hence the localised nature of the perched water within the Made Ground. In the possible channel deposits (observed in BH01/22D and BH02/22D) there is potential for greater recharge as they are located directly beneath the Made Ground, however the empirical site data suggests that they deposits are largely dry.

There is potential for recharge of the groundwater beneath the Site via off-site areas as there is a significant proportion of soft ground cover in the vicinity of the site. However, this would be limited by the extent (outcrop), geological heterogeneities and possibly hydraulic continuity of the superficial deposits. In the MMG outcrops are far more distal.

3.4 Unsaturated Zone (UZ)

The UZ comprises the Made Ground soils and Alluvium. The information reviewed suggests that over the wider site, perched water forms in discrete and non-continuous units on the upper surface of the relatively low permeability TFD. The information reviewed (as well as anecdotal information from personnel at Terra Firma) suggests that groundwater within the TFD itself is present within granular bands and that groundwater units are confined.

As such the UZ thickness is likely to vary depending on the location of perched water units in the Made Ground (which are likely to be ephemeral) and the depth of groundwater bearing granular units within the TFD.

On this basis within the HCSM a conservative approach has been taken and an overall UZ thickness of between 5.0 m and 10.0 m has been considered, considering the depth of discharge via the proposed filter drains and cellular soakaway.

3.5 Aquifer Properties

Jones et al (2000)³ includes some information on the aquifer properties of the MMG but any groundwater within the MMG is overlain by c. 20 m of Made Ground soils and TFD and it is considered unlikely that any significant discharge from the proposed filter strips will reach groundwater units within the MMG.

The data reviewed suggests that groundwater within the TFD forms a multilayered aquifer system where groundwater units are present in granular units separated by cohesive soils. It is unclear if the granular units are laterally continuous but for the purposes of the risk assessment the HCSM assumes a thin and laterally continuous groundwater unit is present and that it is in hydraulic continuity with the Severn estuary to the east.

Literature information referenced within Fetter (1993)⁴ for granular units such the ones described in the TFD (i.e. silty sand and gravel) suggests that a hydraulic conductivity range of between 0.10 m/d and 20 m/d is reasonable.

Within the model the hydraulic conductivity has been input as a log triangular distribution with a minimum value of 1.16E-06 m/s, a likely value of 5.79E-05m/s and a maximum value of 2.31E-04m/s. The effective porosity has been input as a uniform distribution of between 20-30% to consider the variation in the silt and clay content of the granular unit.

3.6 Groundwater Flow

It is considered likely that any laterally extensive groundwater unit within the TFD would be subject to the effects of tidal loading i.e. a pressure differential is created via the variation in high and low tide in the Severn Estuary. This can create temporal variations and even reversals of measured groundwater piezometric levels, making the assessment of groundwater flow very difficult.

However, within the HCSM it has been assumed that groundwater flow is in a generally easterly direction toward the Severn Estuary and an hydraulic gradient of between 0.004 and 0.006 has been applied and is considered to be a reasonable approximation.

⁴ Fetter, C. W. 1993, Contaminant hydrogeology / C.W. Fetter Macmillan Pub. Co.; Maxwell Macmillan Canada; Maxwell Macmillan International New York: Toronto: New York.

4 Hydrogeological Risk Assessment

4.1 Assessment Approach

In completing the risk assessment, the following documents relating to current best practice, policy and regulation have been referenced:

- NRW guidance relating to Land Contamination (<https://naturalresources.wales/guidance-and-advice/business-sectors/planning-and-development/advice-for-developers/land-contamination/?lang=en>).
- Guidance on the gov.uk website relating to Infiltration systems: groundwater risk assessments (<https://www.gov.uk/guidance/infiltration-systems-groundwater-risk-assessments#risk-assessment-approach>).
- Groundwater Protection (previously covered in GP3, withdrawn on 14th March 2017) and associated guidance on the Gov.uk website relating to groundwater risk assessments.
- Guidance on the Assessment and Interrogation of Subsurface Analytical Contaminant Fate and Transport Models. National Groundwater & Contaminated Land Centre report NC/99/38/1 (2001).
- Remedial Targets Methodology: Hydrogeological Risk Assessment for Land Contamination. Environment Agency (2006).
- Environment Agency (2014). Groundwater Risk Assessment for Treated Effluent Discharges to Infiltration Systems. Annex J5: Infiltration Worksheet User Manual v2.0.
- Water Framework Directive (Directive 2000/60/EC) and associated UK Technical Advisory Group documents.
- *The Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015*.

In accordance with current best practice, the 'prevent and limit' approach has been adopted for the assessment of controlled waters, such that:

- Where pollutants have not yet entered the groundwater, all necessary and reasonable measures must be taken to:
 - Prevent the input of hazardous substances into groundwater.

- Minimize entry of other (non-hazardous) pollutants into groundwater so as to avoid pollution and deterioration of the status of groundwater bodies or sustained, upward trends in pollutant concentrations.
- Where hazardous substances or non-hazardous pollutants have already entered the groundwater, the priority is to:
 - Minimise further entry of hazardous substances and non-hazardous pollutants into groundwater.
 - Take necessary and reasonable measures to limit the pollution of groundwater or impact on the status of the groundwater body from the future expansion of a contaminant 'plume', if necessary, by actively reducing its extent.

4.2 Key Risk Drivers

Based on the correspondence from NRW and the best available techniques associated emission levels (BAT-AELs) for discharges from treatment of shredders of metal waste have been referenced and the following potential contaminants have been considered:

- Hydrocarbon oil index (HOI)
- Arsenic (expressed as As)
- Cadmium (expressed as Cd)
- Chromium (expressed as Cr)
- Copper (expressed as Cu)
- Lead (expressed as Pb)
- Nickel (expressed as Ni)
- Mercury (expressed as Hg)
- Zinc (expressed as Zn)

Total organic carbon (TOC) and Total suspended solids (TSS) are also included in the BAT-AELs but as there are no relevant water quality standards or physio-chemical data for these two parameters they have not been included within the risk assessment.

4.3 Receptors and Compliance Point

The groundwater in the TFD beneath the Site is designated a Secondary (Undifferentiated) Aquifer and as such has a local resource potential. However, in the context of the Site setting the most sensitive receptor is the Severn Estuary. The key risk drivers outlined above are hazardous pollutants and as such the compliance point has been considered to be the groundwater immediately down gradient of the southern filter strip.

4.4 Water Quality Standards

Based on the '*prevent and limit*' approach of the Water Framework Directive (2000/60/EC) and the identified receptors, the following Water Quality Standards (WQS) have been applied:

- Drinking Water Quality Standards England & Wales, 2000 (Amended 2004, DWS).
- The Water Framework Directive (Standards and Classification) Directions (England and Wales) 2015.
- World Health Organisation (WHO) Guidelines for Drinking Water Quality, Fourth Edition, Volume 1.

Based on the Site setting and prioritising the Severn Estuary, where available the EQS (salt water) has been applied as the WQS. In the case of oils/hydrocarbons WHO guidance has been applied (C10-16 Aromatic fraction).

4.5 Risk Assessment

4.5.1 Initial Contaminant Inputs

As, outlined, the proposed drainage system will include layers of treatment material (SDS Aqua-Xchange) that will capture and retain potential contaminants (e.g. metals, suspended solids and hydrocarbons) to prevent potential impacts to sensitive water receptor. As such it is difficult to predict the initial concentrations that would enter the system post development. It would be defensible to consider the BAT-AEL values, but a more conservative approach has been considered whereby the initial contaminant concentrations for the metals have all been set to 1 mg/l and for hydrocarbons/oils it has been set to 0.50 mg/l.

4.5.2 Fate and Transport Model

The assessment of potential impacts associated with the key risk drivers on the underlying groundwater has been undertaken with the aid of the Environment Agency ConSim modelling package (v2.5).

ConSim is a probabilistic model that requires the input of aquifer specific parameters such as hydraulic conductivity, contaminant specific parameters such as half-life and partitioning which can be both aquifer and contaminant specific. A range of values (or single values) can be input for each parameter to enable uncertainty to be acknowledged and the model uses monte carlo analysis to randomly select input parameters from the specified range input.

4.5.3 Assessment Stages and Level

Within ConSim a Level 3 assessment has been undertaken that calculates or takes user defined leachate concentration and then simulates transport via the unsaturated zone and groundwater, allowing for the effects of retardation, dilution and biodegradation according to user define inputs.

Rather than applying the soakaway option ConSim the Level 3 assessment has applied the standard approach so that two unsaturated zone layers can be considered (the soakaway option does not enable this) which better reflects the conditions on Site where the Made Ground and TFD are present and have differing properties. The source zones have been input using the area of the proposed filter strips to simulate the concentrated infiltration that will occur over these areas following development.

4.5.4 Unsaturated Zone Assessment

As outlined within the HCSM, the unsaturated zone (UZ) includes the soils of the Made Ground and TFD and its thickness will vary according to the presence of groundwater bearing granular units within the TFD. A conservative overall UZ thickness of 5.0 – 10.0 m has been applied considering a Made Ground thickness of between 2.0 – 3.0 m and a TFD thickness of 3.0 – 7.0 m.

4.5.5 Background Concentrations

Background concentrations have been applied within the groundwater assessment based on the January 2023 data from Terra Firma (Ref. DE/17250/SI, dated 14th March 2023).

A summary of the ConSim input parameters is outlined in **Table 4-1**.

Table 4-1: ConSim Input Parameters

Parameter	Source	Value	Distribution
Infiltration (m/d)	Drainage strategy & data from hydrometric register	150 – 250	Uniform

Parameter		Source	Value	Distribution
Made Ground UZ thickness		Conservative estimate based on site specific data	2.0 – 3.0	Uniform
TFD UZ thickness			3.0 – 7.0	Uniform
Unsaturated Conductivity (m/s)	Made Ground	Based on site specific infiltration testing.	4.61E-05 – 1.13E-04	Log Uniform
	TFD	Conservative estimate taking into consideration cohesive and granular units within TFD.	1E-07 – 1E-04	Log Uniform
Fraction of Organic Carbon (%)		ConSim user manual via EA 2002 & site-specific data.	0.05 – 0.1	Uniform
Partition Coefficient (Kd, ml/g). N.B. values reduced to take into account more granular nature of Made Ground and granular units within TFD.				
Arsenic		EA Science Report SC050021	50	Single
Cadmium			10	Single
Chromium		LQM/CIEH 2009	480	Single
Copper			10	Single
Lead		RIVM 711701023	360	Single
Mercury		EA Science Report SC050021	50	Single
Nickel		EA Science Report SC050021	50	Single
Zinc		LQM/CIEH 2009	38	Single
Oils/Hydrocarbon koc (ml/g)		RBCA database	794 – 15848	Uniform
Oils/Hydrocarbon half-life for degradation (years)			712 – 4280	Uniform
Aquifer Hydraulic Conductivity (m/s)		Fetter (1993) for silty sand & gravel	1.16E-06, 5.79E-05 & 2.31E-04	Log triangular
Effective Porosity			0.2 – 0.3	Uniform

4.6 Conclusions & Recommendations

The results of the ConSim risk assessment model are appended as input-output results and ConSim .csm files) and are summarised **Table 4-2**.

Table 4-2: ConSim Results

Key Risk Driver	Initial Conc. (mg/l)	Background Groundwater Concentration (mg/l)	WQS (mg/l)	Predicted Concentration (95 th percentile) (mg/l)		
				Base of Made Ground UZ	Base of TFD UZ	Receptor
Arsenic	1.0	0.0059 – 0.025	0.025	0.99	0.00	0.024
Cadmium	1.0	0.00011 – 0.00022	0.0002	1.00	0.00	0.00021
Chromium	1.0	0.0005 – 0.0059	0.0047	0.00	0.00	0.0056
Copper	1.0	0.0005 – 0.0006	0.00376	1.00	0.00	0.00059
Lead	1.0	0.0005 – 0.0006	0.0013	0.00	0.00	0.00059
Mercury	1.0	0.00001	0.00007	0.99	0.00	0.00001
Nickel	1.0	0.00073 – 0.0027	0.0086	0.99	0.00	0.0025
Zinc	1.0	0.0025 – 0.0078	0.0068	0.99	0.00	0.0075
Oils/Hydrocarbons	0.50	0.0005 – 0.003	0.094	0.499	0.499	0.089

As outlined above (**Table 4-2**), the ConSim model has been set up to appraise the potential impacts on the local water environment prior to development and emplacement of the filter strips (including the two clean stone layers separating two layers of treatment material that will capture and retains potential contaminants).

It should be noted, that in accordance with current best practice guidance, the modelling work that underpins the risk assessment has been undertaken to aid in professional judgment. However, the results suggest that if run-off at concentrations of c. 1.0 mg/l (metals) and c. 0.50 mg/l oils/hydrocarbons were discharged directly to ground without the use of filter strips (i.e. without abatement) there would be a very low likelihood of impact on the local water environment (including the Severn Estuary).

Following development and emplacement of the proposed drainage system potential impacts on the local water environment are predicted to be negligible.

4.7 Recommendations

It is recommended that a programme of monitoring, sampling and analysis is undertaken to establish baseline conditions in the groundwater beneath the Site before and following development. This requirement is discussed within the Schedule 5 response (Ref. 021-1892 Celsa Cardiff Variation - Schedule 5-2 Response REV00).

If possible, measurement of water concentrations entering and being discharged from the drainage system should also be recorded. This requirement is discussed within the Schedule 5 response (Ref. 021-1892 Celsa Cardiff Variation - Schedule 5-2 Response REV00).

Annex A: Figures and Plans



SITE LOCATION:
Celsa Manufacturing (UK) Ltd (Rover Way Site)

Ordnance Survey 1:50,000 scale map with the permission of The Controller of Her Majesty's Stationery Office, Crown Copyright Earth and Marine Environmental Consultants Ltd, Licence No. 100050755

TITLE:
Figure A1.
Site Location

CLIENT:
Celsa Manufacturing (UK) Ltd

JOB REFERENCE:
021-1892

DATE:
24th July 2023

SCALE:
1:50,000

REVISIONS:		
No.	Date	Description
00	24/07/23	Final for report
-	--/--	-
-	--/--	-
-	--/--	-

DRAWN BY: MJS	CHECKED BY: SPR
------------------	--------------------





- Key**
- Drainage System
 - Site Investigations**
 - Boreholes
 - Trial Pit
 - Hand Dug Pit
 - Surface Sample
 - Abstraction Well
 - Permit (Melt Shop)
 - Permit (Rover Way)



Map data ©2022 Google



Title: Figure A2 - Environmental and Geotechnical Baseline Data (2010-2023)

Client: Celsa Manufacturing (UK) Limited

Job Reference: 021-1892

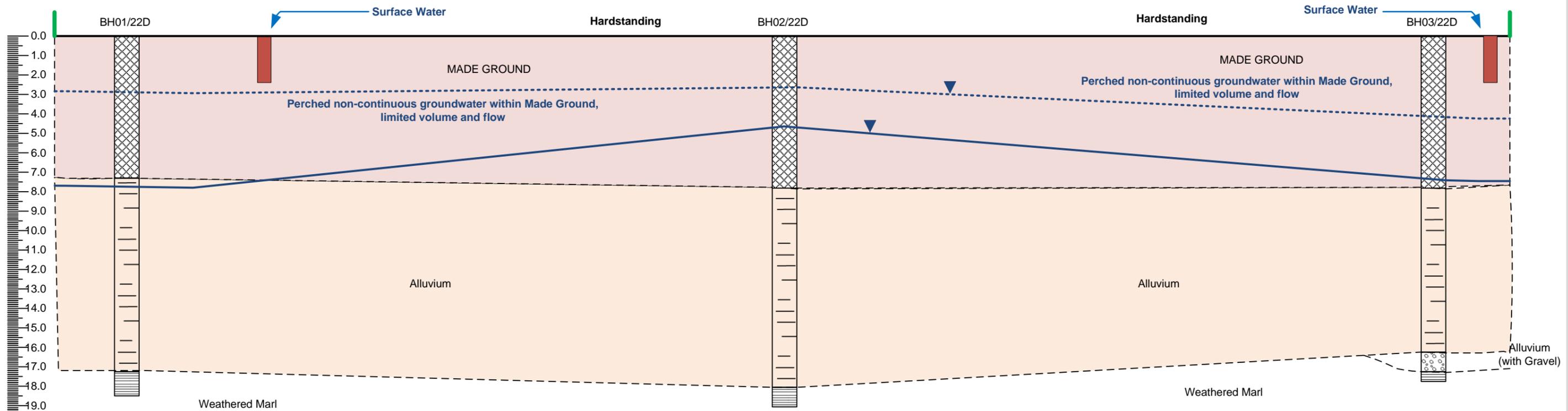
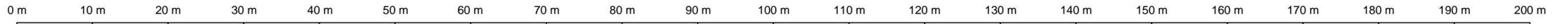
Date: 29th June 2023

Revision: REV00

Scale: As Stated

Drawn by: MS

Checked by: SPR



Notes:

Filter Strips (base depth 2.4 m bgl)

- 150 mm freeboard
- 500 mm clean stone
- Geotextile membrane
- 250 mm SDS Aqua-Xchange
- Geotextile membrane
- 250 mm clean stone
- Geotextile membrane
- 250 mm SDS Aqua-Xchange
- 1000 mm SDS Cellular Soakaway (with geotextile wrap)

Source: James and Nicholas (2022). Drainage construction details, Job No. 21.121, Dwg: C15 Rev: B, 14/06/22.

Groundwater Levels

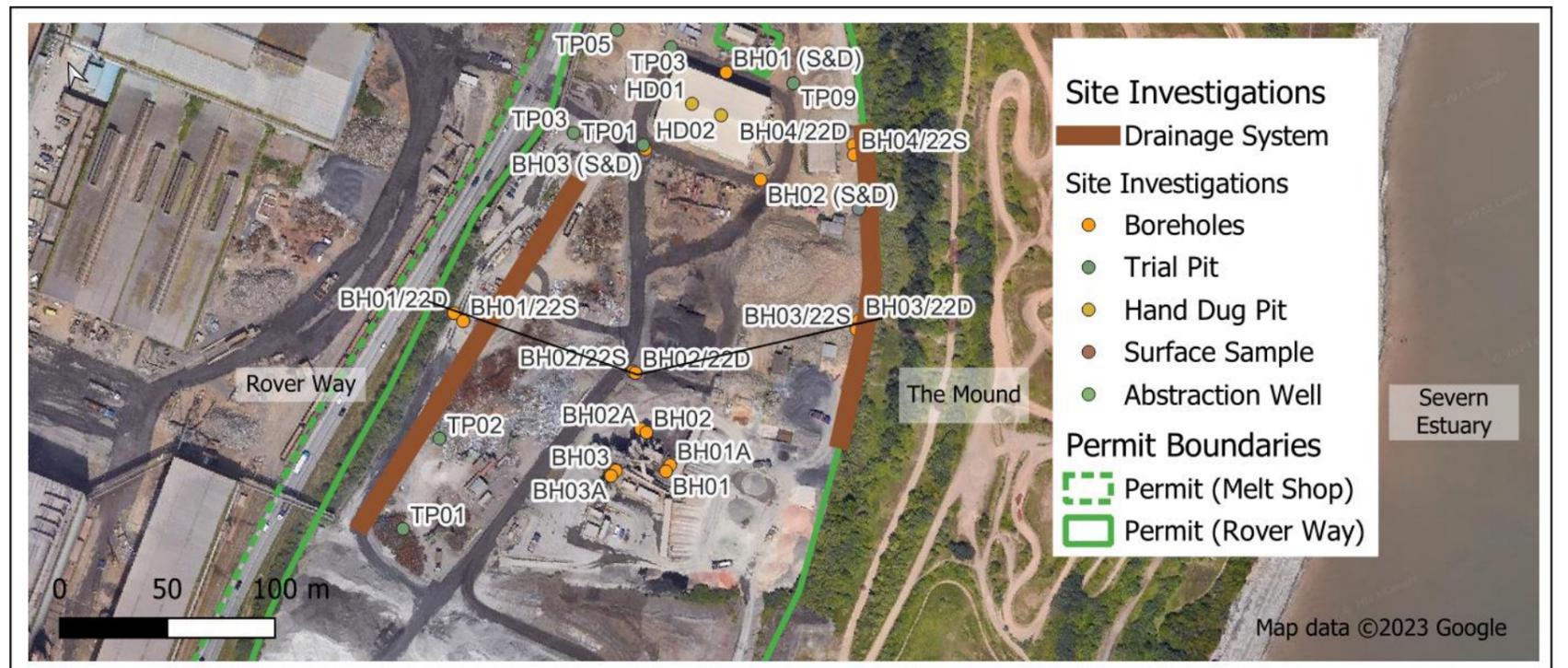
Taken from both BH logs shallow and deep (Terra Firma monitoring on 16/01/23).



Filter strips



Permitted Installation Boundary



TITLE: Figure A3. Hydrogeological Conceptual Site Model (HCSM)	JOB REFERENCE: 021-1892	REVISIONS:		
	DATE: June 29, 2023	No.	Date	Description
CLIENT: Celsa Manufacturing (UK) Ltd	SCALE: As stated	00	29/06/23	DRAFT
		-	-	-
		-	-	-
		-	-	-
	DRAWN BY: MJS	CHECKED BY: PL		



Map data ©2023 Google

Annex B: ConSim Model Outputs

Project: Celsa

Project Number: LMB_Celsa

Project Details

Title: Celsa

Project Number: LMB_Celsa

Prepared By: PIL

Date: 2023-07-21 12:26:57

Client Name: EAME

Comments:

Consim version 2.05

Simulation Level

Level 3

Simulation Parameters

Iterations 1001

Timeslices:100, 300, 1000, 7000

Water Quality Standard

User Defined

Project: Celsa

Project Number: LMB_Celsa

Source

Northern

Dry Bulk Density [g/cm³] UNDEFINED

Air Filled Porosity [fraction] UNDEFINED

Water Filled Porosity [fraction] UNDEFINED

Thickness [m] UNIFORM(0.01,0.05)

Fraction of Organic Carbon [%] UNDEFINED

Contaminated Land

Constant Source Term

Overall Unsaturated Zone Thickness [m] UNIFORM(5,10)

Infiltration

Infiltration [mm/year] UNIFORM(150,250)

Source Inventory:

Arsenic

Measured as Leachable Concentrate

Leachate Concentration [mg/l] SINGLE(1)

Inorganic

Cadmium

Measured as Leachable Concentrate

Leachate Concentration [mg/l] SINGLE(1)

Inorganic

Chromium

Measured as Leachable Concentrate

Leachate Concentration [mg/l] SINGLE(1)

Inorganic

Copper

Measured as Leachable Concentrate

Leachate Concentration [mg/l] SINGLE(1)

Inorganic

Project: Celsa

Project Number: LMB_Celsa

Lead
 Measured as Leachable Concentrate Inorganic Leachate Concentration [mg/l] SINGLE(1)

Mercury
 Measured as Leachable Concentrate Inorganic Leachate Concentration [mg/l] SINGLE(1)

Nickel
 Measured as Leachable Concentrate Inorganic Leachate Concentration [mg/l] SINGLE(1)

Oils/Hydrocarbons
 Measured as Leachable Concentrate Organic Leachate Concentration [mg/l] SINGLE(0.5)

Zinc
 Measured as Leachable Concentrate Inorganic Leachate Concentration [mg/l] SINGLE(1)

Project: Celsa

Project Number: LMB_Celsa

Unsaturated Pathway: Made Ground

Active

Porous Medium

Thickness [m] UNIFORM(2,3)

Dry Bulk Density [g/cm³] UNIFORM(1.6,1.8)

Vertical Dispersivity [m] UNIFORM(0.02,0.03)

Fraction of Organic Carbon [%] UNIFORM(0.05,0.1)

Water Filled Porosity [fraction] UNIFORM(0.05,0.15)

Unsaturated Conductivity [m/s] LOGUNIFORM(4.61e-005,0.000113)

Unsaturated Pathway Contaminants

Arsenic

Partition Coefficient [ml/g] SINGLE(50)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Cadmium

Partition Coefficient [ml/g] SINGLE(10)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Chromium

Partition Coefficient [ml/g] SINGLE(480)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Copper

Partition Coefficient [ml/g] SINGLE(10)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Lead

Partition Coefficient [ml/g] SINGLE(360)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Mercury

Partition Coefficient [ml/g] SINGLE(50)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Project: Celsa

Project Number: LMB_Celsa

Nickel

Partition Coefficient [ml/g] SINGLE(50)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Oils/Hydrocarbons

koc [ml/g] UNIFORM(794,15848)

Calculate kd

Simulate Degradation in Dissolved Phase only

Half-life [years] UNIFORM(712,4280)

Zinc

Partition Coefficient [ml/g] SINGLE(38)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Project: Celsa

Project Number: LMB_Celsa

Unsaturated Pathway: TFD

Active

Porous Medium

Thickness [m] UNIFORM(3,7)

Dry Bulk Density [g/cm³] UNIFORM(1.6,1.8)

Vertical Dispersivity [m] UNIFORM(0.03,0.07)

Fraction of Organic Carbon [%] UNIFORM(0.05,0.1)

Water Filled Porosity [fraction] UNIFORM(0.1,0.2)

Unsaturated Conductivity [m/s] LOGUNIFORM(1e-007,0.0001)

Unsaturated Pathway Contaminants

Arsenic

Partition Coefficient [ml/g] SINGLE(50)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Cadmium

Partition Coefficient [ml/g] SINGLE(50)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Chromium

Partition Coefficient [ml/g] SINGLE(480)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Copper

Partition Coefficient [ml/g] SINGLE(50)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Lead

Partition Coefficient [ml/g] SINGLE(360)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Mercury

Partition Coefficient [ml/g] SINGLE(50)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Project: Celsa

Project Number: LMB_Celsa

Nickel

Partition Coefficient [ml/g] SINGLE(50)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Oils/Hydrocarbons

koc [ml/g] UNIFORM(794,15848)

Calculate kd

Simulate Degradation in Dissolved Phase only

Half-life [years] UNIFORM(712,4280)

Zinc

Partition Coefficient [ml/g] SINGLE(38)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Project: Celsa

Project Number: LMB_Celsa

Source

Southern

Dry Bulk Density [g/cm³] UNDEFINED

Air Filled Porosity [fraction] UNDEFINED

Water Filled Porosity [fraction] UNDEFINED

Thickness [m] UNIFORM(0.01,0.05)

Fraction of Organic Carbon [%] UNDEFINED

Contaminated Land

Constant Source Term

Overall Unsaturated Zone Thickness [m] UNIFORM(5,10)

Infiltration

Infiltration [mm/year] UNIFORM(150,250)

Source Inventory:

Arsenic

Measured as Leachable Concentrate

Inorganic

Leachate Concentration [mg/l] SINGLE(1)

Cadmium

Measured as Leachable Concentrate

Inorganic

Leachate Concentration [mg/l] SINGLE(1)

Chromium

Measured as Leachable Concentrate

Inorganic

Leachate Concentration [mg/l] SINGLE(1)

Copper

Measured as Leachable Concentrate

Inorganic

Leachate Concentration [mg/l] SINGLE(1)

Project: Celsa

Project Number: LMB_Celsa

Lead
 Measured as Leachable Concentrate Inorganic Leachate Concentration [mg/l] SINGLE(1)

Mercury
 Measured as Leachable Concentrate Inorganic Leachate Concentration [mg/l] SINGLE(1)

Nickel
 Measured as Leachable Concentrate Inorganic Leachate Concentration [mg/l] SINGLE(1)

Oils/Hydrocarbons
 Measured as Leachable Concentrate Organic Leachate Concentration [mg/l] SINGLE(0.5)

Zinc
 Measured as Leachable Concentrate Inorganic Leachate Concentration [mg/l] SINGLE(1)

Project: Celsa

Project Number: LMB_Celsa

Unsaturated Pathway: Made Ground

Active

Porous Medium

Thickness [m] UNIFORM(2,3)

Dry Bulk Density [g/cm³] UNIFORM(1.6,1.8)

Vertical Dispersivity [m] UNIFORM(0.02,0.03)

Fraction of Organic Carbon [%] UNIFORM(0.05,0.5)

Water Filled Porosity [fraction] UNIFORM(0.05,0.15)

Unsaturated Conductivity [m/s] LOGUNIFORM(4.61e-005,0.000113)

Unsaturated Pathway Contaminants

Arsenic

Partition Coefficient [ml/g] SINGLE(50)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Cadmium

Partition Coefficient [ml/g] SINGLE(10)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Chromium

Partition Coefficient [ml/g] SINGLE(480)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Copper

Partition Coefficient [ml/g] SINGLE(10)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Lead

Partition Coefficient [ml/g] SINGLE(360)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Mercury

Partition Coefficient [ml/g] SINGLE(50)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Project: Celsa

Project Number: LMB_Celsa

Nickel

Partition Coefficient [ml/g] SINGLE(50)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Oils/Hydrocarbons

koc [ml/g] UNIFORM(794,15848)

Calculate kd

Simulate Degradation in Dissolved Phase only

Half-life [years] UNIFORM(712,4280)

Zinc

Partition Coefficient [ml/g] SINGLE(38)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Project: Celsa

Project Number: LMB_Celsa

Unsaturated Pathway: TFD

Active

Porous Medium

Thickness [m] UNIFORM(3,7)

Dry Bulk Density [g/cm³] UNIFORM(1.6,1.8)

Vertical Dispersivity [m] UNIFORM(0.03,0.07)

Fraction of Organic Carbon [%] UNIFORM(0.05,0.5)

Water Filled Porosity [fraction] UNIFORM(0.1,0.2)

Unsaturated Conductivity [m/s] LOGUNIFORM(1e-007,0.0001)

Unsaturated Pathway Contaminants

Arsenic

Partition Coefficient [ml/g] SINGLE(50)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Cadmium

Partition Coefficient [ml/g] SINGLE(50)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Chromium

Partition Coefficient [ml/g] SINGLE(480)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Copper

Partition Coefficient [ml/g] SINGLE(50)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Lead

Partition Coefficient [ml/g] SINGLE(360)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Mercury

Partition Coefficient [ml/g] SINGLE(50)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Project: Celsa

Project Number: LMB_Celsa

Nickel

Partition Coefficient [ml/g] SINGLE(50)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Oils/Hydrocarbons

koc [ml/g] UNIFORM(794,15848)

Calculate kd

Simulate Degradation in Dissolved Phase only

Half-life [years] UNIFORM(712,4280)

Zinc

Partition Coefficient [ml/g] SINGLE(38)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Project: Celsa**Project Number: LMB_Celsa**

Aquifer Pathway

Thickness [m] UNIFORM(0.5,2)
Dry Bulk Density [g/cm³] UNIFORM(1.6,1.8)
Fraction of Organic Carbon [%] UNIFORM(0.05,0.5)
Calculated Mixing Zone Thickness
Hydraulic Conductivity [m/s] LOGTRIANGULAR(1.16e-006,5.79e-005,0.000231)
Effective Porosity [fraction] UNIFORM(0.2,0.3)
Hydraulic Gradient UNIFORM(0.004,0.006)
Groundwater Flow Direction (degrees), 90.00
Longitudinal Dispersivity [m] SINGLE(5)
Lateral Dispersivity [m] SINGLE(0.5)

Contaminant Inventory*Arsenic*

Background Concentration [mg/l] UNIFORM(0.0059,0.025)
Partition Coefficient [ml/g] SINGLE(500)
Simulate Degradation in Dissolved Phase only
Half-life [years] SINGLE(1e+030)

Cadmium

Background Concentration [mg/l] UNIFORM(0.00011,0.00022)
Partition Coefficient [ml/g] SINGLE(100)
Simulate Degradation in Dissolved Phase only
Half-life [years] SINGLE(1e+030)

Chromium

Background Concentration [mg/l] UNIFORM(0.0005,0.0059)
Partition Coefficient [ml/g] SINGLE(4800)
Simulate Degradation in Dissolved Phase only
Half-life [years] SINGLE(1e+030)

Copper

Background Concentration [mg/l] UNIFORM(0.0005,0.0006)
Partition Coefficient [ml/g] SINGLE(100)
Simulate Degradation in Dissolved Phase only
Half-life [years] SINGLE(1e+030)

Lead

Background Concentration [mg/l] UNIFORM(0.0005,0.0006)
Partition Coefficient [ml/g] SINGLE(3600)
Simulate Degradation in Dissolved Phase only
Half-life [years] SINGLE(1e+030)

Project: Celsa

Project Number: LMB_Celsa

Mercury

Background Concentration [mg/l] SINGLE(1e-005)

Partition Coefficient [ml/g] SINGLE(500)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Nickel

Background Concentration [mg/l] UNIFORM(0.00073,0.0027)

Partition Coefficient [ml/g] SINGLE(500)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Oils/Hydrocarbons

Background Concentration [mg/l] UNIFORM(0.0005,0.003)

koc [ml/g] UNIFORM(794,15848)

Calculate kd

Simulate Degradation in Dissolved Phase only

Half-life [years] UNIFORM(712,4280)

Zinc

Background Concentration [mg/l] UNIFORM(0.0025,0.0078)

Partition Coefficient [ml/g] SINGLE(38)

Simulate Degradation in Dissolved Phase only

Half-life [years] SINGLE(1e+030)

Project: Celsa

Project Number: LMB_Celsa

Receptor

Northern Receptor	X 321505.145254	Y 176389.536727
Southern Receptor	X 321641.219470	Y 176359.744726
50m compliance point	X 321670.140447	Y 176309.896393

Input Correlations

No Correlations

Project: Celsa

Project Number: LMB_Celsa

Northern - Arsenic

Concentration at Source [mg/l] - 1000 years

05% of values less than 1

10% of values less than 1

25% of values less than 1

50% of values less than 1

75% of values less than 1

90% of values less than 1

Minimum 1es less than 1

Maximum 1

Mean 1

SD 0

Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Cadmium

Concentration at Source [mg/l] - 1000 years

05% of values less than 1	10% of values less than 1	25% of values less than 1
50% of values less than 1	75% of values less than 1	90% of values less than 1
Minimum 1es less than 1	Maximum 1	
Mean 1	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Chromium

Concentration at Source [mg/l] - 1000 years

05% of values less than 1

10% of values less than 1

25% of values less than 1

50% of values less than 1

75% of values less than 1

90% of values less than 1

Minimum 1es less than 1

Maximum 1

Mean 1

SD 0

Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Copper

Concentration at Source [mg/l] - 1000 years

05% of values less than 1

10% of values less than 1

25% of values less than 1

50% of values less than 1

75% of values less than 1

90% of values less than 1

Minimum 1es less than 1

Maximum 1

Mean 1

SD 0

Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Lead

Concentration at Source [mg/l] - 1000 years

05% of values less than 1

10% of values less than 1

25% of values less than 1

50% of values less than 1

75% of values less than 1

90% of values less than 1

Minimum 1es less than 1

Maximum 1

Mean 1

SD 0

Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Mercury

Concentration at Source [mg/l] - 1000 years

05% of values less than 1

10% of values less than 1

25% of values less than 1

50% of values less than 1

75% of values less than 1

90% of values less than 1

Minimum 1es less than 1

Maximum 1

Mean 1

SD 0

Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Nickel

Concentration at Source [mg/l] - 1000 years

05% of values less than 1

10% of values less than 1

25% of values less than 1

50% of values less than 1

75% of values less than 1

90% of values less than 1

Minimum 1es less than 1

Maximum 1

Mean 1

SD 0

Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Oils/Hydrocarbons

Concentration at Source [mg/l] - 1000 years

05% of values less than 0.5

10% of values less than 0.5

25% of values less than 0.5

50% of values less than 0.5

75% of values less than 0.5

90% of values less than 0.5

Minimum 0.5s less than 0.5

Maximum 0.5

Mean 0.5

SD 0

Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Zinc

Concentration at Source [mg/l] - 1000 years

05% of values less than 1

10% of values less than 1

25% of values less than 1

50% of values less than 1

75% of values less than 1

90% of values less than 1

Minimum 1es less than 1

Maximum 1

Mean 1

SD 0

Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Arsenic

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 635.265	10% of values less than 705.376	25% of values less than 854.807
50% of values less than 1061.35	75% of values less than 1309.54	90% of values less than 1541.18
Minimum 455.07ss than 1710.4	Maximum 2357.71	
Mean 1102.15	SD 335.94	Variance 112856

Northern - Cadmium

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 127.631	10% of values less than 141.657	25% of values less than 171.865
50% of values less than 212.993	75% of values less than 263.006	90% of values less than 310.161
Minimum 91.3164s than 343.373	Maximum 473.909	
Mean 221.471	SD 67.5031	Variance 4556.67

Northern - Chromium

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 6092.33	10% of values less than 6765.42	25% of values less than 8194.85
50% of values less than 10174.4	75% of values less than 12555.4	90% of values less than 14776.9
Minimum 4365.42s than 16405.9	Maximum 22608.6	
Mean 10569.4	SD 3221.65	Variance 1.0379E+007

Northern - Copper

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 127.631	10% of values less than 141.657	25% of values less than 171.865
50% of values less than 212.993	75% of values less than 263.006	90% of values less than 310.161
Minimum 91.3164s than 343.373	Maximum 473.909	
Mean 221.471	SD 67.5031	Variance 4556.67

Project: Celsa

Project Number: LMB_Celsa

Northern - Arsenic

Unretarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 3.21441	10% of values less than 3.51816	25% of values less than 4.14243
50% of values less than 4.96651	75% of values less than 5.91875	90% of values less than 6.95323
Minimum 2.15748s than 7.73119	Maximum 10.0416	
Mean 5.13288	SD 1.37648	Variance 1.89469

Retarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 2258.14	10% of values less than 2471.81	25% of values less than 2815.25
50% of values less than 3182.18	75% of values less than 3682.48	90% of values less than 4149.01
Minimum 1682.39s than 4490.36	Maximum 5505.08	
Mean 3270.29	SD 661.57	Variance 437674

Project: Celsa

Project Number: LMB_Celsa

Northern - Cadmium

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 127.631	10% of values less than 141.657	25% of values less than 171.865
50% of values less than 212.993	75% of values less than 263.006	90% of values less than 310.161
Minimum 91.3164s than 343.373	Maximum 473.909	
Mean 221.471	SD 67.5031	Variance 4556.67

Northern - Chromium

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 6092.33	10% of values less than 6765.42	25% of values less than 8194.85
50% of values less than 10174.4	75% of values less than 12555.4	90% of values less than 14776.9
Minimum 4365.42s than 16405.9	Maximum 22608.6	
Mean 10569.4	SD 3221.65	Variance 1.0379E+007

Northern - Copper

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 127.631	10% of values less than 141.657	25% of values less than 171.865
50% of values less than 212.993	75% of values less than 263.006	90% of values less than 310.161
Minimum 91.3164s than 343.373	Maximum 473.909	
Mean 221.471	SD 67.5031	Variance 4556.67

Northern - Lead

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 4569.43	10% of values less than 5074.25	25% of values less than 6146.47
50% of values less than 7631.94	75% of values less than 9417.92	90% of values less than 11992
Minimum 2365.42s than 9131.64	Maximum 16405.9	
Mean 5074.25	SD 1056.94	Variance 1.1179E+007

Project: Celsa

Project Number: LMB_Celsa

Northern - Cadmium

Unretarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 3.21441	10% of values less than 3.51816	25% of values less than 4.14243
50% of values less than 4.96651	75% of values less than 5.91875	90% of values less than 6.95323
Minimum 2.15748s than 7.73119	Maximum 10.0416	
Mean 5.13288	SD 1.37648	Variance 1.89469

Retarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 1487.44	10% of values less than 1626.12	25% of values less than 1920.85
50% of values less than 2342.81	75% of values less than 2765.41	90% of values less than 3231.24
Minimum 1080.36s than 3511.26	Maximum 4245.08	
Mean 2389.62	SD 606.966	Variance 368408

Project: Celsa

Project Number: LMB_Celsa

Northern - Chromium

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 6092.33	10% of values less than 6765.42	25% of values less than 8194.85
50% of values less than 10174.4	75% of values less than 12555.4	90% of values less than 14776.9
Minimum 4365.42s than 16405.9	Maximum 22608.6	
Mean 10569.4	SD 3221.65	Variance 1.0379E+007

Northern - Copper

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 127.631	10% of values less than 141.657	25% of values less than 171.865
50% of values less than 212.993	75% of values less than 263.006	90% of values less than 310.161
Minimum 91.3164s than 343.373	Maximum 473.909	
Mean 221.471	SD 67.5031	Variance 4556.67

Northern - Lead

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 4569.43	10% of values less than 5074.25	25% of values less than 6146.47
50% of values less than 7631.24	75% of values less than 9417.03	90% of values less than 11083
Minimum 3274.16s than 12304.8	Maximum 16957.2	
Mean 7927.37	SD 2416.33	Variance 5.83867E+006

Northern - Mercury

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 635.265	10% of values less than 705.376	25% of values less than 854.807
50% of values less than 1031.25	75% of values less than 1292.54	90% of values less than 1541.19
Minimum 327.16s than 1230.48	Maximum 1695.72	
Mean 792.737	SD 241.633	Variance 5.83867E+006

Project: Celsa

Project Number: LMB_Celsa

Northern - Chromium

Unretarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 3.21441	10% of values less than 3.51816	25% of values less than 4.14243
50% of values less than 4.96651	75% of values less than 5.91875	90% of values less than 6.95323
Minimum 2.15748s than 7.73119	Maximum 10.0416	
Mean 5.13288	SD 1.37648	Variance 1.89469

Retarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 21648.1	10% of values less than 23705.3	25% of values less than 26995.4
50% of values less than 30507.3	75% of values less than 35313.8	90% of values less than 39781.9
Minimum 16132.4s than 43058	Maximum 52763.3	
Mean 31350.7	SD 6342.05	Variance 4.02216E+007

Project: Celsa

Project Number: LMB_Celsa

Northern - Copper

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 127.631	10% of values less than 141.657	25% of values less than 171.865
50% of values less than 212.993	75% of values less than 263.006	90% of values less than 310.161
Minimum 91.3164s than 343.373	Maximum 473.909	
Mean 221.471	SD 67.5031	Variance 4556.67

Northern - Lead

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 4569.43	10% of values less than 5074.25	25% of values less than 6146.47
50% of values less than 7631.24	75% of values less than 9417.03	90% of values less than 11083
Minimum 3274.16s than 12304.8	Maximum 16957.2	
Mean 7927.37	SD 2416.33	Variance 5.83867E+006

Northern - Mercury

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 635.265	10% of values less than 705.376	25% of values less than 854.807
50% of values less than 1061.35	75% of values less than 1309.54	90% of values less than 1541.18
Minimum 455.07ss than 1710.4	Maximum 2357.71	
Mean 1102.15	SD 335.94	Variance 112856

Northern - Nickel

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 635.265	10% of values less than 705.376	25% of values less than 854.807
50% of values less than 1061.35	75% of values less than 1309.54	90% of values less than 1541.18
Minimum 455.07ss than 1710.4	Maximum 2357.71	
Mean 1102.15	SD 335.94	Variance 112856

Project: Celsa

Project Number: LMB_Celsa

Northern - Copper

Unretarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 3.21441	10% of values less than 3.51816	25% of values less than 4.14243
50% of values less than 4.96651	75% of values less than 5.91875	90% of values less than 6.95323
Minimum 2.15748s than 7.73119	Maximum 10.0416	
Mean 5.13288	SD 1.37648	Variance 1.89469

Retarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 1487.44	10% of values less than 1626.12	25% of values less than 1920.85
50% of values less than 2342.81	75% of values less than 2765.41	90% of values less than 3231.24
Minimum 1080.36s than 3511.26	Maximum 4245.08	
Mean 2389.62	SD 606.966	Variance 368408

Project: Celsa

Project Number: LMB_Celsa

Northern - Lead

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 4569.43	10% of values less than 5074.25	25% of values less than 6146.47
50% of values less than 7631.24	75% of values less than 9417.03	90% of values less than 11083
Minimum 3274.16s than 12304.8	Maximum 16957.2	
Mean 7927.37	SD 2416.33	Variance 5.83867E+006

Northern - Mercury

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 635.265	10% of values less than 705.376	25% of values less than 854.807
50% of values less than 1061.35	75% of values less than 1309.54	90% of values less than 1541.18
Minimum 455.07ss than 1710.4	Maximum 2357.71	
Mean 1102.15	SD 335.94	Variance 112856

Northern - Nickel

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 635.265	10% of values less than 705.376	25% of values less than 854.807
50% of values less than 1061.35	75% of values less than 1309.54	90% of values less than 1541.18
Minimum 455.07ss than 1710.4	Maximum 2357.71	
Mean 1102.15	SD 335.94	Variance 112856

Northern - Oils/Hydrocarbons

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 22.792	10% of values less than 32.4311	25% of values less than 69.2263
50% of values less than 148.888	75% of values less than 191.265	90% of values less than 251.257
Minimum 10.1488 than 234.198	Maximum 324.198	
Mean 50.1488	SD 48.1488	Variance 2314.88

Project: Celsa

Project Number: LMB_Celsa

Northern - Lead

Unretarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 3.21441	10% of values less than 3.51816	25% of values less than 4.14243
50% of values less than 4.96651	75% of values less than 5.91875	90% of values less than 6.95323
Minimum 2.15748s than 7.73119	Maximum 10.0416	
Mean 5.13288	SD 1.37648	Variance 1.89469

Retarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 16236.9	10% of values less than 17779.7	25% of values less than 20247.3
50% of values less than 22881.5	75% of values less than 26486.5	90% of values less than 29837.8
Minimum 12099.8s than 32294.9	Maximum 39575	
Mean 23514.3	SD 4756.8	Variance 2.26271E+007

Project: Celsa

Project Number: LMB_Celsa

Northern - Mercury

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 635.265	10% of values less than 705.376	25% of values less than 854.807
50% of values less than 1061.35	75% of values less than 1309.54	90% of values less than 1541.18
Minimum 455.07ss than 1710.4	Maximum 2357.71	
Mean 1102.15	SD 335.94	Variance 112856

Northern - Nickel

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 635.265	10% of values less than 705.376	25% of values less than 854.807
50% of values less than 1061.35	75% of values less than 1309.54	90% of values less than 1541.18
Minimum 455.07ss than 1710.4	Maximum 2357.71	
Mean 1102.15	SD 335.94	Variance 112856

Northern - Oils/Hydrocarbons

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 22.792	10% of values less than 32.4311	25% of values less than 69.2263
50% of values less than 118.806	75% of values less than 191.365	90% of values less than 254.857
Minimum 8.47479s than 300.415	Maximum 535.749	
Mean 136.813	SD 90.6695	Variance 8220.96

Northern - Zinc

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 482.975	10% of values less than 536.258	25% of values less than 649.89
50% of values less than 927.922	75% of values less than 925.476	90% of values less than 1171.92

Project: Celsa

Project Number: LMB_Celsa

Northern - Mercury

Unretarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 3.21441	10% of values less than 3.51816	25% of values less than 4.14243
50% of values less than 4.96651	75% of values less than 5.91875	90% of values less than 6.95323
Minimum 2.15748s than 7.73119	Maximum 10.0416	
Mean 5.13288	SD 1.37648	Variance 1.89469

Retarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 2258.14	10% of values less than 2471.81	25% of values less than 2815.25
50% of values less than 3182.18	75% of values less than 3682.48	90% of values less than 4149.01
Minimum 1682.39s than 4490.36	Maximum 5505.08	
Mean 3270.29	SD 661.57	Variance 437674

Project: Celsa

Project Number: LMB_Celsa

Northern - Nickel

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 635.265	10% of values less than 705.376	25% of values less than 854.807
50% of values less than 1061.35	75% of values less than 1309.54	90% of values less than 1541.18
Minimum 455.07ss than 1710.4	Maximum 2357.71	
Mean 1102.15	SD 335.94	Variance 112856

Northern - Oils/Hydrocarbons

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 22.792	10% of values less than 32.4311	25% of values less than 69.2263
50% of values less than 118.806	75% of values less than 191.365	90% of values less than 254.857
Minimum 8.47479s than 300.415	Maximum 535.749	
Mean 136.813	SD 90.6695	Variance 8220.96

Northern - Zinc

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 482.975	10% of values less than 536.258	25% of values less than 649.89
50% of values less than 807.008	75% of values less than 995.476	90% of values less than 1171.88
Minimum 345.944s than 1300.29	Maximum 1792.57	
Mean 837.943	SD 255.409	Variance 65233.7

Project: Celsa

Project Number: LMB_Celsa

Northern - Nickel

Unretarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 3.21441	10% of values less than 3.51816	25% of values less than 4.14243
50% of values less than 4.96651	75% of values less than 5.91875	90% of values less than 6.95323
Minimum 2.15748s than 7.73119	Maximum 10.0416	
Mean 5.13288	SD 1.37648	Variance 1.89469

Retarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 2258.14	10% of values less than 2471.81	25% of values less than 2815.25
50% of values less than 3182.18	75% of values less than 3682.48	90% of values less than 4149.01
Minimum 1682.39s than 4490.36	Maximum 5505.08	
Mean 3270.29	SD 661.57	Variance 437674

Project: Celsa

Project Number: LMB_Celsa

Northern - Oils/Hydrocarbons

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 22.792	10% of values less than 32.4311	25% of values less than 69.2263
50% of values less than 118.806	75% of values less than 191.365	90% of values less than 254.857
Minimum 8.47479s than 300.415	Maximum 535.749	
Mean 136.813	SD 90.6695	Variance 8220.96

Northern - Zinc

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 482.975	10% of values less than 536.258	25% of values less than 649.89
50% of values less than 807.008	75% of values less than 995.476	90% of values less than 1171.88
Minimum 345.944s than 1300.29	Maximum 1792.57	
Mean 837.943	SD 255.409	Variance 65233.7

Project: Celsa

Project Number: LMB_Celsa

Northern - Oils/Hydrocarbons

Unretarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 3.21441	10% of values less than 3.51816	25% of values less than 4.14243
50% of values less than 4.96651	75% of values less than 5.91875	90% of values less than 6.95323
Minimum 2.15748s than 7.73119	Maximum 10.0416	
Mean 5.13288	SD 1.37648	Variance 1.89469

Retarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 71.4884	10% of values less than 103.383	25% of values less than 211.698
50% of values less than 378.513	75% of values less than 572.939	90% of values less than 733.649
Minimum 28.848ss than 833.366	Maximum 1317.68	
Mean 405.906	SD 238.516	Variance 56889.9

Project: Celsa

Project Number: LMB_Celsa

Northern - Zinc

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.564578	10% of values less than 0.664085	25% of values less than 0.8908
50% of values less than 1.21485	75% of values less than 1.6176	90% of values less than 2.06016
Minimum 0.314692 than 2.34198	Maximum 3.49928	
Mean 1.30265	SD 0.555671	Variance 0.30877

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 482.975	10% of values less than 536.258	25% of values less than 649.89
50% of values less than 807.008	75% of values less than 995.476	90% of values less than 1171.88
Minimum 345.944s than 1300.29	Maximum 1792.57	
Mean 837.943	SD 255.409	Variance 65233.7

Project: Celsa

Project Number: LMB_Celsa

Northern - Zinc

Unretarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 3.21441	10% of values less than 3.51816	25% of values less than 4.14243
50% of values less than 4.96651	75% of values less than 5.91875	90% of values less than 6.95323
Minimum 2.15748s than 7.73119	Maximum 10.0416	
Mean 5.13288	SD 1.37648	Variance 1.89469

Retarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 1717.02	10% of values less than 1879.25	25% of values less than 2140.51
50% of values less than 2419.86	75% of values less than 2799.74	90% of values less than 3154.67
Minimum 1279.14s than 3414.05	Maximum 4186.24	
Mean 2486.66	SD 503.045	Variance 253054

Project: Celsa

Project Number: LMB_Celsa

Northern - Arsenic

Concentration at Base of Unsaturated Zone Made Ground [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0.849753	90% of values less than 0.981468
Minimum 0 less than 0.995706	Maximum 0.999985	
Mean 0.364527	SD 0.429934	Variance 0.184844

Concentration at Base of Unsaturated Zone TFD [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0 less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Cadmium

Concentration at Base of Unsaturated Zone Made Ground [mg/l] - 1000 years

05% of values less than 1	10% of values less than 1	25% of values less than 1
50% of values less than 1	75% of values less than 1	90% of values less than 1
Minimum 1es less than 1	Maximum 1	
Mean 1	SD 3.57672E-008	Variance -1.27929E-015

Concentration at Base of Unsaturated Zone TFD [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Chromium

Concentration at Base of Unsaturated Zone Made Ground [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0.es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Concentration at Base of Unsaturated Zone TFD [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0.es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Copper

Concentration at Base of Unsaturated Zone Made Ground [mg/l] - 1000 years

05% of values less than 1	10% of values less than 1	25% of values less than 1
50% of values less than 1	75% of values less than 1	90% of values less than 1
Minimum 1	Maximum 1	
Mean 1	SD 3.57672E-008	Variance -1.27929E-015

Concentration at Base of Unsaturated Zone TFD [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Lead

Concentration at Base of Unsaturated Zone Made Ground [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Concentration at Base of Unsaturated Zone TFD [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Mercury

Concentration at Base of Unsaturated Zone Made Ground [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0.849753	90% of values less than 0.981468
Minimum 0 less than 0.995706	Maximum 0.999985	
Mean 0.364527	SD 0.429934	Variance 0.184844

Concentration at Base of Unsaturated Zone TFD [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0 less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Nickel

Concentration at Base of Unsaturated Zone Made Ground [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0.849753	90% of values less than 0.981468
Minimum 0 less than 0.995706	Maximum 0.999985	
Mean 0.364527	SD 0.429934	Variance 0.184844

Concentration at Base of Unsaturated Zone TFD [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0 less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Oils/Hydrocarbons

Concentration at Base of Unsaturated Zone Made Ground [mg/l] - 1000 years

05% of values less than 0.499416	10% of values less than 0.49955	25% of values less than 0.499718
50% of values less than 0.499822	75% of values less than 0.499878	90% of values less than 0.499916
Minimum 0.49877s than 0.499931	Maximum 0.499969	
Mean 0.499771	SD 0.000167846	Variance 2.81722E-008

Concentration at Base of Unsaturated Zone TFD [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0.499288	90% of values less than 0.499844
Minimum 0.1es less than 0.499895	Maximum 0.499964	
Mean 0.13643	SD 0.221245	Variance 0.0489492

Project: Celsa

Project Number: LMB_Celsa

Northern - Zinc

Concentration at Base of Unsaturated Zone Made Ground [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0.513409
50% of values less than 0.936831	75% of values less than 0.997658	90% of values less than 0.99993
Minimum 0es less than 0.999994	Maximum 1	
Mean 0.691716	SD 0.410018	Variance 0.168115

Concentration at Base of Unsaturated Zone TFD [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Arsenic

Diluted Concentration [mg/l] TFD - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0.es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Cadmium

Diluted Concentration [mg/l] TFD - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0.es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Chromium

Diluted Concentration [mg/l] TFD - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Copper

Diluted Concentration [mg/l] TFD - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Lead

Diluted Concentration [mg/l] TFD - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0.es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Mercury

Diluted Concentration [mg/l] TFD - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0.es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Nickel

Diluted Concentration [mg/l] TFD - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0.es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Oils/Hydrocarbons

Diluted Concentration [mg/l] TFD - 1000 years

05% of values less than 0.00965775	10% of values less than 0.0124775	25% of values less than 0.0221472
50% of values less than 0.0435252	75% of values less than 0.108561	90% of values less than 0.196115
Minimum 0.000000	Maximum 0.384342	
Mean 0.0775004	SD 0.079626	Variance 0.0063403

Project: Celsa

Project Number: LMB_Celsa

Northern - Zinc

Diluted Concentration [mg/l] TFD - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0.es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Northern - Arsenic

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 4.47133	10% of values less than 5.01889	25% of values less than 6.26866
50% of values less than 8.28524	75% of values less than 12.1884	90% of values less than 19.7805
Minimum 2.69926s than 26.8909	Maximum 64.5954	
Mean 10.8539	SD 7.76562	Variance 60.3049

Retarded Travel Time to Northern Receptor years

05% of values less than 4097.19	10% of values less than 4858.09	25% of values less than 7573.82
50% of values less than 13111.5	75% of values less than 26998.6	90% of values less than 51768.4
Minimum 2154.42s than 75103.2	Maximum 210552	
Mean 22618.3	SD 25446.2	Variance 6.4751E+008

Project: Celsa

Project Number: LMB_Celsa

Northern - Cadmium

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 4.47133	10% of values less than 5.01889	25% of values less than 6.26866
50% of values less than 8.28524	75% of values less than 12.1884	90% of values less than 19.7805
Minimum 2.69926s than 26.8909	Maximum 64.5954	
Mean 10.8539	SD 7.76562	Variance 60.3049

Retarded Travel Time to Northern Receptor years

05% of values less than 2227.54	10% of values less than 2530.24	25% of values less than 3228.7
50% of values less than 4462.17	75% of values less than 7185.68	90% of values less than 12081.6
Minimum 1396.32s than 16795	Maximum 44606.1	
Mean 6263.8	SD 5156.9	Variance 2.65936E+007

Project: Celsa

Project Number: LMB_Celsa

Northern - Chromium

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 4.47133	10% of values less than 5.01889	25% of values less than 6.26866
50% of values less than 8.28524	75% of values less than 12.1884	90% of values less than 19.7805
Minimum 2.69926s than 26.8909	Maximum 64.5954	
Mean 10.8539	SD 7.76562	Variance 60.3049

Retarded Travel Time to Northern Receptor years

05% of values less than 39281.5	10% of values less than 46597.2	25% of values less than 72661.2
50% of values less than 125798	75% of values less than 259107	90% of values less than 496792
Minimum 20650ss than 720768	Maximum 2.02075E+006	
Mean 217043	SD 244218	Variance 5.96427E+010

Project: Celsa

Project Number: LMB_Celsa

Northern - Copper

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 4.47133	10% of values less than 5.01889	25% of values less than 6.26866
50% of values less than 8.28524	75% of values less than 12.1884	90% of values less than 19.7805
Minimum 2.69926s than 26.8909	Maximum 64.5954	
Mean 10.8539	SD 7.76562	Variance 60.3049

Retarded Travel Time to Northern Receptor years

05% of values less than 2227.54	10% of values less than 2530.24	25% of values less than 3228.7
50% of values less than 4462.17	75% of values less than 7185.68	90% of values less than 12081.6
Minimum 1396.32s than 16795	Maximum 44606.1	
Mean 6263.8	SD 5156.9	Variance 2.65936E+007

Project: Celsa

Project Number: LMB_Celsa

Northern - Lead

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 4.47133	10% of values less than 5.01889	25% of values less than 6.26866
50% of values less than 8.28524	75% of values less than 12.1884	90% of values less than 19.7805
Minimum 2.69926s than 26.8909	Maximum 64.5954	
Mean 10.8539	SD 7.76562	Variance 60.3049

Retarded Travel Time to Northern Receptor years

05% of values less than 29462.6	10% of values less than 34949.1	25% of values less than 54497.3
50% of values less than 94350.7	75% of values less than 194333	90% of values less than 372600
Minimum 15488.5s than 540582	Maximum 1.51557E+006	
Mean 162785	SD 183166	Variance 3.35497E+010

Project: Celsa

Project Number: LMB_Celsa

Northern - Mercury

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 4.47133	10% of values less than 5.01889	25% of values less than 6.26866
50% of values less than 8.28524	75% of values less than 12.1884	90% of values less than 19.7805
Minimum 2.69926s than 26.8909	Maximum 64.5954	
Mean 10.8539	SD 7.76562	Variance 60.3049

Retarded Travel Time to Northern Receptor years

05% of values less than 4097.19	10% of values less than 4858.09	25% of values less than 7573.82
50% of values less than 13111.5	75% of values less than 26998.6	90% of values less than 51768.4
Minimum 2154.42s than 75103.2	Maximum 210552	
Mean 22618.3	SD 25446.2	Variance 6.4751E+008

Project: Celsa

Project Number: LMB_Celsa

Northern - Nickel

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 4.47133	10% of values less than 5.01889	25% of values less than 6.26866
50% of values less than 8.28524	75% of values less than 12.1884	90% of values less than 19.7805
Minimum 2.69926s than 26.8909	Maximum 64.5954	
Mean 10.8539	SD 7.76562	Variance 60.3049

Retarded Travel Time to Northern Receptor years

05% of values less than 4097.19	10% of values less than 4858.09	25% of values less than 7573.82
50% of values less than 13111.5	75% of values less than 26998.6	90% of values less than 51768.4
Minimum 2154.42s than 75103.2	Maximum 210552	
Mean 22618.3	SD 25446.2	Variance 6.4751E+008

Project: Celsa

Project Number: LMB_Celsa

Northern - Oils/Hydrocarbons

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 4.47133	10% of values less than 5.01889	25% of values less than 6.26866
50% of values less than 8.28524	75% of values less than 12.1884	90% of values less than 19.7805
Minimum 2.69926s than 26.8909	Maximum 64.5954	
Mean 10.8539	SD 7.76562	Variance 60.3049

Retarded Travel Time to Northern Receptor years

05% of values less than 128.363	10% of values less than 207.763	25% of values less than 432.214
50% of values less than 804.706	75% of values less than 1438.68	90% of values less than 2565.09
Minimum 36.0082s than 3903.2	Maximum 13264	
Mean 1227.75	SD 1445.18	Variance 2.08855E+006

Project: Celsa

Project Number: LMB_Celsa

Northern - Zinc

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 4.47133	10% of values less than 5.01889	25% of values less than 6.26866
50% of values less than 8.28524	75% of values less than 12.1884	90% of values less than 19.7805
Minimum 2.69926s than 26.8909	Maximum 64.5954	
Mean 10.8539	SD 7.76562	Variance 60.3049

Retarded Travel Time to Northern Receptor years

05% of values less than 2147.29	10% of values less than 2349.27	25% of values less than 2738.81
50% of values less than 3374	75% of values less than 4378.9	90% of values less than 6221.78
Minimum 1482.69s than 8089.5	Maximum 18734.5	
Mean 3962.39	SD 2031.29	Variance 4.12613E+006

Project: Celsa

Project Number: LMB_Celsa

Northern - Arsenic

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.006466	10% of values less than 0.00732636	25% of values less than 0.00999781
50% of values less than 0.0149146	75% of values less than 0.0199853	90% of values less than 0.0233061
Minimum 0.0059035nan 0.02416	Maximum 0.0249738	
Mean 0.0151636	SD 0.00572158	Variance 3.27365E-005

Project: Celsa

Project Number: LMB_Celsa

Northern - Cadmium

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.000115653	10% of values less than 0.000122411	25% of values less than 0.000139807
50% of values less than 0.000165159	75% of values less than 0.000192563	90% of values less than 0.000208032
Minimum 0.000110393 to 0.000214639	Maximum 0.000219933	
Mean 0.000165708	SD 3.10786E-005	Variance 9.65878E-010

Project: Celsa

Project Number: LMB_Celsa

Northern - Chromium

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.00077604	10% of values less than 0.001	25% of values less than 0.00185482
50% of values less than 0.00318162	75% of values less than 0.00456281	90% of values less than 0.00542983
Minimum 0.00050379an 0.00565231	Maximum 0.00588929	
Mean 0.0032001	SD 0.00157912	Variance 2.49361E-006

Project: Celsa

Project Number: LMB_Celsa

Northern - Copper

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.000504486	10% of values less than 0.000510282	25% of values less than 0.000524052
50% of values less than 0.000548448	75% of values less than 0.000573473	90% of values less than 0.000589276
Minimum 0.000500034	Maximum 0.000599918	
Mean 0.000548883	SD 2.88125E-005	Variance 8.30163E-010

Project: Celsa

Project Number: LMB_Celsa

Northern - Lead

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.000505332	10% of values less than 0.000511432	25% of values less than 0.000527207
50% of values less than 0.000550597	75% of values less than 0.000574899	90% of values less than 0.000591363
Minimum 0.000500012	Maximum 0.000599838	
Mean 0.000551054	SD 2.85894E-005	Variance 8.17351E-010

Project: Celsa

Project Number: LMB_Celsa

Northern - Mercury

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 1E-005	10% of values less than 1E-005	25% of values less than 1E-005
50% of values less than 1E-005	75% of values less than 1E-005	90% of values less than 1E-005
Minimum 1E-005s than 1E-005	Maximum 1E-005	
Mean 1E-005	SD 1.67813E-012	Variance 2.81611E-024

Project: Celsa

Project Number: LMB_Celsa

Northern - Nickel

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.000831184

10% of values less than 0.000952089

25% of values less than 0.00122035

50% of values less than 0.00170343

75% of values less than 0.00217466

90% of values less than 0.00251284

Minimum 0.000733607 0.00259876

Maximum 0.00269982

Mean 0.00170903

SD 0.000565154

Variance 3.19399E-007

Project: Celsa

Project Number: LMB_Celsa

Northern - Oils/Hydrocarbons

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.000761696

10% of values less than 0.00105002

25% of values less than 0.00178674

50% of values less than 0.00294118

75% of values less than 0.028418

90% of values less than 0.0796007

Minimum 0.000502823 to 0.119178

Maximum 0.384178

Mean 0.0259119

SD 0.0474054

Variance 0.00224727

Project: Celsa

Project Number: LMB_Celsa

Northern - Zinc

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.00269717

10% of values less than 0.00295451

25% of values less than 0.00371117

50% of values less than 0.00501809

75% of values less than 0.00642142

90% of values less than 0.00725653

Minimum 0.0025ss than 0.00753425

Maximum 0.00779951

Mean 0.00508407

SD 0.00154823

Variance 2.39701E-006

Project: Celsa

Project Number: LMB_Celsa

Northern - Arsenic

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 7.03783	10% of values less than 7.80357	25% of values less than 9.92354
50% of values less than 14.7794	75% of values less than 27.5805	90% of values less than 46.6568
Minimum 5.07232s than 58.1933	Maximum 123.543	
Mean 21.6542	SD 17.6746	Variance 312.392

Retarded Travel Time to Southern Receptor years

05% of values less than 11111.5	10% of values less than 13061	25% of values less than 19933.5
50% of values less than 35976.3	75% of values less than 77039.9	90% of values less than 138000
Minimum 7320.22s than 180384	Maximum 408310	
Mean 59067.9	SD 58602.1	Variance 3.43421E+009

Project: Celsa

Project Number: LMB_Celsa

Northern - Cadmium

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 7.03783	10% of values less than 7.80357	25% of values less than 9.92354
50% of values less than 14.7794	75% of values less than 27.5805	90% of values less than 46.6568
Minimum 5.07232s than 58.1933	Maximum 123.543	
Mean 21.6542	SD 17.6746	Variance 312.392

Retarded Travel Time to Southern Receptor years

05% of values less than 3780.56	10% of values less than 4297.96	25% of values less than 5667.17
50% of values less than 8934.36	75% of values less than 17062.3	90% of values less than 29485.1
Minimum 2483.09s than 37527.9	Maximum 84201.2	
Mean 13562.4	SD 11782.6	Variance 1.3883E+008

Project: Celsa

Project Number: LMB_Celsa

Northern - Chromium

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 7.03783	10% of values less than 7.80357	25% of values less than 9.92354
50% of values less than 14.7794	75% of values less than 27.5805	90% of values less than 46.6568
Minimum 5.07232s than 58.1933	Maximum 123.543	
Mean 21.6542	SD 17.6746	Variance 312.392

Retarded Travel Time to Southern Receptor years

05% of values less than 106609	10% of values less than 125318	25% of values less than 191295
50% of values less than 345248	75% of values less than 739324	90% of values less than 1.32438E+006
Minimum 70230.5s than 1.73122E+006	Maximum 3.91875E+006	
Mean 566866	SD 562431	Variance 3.16329E+011

Project: Celsa

Project Number: LMB_Celsa

Northern - Copper

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 7.03783	10% of values less than 7.80357	25% of values less than 9.92354
50% of values less than 14.7794	75% of values less than 27.5805	90% of values less than 46.6568
Minimum 5.07232s than 58.1933	Maximum 123.543	
Mean 21.6542	SD 17.6746	Variance 312.392

Retarded Travel Time to Southern Receptor years

05% of values less than 3780.56	10% of values less than 4297.96	25% of values less than 5667.17
50% of values less than 8934.36	75% of values less than 17062.3	90% of values less than 29485.1
Minimum 2483.09s than 37527.9	Maximum 84201.2	
Mean 13562.4	SD 11782.6	Variance 1.3883E+008

Project: Celsa

Project Number: LMB_Celsa

Northern - Lead

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 7.03783	10% of values less than 7.80357	25% of values less than 9.92354
50% of values less than 14.7794	75% of values less than 27.5805	90% of values less than 46.6568
Minimum 5.07232s than 58.1933	Maximum 123.543	
Mean 21.6542	SD 17.6746	Variance 312.392

Retarded Travel Time to Southern Receptor years

05% of values less than 79958.7	10% of values less than 93990.4	25% of values less than 143473
50% of values less than 258940	75% of values less than 554500	90% of values less than 993297
Minimum 52674.1s than 1.29843E+006	Maximum 2.9391E+006	
Mean 425155	SD 421828	Variance 1.77939E+011

Project: Celsa

Project Number: LMB_Celsa

Northern - Mercury

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 7.03783	10% of values less than 7.80357	25% of values less than 9.92354
50% of values less than 14.7794	75% of values less than 27.5805	90% of values less than 46.6568
Minimum 5.07232s than 58.1933	Maximum 123.543	
Mean 21.6542	SD 17.6746	Variance 312.392

Retarded Travel Time to Southern Receptor years

05% of values less than 11111.5	10% of values less than 13061	25% of values less than 19933.5
50% of values less than 35976.3	75% of values less than 77039.9	90% of values less than 138000
Minimum 7320.22s than 180384	Maximum 408310	
Mean 59067.9	SD 58602.1	Variance 3.43421E+009

Project: Celsa

Project Number: LMB_Celsa

Northern - Nickel

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 7.03783	10% of values less than 7.80357	25% of values less than 9.92354
50% of values less than 14.7794	75% of values less than 27.5805	90% of values less than 46.6568
Minimum 5.07232s than 58.1933	Maximum 123.543	
Mean 21.6542	SD 17.6746	Variance 312.392

Retarded Travel Time to Southern Receptor years

05% of values less than 11111.5	10% of values less than 13061	25% of values less than 19933.5
50% of values less than 35976.3	75% of values less than 77039.9	90% of values less than 138000
Minimum 7320.22s than 180384	Maximum 408310	
Mean 59067.9	SD 58602.1	Variance 3.43421E+009

Project: Celsa

Project Number: LMB_Celsa

Northern - Oils/Hydrocarbons

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 7.03783	10% of values less than 7.80357	25% of values less than 9.92354
50% of values less than 14.7794	75% of values less than 27.5805	90% of values less than 46.6568
Minimum 5.07232s than 58.1933	Maximum 123.543	
Mean 21.6542	SD 17.6746	Variance 312.392

Retarded Travel Time to Southern Receptor years

05% of values less than 262.493	10% of values less than 405.137	25% of values less than 847.47
50% of values less than 1677.28	75% of values less than 3270.95	90% of values less than 6605.56
Minimum 56.979ss than 9167.97	Maximum 26024.7	
Mean 2780.85	SD 3389.21	Variance 1.14867E+007

Project: Celsa

Project Number: LMB_Celsa

Northern - Zinc

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 7.03783	10% of values less than 7.80357	25% of values less than 9.92354
50% of values less than 14.7794	75% of values less than 27.5805	90% of values less than 46.6568
Minimum 5.07232s than 58.1933	Maximum 123.543	
Mean 21.6542	SD 17.6746	Variance 312.392

Retarded Travel Time to Southern Receptor years

05% of values less than 2847.75	10% of values less than 3114.06	25% of values less than 3734.39
50% of values less than 5041.15	75% of values less than 8129.49	90% of values less than 12935.9
Minimum 1928.87s than 15845.4	Maximum 33814.2	
Mean 6742.54	SD 4531.88	Variance 2.0538E+007

Project: Celsa

Project Number: LMB_Celsa

Northern - Arsenic

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.006466	10% of values less than 0.00732636	25% of values less than 0.00999781
50% of values less than 0.0149146	75% of values less than 0.0199853	90% of values less than 0.0233061
Minimum 0.0059035	Maximum 0.0249738	
Mean 0.0151636	SD 0.00572158	Variance 3.27365E-005

Project: Celsa

Project Number: LMB_Celsa

Northern - Cadmium

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.000115653	10% of values less than 0.000122411	25% of values less than 0.000139807
50% of values less than 0.000165159	75% of values less than 0.000192563	90% of values less than 0.000208032
Minimum 0.000110393	Maximum 0.000219933	
Mean 0.000165708	SD 3.10786E-005	Variance 9.65878E-010

Project: Celsa

Project Number: LMB_Celsa

Northern - Chromium

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.00077604

10% of values less than 0.001

25% of values less than 0.00185482

50% of values less than 0.00318162

75% of values less than 0.00456281

90% of values less than 0.00542983

Minimum 0.00050379an 0.00565231

Maximum 0.00588929

Mean 0.0032001

SD 0.00157912

Variance 2.49361E-006

Project: Celsa

Project Number: LMB_Celsa

Northern - Copper

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.000504486	10% of values less than 0.000510282	25% of values less than 0.000524052
50% of values less than 0.000548448	75% of values less than 0.000573473	90% of values less than 0.000589276
Minimum 0.000500034	Maximum 0.000599918	
Mean 0.000548883	SD 2.88125E-005	Variance 8.30163E-010

Project: Celsa

Project Number: LMB_Celsa

Northern - Lead

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.000505332	10% of values less than 0.000511432	25% of values less than 0.000527207
50% of values less than 0.000550597	75% of values less than 0.000574899	90% of values less than 0.000591363
Minimum 0.000500012	Maximum 0.000599838	
Mean 0.000551054	SD 2.85894E-005	Variance 8.17351E-010

Project: Celsa

Project Number: LMB_Celsa

Northern - Mercury

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 1E-005	10% of values less than 1E-005	25% of values less than 1E-005
50% of values less than 1E-005	75% of values less than 1E-005	90% of values less than 1E-005
Minimum 1E-005s than 1E-005	Maximum 1E-005	
Mean 1E-005	SD 1.67813E-012	Variance 2.81611E-024

Project: Celsa

Project Number: LMB_Celsa

Northern - Nickel

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.000831184

10% of values less than 0.000952089

25% of values less than 0.00122035

50% of values less than 0.00170343

75% of values less than 0.00217466

90% of values less than 0.00251284

Minimum 0.000733607 to 0.00259876

Maximum 0.00269982

Mean 0.00170903

SD 0.000565154

Variance 3.19399E-007

Project: Celsa

Project Number: LMB_Celsa

Northern - Oils/Hydrocarbons

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.000674718	10% of values less than 0.000846461	25% of values less than 0.00140167
50% of values less than 0.00229617	75% of values less than 0.0117483	90% of values less than 0.0315619
Minimum 0.000502823 to 0.0504925	Maximum 0.251769	
Mean 0.0116074	SD 0.0246726	Variance 0.000608736

Project: Celsa

Project Number: LMB_Celsa

Northern - Zinc

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.00269717	10% of values less than 0.00295451	25% of values less than 0.00371117
50% of values less than 0.00501809	75% of values less than 0.00642142	90% of values less than 0.00725653
Minimum 0.0025ss than 0.00753425	Maximum 0.00779951	
Mean 0.00508407	SD 0.00154823	Variance 2.39701E-006

Project: Celsa

Project Number: LMB_Celsa

Northern - Arsenic

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 7.39346	10% of values less than 8.23195	25% of values less than 10.6952
50% of values less than 16.1749	75% of values less than 30.6788	90% of values less than 51.6936
Minimum 5.35118s than 65.7586	Maximum 137.121	
Mean 23.9497	SD 19.9421	Variance 397.686

Retarded Travel Time to 50m compliance point years

05% of values less than 12522.4	10% of values less than 14521.2	25% of values less than 22160.8
50% of values less than 40675.9	75% of values less than 88064.3	90% of values less than 157507
Minimum 8006.62s than 202279	Maximum 450341	
Mean 66814.9	SD 66165.2	Variance 4.37783E+009

Project: Celsa

Project Number: LMB_Celsa

Northern - Cadmium

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 7.39346	10% of values less than 8.23195	25% of values less than 10.6952
50% of values less than 16.1749	75% of values less than 30.6788	90% of values less than 51.6936
Minimum 5.35118s than 65.7586	Maximum 137.121	
Mean 23.9497	SD 19.9421	Variance 397.686

Retarded Travel Time to 50m compliance point years

05% of values less than 4049.17	10% of values less than 4581.19	25% of values less than 6131.34
50% of values less than 9815.24	75% of values less than 19339.5	90% of values less than 33096.8
Minimum 2702.9ss than 41770.1	Maximum 92616.6	
Mean 15113.6	SD 13295.6	Variance 1.76772E+008

Project: Celsa

Project Number: LMB_Celsa

Northern - Chromium

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 7.39346	10% of values less than 8.23195	25% of values less than 10.6952
50% of values less than 16.1749	75% of values less than 30.6788	90% of values less than 51.6936
Minimum 5.35118s than 65.7586	Maximum 137.121	
Mean 23.9497	SD 19.9421	Variance 397.686

Retarded Travel Time to 50m compliance point years

05% of values less than 120146	10% of values less than 139337	25% of values less than 212635
50% of values less than 390351	75% of values less than 845180	90% of values less than 1.51166E+006
Minimum 767966s than 1.94137E+006	Maximum 4.32215E+006	
Mean 641217	SD 635017	Variance 4.03246E+011

Project: Celsa

Project Number: LMB_Celsa

Northern - Copper

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 7.39346	10% of values less than 8.23195	25% of values less than 10.6952
50% of values less than 16.1749	75% of values less than 30.6788	90% of values less than 51.6936
Minimum 5.35118s than 65.7586	Maximum 137.121	
Mean 23.9497	SD 19.9421	Variance 397.686

Retarded Travel Time to 50m compliance point years

05% of values less than 4049.17	10% of values less than 4581.19	25% of values less than 6131.34
50% of values less than 9815.24	75% of values less than 19339.5	90% of values less than 33096.8
Minimum 2702.9ss than 41770.1	Maximum 92616.6	
Mean 15113.6	SD 13295.6	Variance 1.76772E+008

Project: Celsa

Project Number: LMB_Celsa

Northern - Lead

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 7.39346	10% of values less than 8.23195	25% of values less than 10.6952
50% of values less than 16.1749	75% of values less than 30.6788	90% of values less than 51.6936
Minimum 5.35118s than 65.7586	Maximum 137.121	
Mean 23.9497	SD 19.9421	Variance 397.686

Retarded Travel Time to 50m compliance point years

05% of values less than 90111.8	10% of values less than 104504	25% of values less than 159479
50% of values less than 292768	75% of values less than 633892	90% of values less than 1.13376E+006
Minimum 57598.9s than 1.45604E+006	Maximum 3.24165E+006	
Mean 480919	SD 476268	Variance 2.26831E+011

Project: Celsa

Project Number: LMB_Celsa

Northern - Mercury

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 7.39346	10% of values less than 8.23195	25% of values less than 10.6952
50% of values less than 16.1749	75% of values less than 30.6788	90% of values less than 51.6936
Minimum 5.35118s than 65.7586	Maximum 137.121	
Mean 23.9497	SD 19.9421	Variance 397.686

Retarded Travel Time to 50m compliance point years

05% of values less than 12522.4	10% of values less than 14521.2	25% of values less than 22160.8
50% of values less than 40675.9	75% of values less than 88064.3	90% of values less than 157507
Minimum 8006.62s than 202279	Maximum 450341	
Mean 66814.9	SD 66165.2	Variance 4.37783E+009

Project: Celsa

Project Number: LMB_Celsa

Northern - Nickel

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 7.39346	10% of values less than 8.23195	25% of values less than 10.6952
50% of values less than 16.1749	75% of values less than 30.6788	90% of values less than 51.6936
Minimum 5.35118s than 65.7586	Maximum 137.121	
Mean 23.9497	SD 19.9421	Variance 397.686

Retarded Travel Time to 50m compliance point years

05% of values less than 12522.4	10% of values less than 14521.2	25% of values less than 22160.8
50% of values less than 40675.9	75% of values less than 88064.3	90% of values less than 157507
Minimum 8006.62s than 202279	Maximum 450341	
Mean 66814.9	SD 66165.2	Variance 4.37783E+009

Project: Celsa

Project Number: LMB_Celsa

Northern - Oils/Hydrocarbons

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 7.39346	10% of values less than 8.23195	25% of values less than 10.6952
50% of values less than 16.1749	75% of values less than 30.6788	90% of values less than 51.6936
Minimum 5.35118s than 65.7586	Maximum 137.121	
Mean 23.9497	SD 19.9421	Variance 397.686

Retarded Travel Time to 50m compliance point years

05% of values less than 283.083	10% of values less than 431.54	25% of values less than 922.823
50% of values less than 1841.22	75% of values less than 3675.33	90% of values less than 7415.84
Minimum 61.436ss than 10259.1	Maximum 29348	
Mean 3110.95	SD 3827.56	Variance 1.46502E+007

Project: Celsa

Project Number: LMB_Celsa

Northern - Zinc

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 7.39346	10% of values less than 8.23195	25% of values less than 10.6952
50% of values less than 16.1749	75% of values less than 30.6788	90% of values less than 51.6936
Minimum 5.35118s than 65.7586	Maximum 137.121	
Mean 23.9497	SD 19.9421	Variance 397.686

Retarded Travel Time to 50m compliance point years

05% of values less than 2956.71	10% of values less than 3257.74	25% of values less than 3876.99
50% of values less than 5362.63	75% of values less than 8899.91	90% of values less than 14228.1
Minimum 2012.57s than 17524.6	Maximum 37019.3	
Mean 7333.43	SD 5105.89	Variance 2.60701E+007

Project: Celsa

Project Number: LMB_Celsa

Northern - Arsenic

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.006466	10% of values less than 0.00732636	25% of values less than 0.00999781
50% of values less than 0.0149146	75% of values less than 0.0199853	90% of values less than 0.0233061
Minimum 0.0059035	Maximum 0.0249738	
Mean 0.0151636	SD 0.00572158	Variance 3.27365E-005

Project: Celsa

Project Number: LMB_Celsa

Northern - Cadmium

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.000115653	10% of values less than 0.000122411	25% of values less than 0.000139807
50% of values less than 0.000165159	75% of values less than 0.000192563	90% of values less than 0.000208032
Minimum 0.000110393	Maximum 0.000219933	
Mean 0.000165708	SD 3.10786E-005	Variance 9.65878E-010

Project: Celsa

Project Number: LMB_Celsa

Northern - Chromium

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.00077604	10% of values less than 0.001	25% of values less than 0.00185482
50% of values less than 0.00318162	75% of values less than 0.00456281	90% of values less than 0.00542983
Minimum 0.00050379an 0.00565231	Maximum 0.00588929	
Mean 0.0032001	SD 0.00157912	Variance 2.49361E-006

Project: Celsa

Project Number: LMB_Celsa

Northern - Copper

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.000504486	10% of values less than 0.000510282	25% of values less than 0.000524052
50% of values less than 0.000548448	75% of values less than 0.000573473	90% of values less than 0.000589276
Minimum 0.000500034	Maximum 0.000599918	
Mean 0.000548883	SD 2.88125E-005	Variance 8.30163E-010

Project: Celsa

Project Number: LMB_Celsa

Northern - Lead

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.000505332	10% of values less than 0.000511432	25% of values less than 0.000527207
50% of values less than 0.000550597	75% of values less than 0.000574899	90% of values less than 0.000591363
Minimum 0.000500012	Maximum 0.000599838	
Mean 0.000551054	SD 2.85894E-005	Variance 8.17351E-010

Project: Celsa

Project Number: LMB_Celsa

Northern - Mercury

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 1E-005	10% of values less than 1E-005	25% of values less than 1E-005
50% of values less than 1E-005	75% of values less than 1E-005	90% of values less than 1E-005
Minimum 1E-005s than 1E-005	Maximum 1E-005	
Mean 1E-005	SD 1.67813E-012	Variance 2.81611E-024

Project: Celsa

Project Number: LMB_Celsa

Northern - Nickel

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.000831184

10% of values less than 0.000952089

25% of values less than 0.00122035

50% of values less than 0.00170343

75% of values less than 0.00217466

90% of values less than 0.00251284

Minimum 0.000733607 to 0.00259876

Maximum 0.00269982

Mean 0.00170903

SD 0.000565154

Variance 3.19399E-007

Project: Celsa

Project Number: LMB_Celsa

Northern - Oils/Hydrocarbons

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.00066274	10% of values less than 0.000830134	25% of values less than 0.00133735
50% of values less than 0.00212091	75% of values less than 0.00297566	90% of values less than 0.019984
Minimum 0.0005028231 0.0332522	Maximum 0.232795	
Mean 0.00718493	SD 0.0164131	Variance 0.00026939

Project: Celsa

Project Number: LMB_Celsa

Northern - Zinc

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.00269717	10% of values less than 0.00295451	25% of values less than 0.00371117
50% of values less than 0.00501809	75% of values less than 0.00642142	90% of values less than 0.00725653
Minimum 0.0025ss than 0.00753425	Maximum 0.00779951	
Mean 0.00508407	SD 0.00154823	Variance 2.39701E-006

Project: Celsa

Project Number: LMB_Celsa

Southern - Arsenic

Concentration at Source [mg/l] - 1000 years

05% of values less than 1

10% of values less than 1

25% of values less than 1

50% of values less than 1

75% of values less than 1

90% of values less than 1

Minimum 1es less than 1

Maximum 1

Mean 1

SD 0

Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Cadmium

Concentration at Source [mg/l] - 1000 years

05% of values less than 1

10% of values less than 1

25% of values less than 1

50% of values less than 1

75% of values less than 1

90% of values less than 1

Minimum 1es less than 1

Maximum 1

Mean 1

SD 0

Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Chromium

Concentration at Source [mg/l] - 1000 years

05% of values less than 1	10% of values less than 1	25% of values less than 1
50% of values less than 1	75% of values less than 1	90% of values less than 1
Minimum 1es less than 1	Maximum 1	
Mean 1	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Copper

Concentration at Source [mg/l] - 1000 years

05% of values less than 1	10% of values less than 1	25% of values less than 1
50% of values less than 1	75% of values less than 1	90% of values less than 1
Minimum 1es less than 1	Maximum 1	
Mean 1	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Lead

Concentration at Source [mg/l] - 1000 years

05% of values less than 1

10% of values less than 1

25% of values less than 1

50% of values less than 1

75% of values less than 1

90% of values less than 1

Minimum 1es less than 1

Maximum 1

Mean 1

SD 0

Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Mercury

Concentration at Source [mg/l] - 1000 years

05% of values less than 1

10% of values less than 1

25% of values less than 1

50% of values less than 1

75% of values less than 1

90% of values less than 1

Minimum 1es less than 1

Maximum 1

Mean 1

SD 0

Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Nickel

Concentration at Source [mg/l] - 1000 years

05% of values less than 1	10% of values less than 1	25% of values less than 1
50% of values less than 1	75% of values less than 1	90% of values less than 1
Minimum 1es less than 1	Maximum 1	
Mean 1	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Oils/Hydrocarbons

Concentration at Source [mg/l] - 1000 years

05% of values less than 0.5

10% of values less than 0.5

25% of values less than 0.5

50% of values less than 0.5

75% of values less than 0.5

90% of values less than 0.5

Minimum 0.5s less than 0.5

Maximum 0.5

Mean 0.5

SD 0

Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Zinc

Concentration at Source [mg/l] - 1000 years

05% of values less than 1

10% of values less than 1

25% of values less than 1

50% of values less than 1

75% of values less than 1

90% of values less than 1

Minimum 1es less than 1

Maximum 1

Mean 1

SD 0

Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Arsenic

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 627.223	10% of values less than 692.259	25% of values less than 835.273
50% of values less than 1059.67	75% of values less than 1312.32	90% of values less than 1562.18
Minimum 461.101s than 1718.15	Maximum 2477.67	
Mean 1099.68	SD 342.082	Variance 117020

Southern - Cadmium

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 125.934	10% of values less than 139.069	25% of values less than 167.989
50% of values less than 212.699	75% of values less than 263.433	90% of values less than 313.872
Minimum 92.5458s than 345.191	Maximum 497.235	
Mean 220.952	SD 68.7149	Variance 4721.74

Southern - Chromium

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 6016.08	10% of values less than 6641.41	25% of values less than 8012.92
50% of values less than 10163	75% of values less than 12582.1	90% of values less than 14981.5
Minimum 4423.07s than 16477.4	Maximum 23767.3	
Mean 10546	SD 3280.78	Variance 1.07635E+007

Southern - Copper

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 125.934	10% of values less than 139.069	25% of values less than 167.989
50% of values less than 212.699	75% of values less than 263.433	90% of values less than 313.872
Minimum 92.5458s than 345.191	Maximum 497.235	
Mean 220.952	SD 68.7149	Variance 4721.74

Project: Celsa

Project Number: LMB_Celsa

Southern - Arsenic

Unretarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 3.09042	10% of values less than 3.43583	25% of values less than 4.04871
50% of values less than 4.93448	75% of values less than 5.88395	90% of values less than 6.9343
Minimum 1.92287s than 7.64368	Maximum 10.2463	
Mean 5.07819	SD 1.38465	Variance 1.91726

Retarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 2244.47	10% of values less than 2445.54	25% of values less than 2774.43
50% of values less than 3200.51	75% of values less than 3704.9	90% of values less than 4205.14
Minimum 1668.79s than 4534.71	Maximum 5497.32	
Mean 3271.67	SD 681.706	Variance 464723

Project: Celsa

Project Number: LMB_Celsa

Southern - Cadmium

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 125.934	10% of values less than 139.069	25% of values less than 167.989
50% of values less than 212.699	75% of values less than 263.433	90% of values less than 313.872
Minimum 92.5458s than 345.191	Maximum 497.235	
Mean 220.952	SD 68.7149	Variance 4721.74

Southern - Chromium

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 6016.08	10% of values less than 6641.41	25% of values less than 8012.92
50% of values less than 10163	75% of values less than 12582.1	90% of values less than 14981.5
Minimum 4423.07s than 16477.4	Maximum 23767.3	
Mean 10546	SD 3280.78	Variance 1.07635E+007

Southern - Copper

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 125.934	10% of values less than 139.069	25% of values less than 167.989
50% of values less than 212.699	75% of values less than 263.433	90% of values less than 313.872
Minimum 92.5458s than 345.191	Maximum 497.235	
Mean 220.952	SD 68.7149	Variance 4721.74

Southern - Lead

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 4512.22	10% of values less than 4981.18	25% of values less than 6009.86
50% of values less than 7699.55	75% of values less than 9496.75	90% of values less than 11996.6

Project: Celsa

Project Number: LMB_Celsa

Southern - Cadmium

Unretarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 3.09042	10% of values less than 3.43583	25% of values less than 4.04871
50% of values less than 4.93448	75% of values less than 5.88395	90% of values less than 6.9343
Minimum 1.92287s than 7.64368	Maximum 10.2463	
Mean 5.07819	SD 1.38465	Variance 1.91726

Retarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 1466.14	10% of values less than 1613.74	25% of values less than 1912.69
50% of values less than 2327.29	75% of values less than 2787.45	90% of values less than 3285.56
Minimum 1125.38s than 3559.85	Maximum 4211.93	
Mean 2392.95	SD 625.72	Variance 391526

Project: Celsa

Project Number: LMB_Celsa

Southern - Chromium

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 6016.08	10% of values less than 6641.41	25% of values less than 8012.92
50% of values less than 10163	75% of values less than 12582.1	90% of values less than 14981.5
Minimum 4423.07s than 16477.4	Maximum 23767.3	
Mean 10546	SD 3280.78	Variance 1.07635E+007

Southern - Copper

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 125.934	10% of values less than 139.069	25% of values less than 167.989
50% of values less than 212.699	75% of values less than 263.433	90% of values less than 313.872
Minimum 92.5458s than 345.191	Maximum 497.235	
Mean 220.952	SD 68.7149	Variance 4721.74

Southern - Lead

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 4512.22	10% of values less than 4981.18	25% of values less than 6009.86
50% of values less than 7622.55	75% of values less than 9436.75	90% of values less than 11236.6
Minimum 3317.4ss than 12358.6	Maximum 17826	
Mean 7909.79	SD 2460.68	Variance 6.05495E+006

Southern - Mercury

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 627.223	10% of values less than 692.259	25% of values less than 835.273
50% of values less than 1050.07	75% of values less than 1210.00	90% of values less than 1500.10

Project: Celsa

Project Number: LMB_Celsa

Southern - Chromium

Unretarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 3.09042	10% of values less than 3.43583	25% of values less than 4.04871
50% of values less than 4.93448	75% of values less than 5.88395	90% of values less than 6.9343
Minimum 1.92287s than 7.64368	Maximum 10.2463	
Mean 5.07819	SD 1.38465	Variance 1.91726

Retarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 21519.9	10% of values less than 23442	25% of values less than 26590.9
50% of values less than 30674.4	75% of values less than 35521.5	90% of values less than 40297.2
Minimum 15999.9s than 43476.7	Maximum 52698.8	
Mean 31364.4	SD 6535.21	Variance 4.27089E+007

Project: Celsa

Project Number: LMB_Celsa

Southern - Copper

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 125.934	10% of values less than 139.069	25% of values less than 167.989
50% of values less than 212.699	75% of values less than 263.433	90% of values less than 313.872
Minimum 92.5458s than 345.191	Maximum 497.235	
Mean 220.952	SD 68.7149	Variance 4721.74

Southern - Lead

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 4512.22	10% of values less than 4981.18	25% of values less than 6009.86
50% of values less than 7622.55	75% of values less than 9436.75	90% of values less than 11236.6
Minimum 3317.4ss than 12358.6	Maximum 17826	
Mean 7909.79	SD 2460.68	Variance 6.05495E+006

Southern - Mercury

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 627.223	10% of values less than 692.259	25% of values less than 835.273
50% of values less than 1059.67	75% of values less than 1312.32	90% of values less than 1562.18
Minimum 461.101s than 1718.15	Maximum 2477.67	
Mean 1099.68	SD 342.082	Variance 117020

Southern - Nickel

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 627.223	10% of values less than 692.259	25% of values less than 835.273
50% of values less than 1059.67	75% of values less than 1312.32	90% of values less than 1562.18

Project: Celsa

Project Number: LMB_Celsa

Southern - Copper

Unretarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 3.09042	10% of values less than 3.43583	25% of values less than 4.04871
50% of values less than 4.93448	75% of values less than 5.88395	90% of values less than 6.9343
Minimum 1.92287s than 7.64368	Maximum 10.2463	
Mean 5.07819	SD 1.38465	Variance 1.91726

Retarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 1466.14	10% of values less than 1613.74	25% of values less than 1912.69
50% of values less than 2327.29	75% of values less than 2787.45	90% of values less than 3285.56
Minimum 1125.38s than 3559.85	Maximum 4211.93	
Mean 2392.95	SD 625.72	Variance 391526

Project: Celsa

Project Number: LMB_Celsa

Southern - Lead

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 4512.22	10% of values less than 4981.18	25% of values less than 6009.86
50% of values less than 7622.55	75% of values less than 9436.75	90% of values less than 11236.6
Minimum 3317.4ss than 12358.6	Maximum 17826	
Mean 7909.79	SD 2460.68	Variance 6.05495E+006

Southern - Mercury

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 627.223	10% of values less than 692.259	25% of values less than 835.273
50% of values less than 1059.67	75% of values less than 1312.32	90% of values less than 1562.18
Minimum 461.101s than 1718.15	Maximum 2477.67	
Mean 1099.68	SD 342.082	Variance 117020

Southern - Nickel

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 627.223	10% of values less than 692.259	25% of values less than 835.273
50% of values less than 1059.67	75% of values less than 1312.32	90% of values less than 1562.18
Minimum 461.101s than 1718.15	Maximum 2477.67	
Mean 1099.68	SD 342.082	Variance 117020

Southern - Oils/Hydrocarbons

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 58.1891	10% of values less than 64.7949	25% of values less than 190.053
50% of values less than 284.500	75% of values less than 600.757	90% of values less than 1040.00

Project: Celsa

Project Number: LMB_Celsa

Southern - Lead

Unretarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 3.09042	10% of values less than 3.43583	25% of values less than 4.04871
50% of values less than 4.93448	75% of values less than 5.88395	90% of values less than 6.9343
Minimum 1.92287s than 7.64368	Maximum 10.2463	
Mean 5.07819	SD 1.38465	Variance 1.91726

Retarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 16140.7	10% of values less than 17582.5	25% of values less than 19944.5
50% of values less than 23007.3	75% of values less than 26642.6	90% of values less than 30225
Minimum 11999.9s than 32609.2	Maximum 39526.3	
Mean 23524.6	SD 4901.67	Variance 2.40264E+007

Project: Celsa

Project Number: LMB_Celsa

Southern - Mercury

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 627.223	10% of values less than 692.259	25% of values less than 835.273
50% of values less than 1059.67	75% of values less than 1312.32	90% of values less than 1562.18
Minimum 461.101s than 1718.15	Maximum 2477.67	
Mean 1099.68	SD 342.082	Variance 117020

Southern - Nickel

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 627.223	10% of values less than 692.259	25% of values less than 835.273
50% of values less than 1059.67	75% of values less than 1312.32	90% of values less than 1562.18
Minimum 461.101s than 1718.15	Maximum 2477.67	
Mean 1099.68	SD 342.082	Variance 117020

Southern - Oils/Hydrocarbons

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 58.1891	10% of values less than 84.7949	25% of values less than 190.053
50% of values less than 381.569	75% of values less than 682.757	90% of values less than 1049.39
Minimum 10.2188s than 1324.8	Maximum 2841.9	
Mean 487.855	SD 411.079	Variance 168986

Southern - Zinc

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 476.836	10% of values less than 526.236	25% of values less than 634.966
50% of values less than 925.502	75% of values less than 927.974	90% of values less than 1197.69

Project: Celsa

Project Number: LMB_Celsa

Southern - Mercury

Unretarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 3.09042	10% of values less than 3.43583	25% of values less than 4.04871
50% of values less than 4.93448	75% of values less than 5.88395	90% of values less than 6.9343
Minimum 1.92287s than 7.64368	Maximum 10.2463	
Mean 5.07819	SD 1.38465	Variance 1.91726

Retarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 2244.47	10% of values less than 2445.54	25% of values less than 2774.43
50% of values less than 3200.51	75% of values less than 3704.9	90% of values less than 4205.14
Minimum 1668.79s than 4534.71	Maximum 5497.32	
Mean 3271.67	SD 681.706	Variance 464723

Project: Celsa

Project Number: LMB_Celsa

Southern - Nickel

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 627.223	10% of values less than 692.259	25% of values less than 835.273
50% of values less than 1059.67	75% of values less than 1312.32	90% of values less than 1562.18
Minimum 461.101s than 1718.15	Maximum 2477.67	
Mean 1099.68	SD 342.082	Variance 117020

Southern - Oils/Hydrocarbons

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 58.1891	10% of values less than 84.7949	25% of values less than 190.053
50% of values less than 381.569	75% of values less than 682.757	90% of values less than 1049.39
Minimum 10.2188s than 1324.8	Maximum 2841.9	
Mean 487.855	SD 411.079	Variance 168986

Southern - Zinc

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 476.836	10% of values less than 526.236	25% of values less than 634.966
50% of values less than 805.592	75% of values less than 997.871	90% of values less than 1187.69
Minimum 350.534s than 1306.26	Maximum 1883.54	
Mean 836.059	SD 260.071	Variance 67637.2

Project: Celsa

Project Number: LMB_Celsa

Southern - Nickel

Unretarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 3.09042	10% of values less than 3.43583	25% of values less than 4.04871
50% of values less than 4.93448	75% of values less than 5.88395	90% of values less than 6.9343
Minimum 1.92287s than 7.64368	Maximum 10.2463	
Mean 5.07819	SD 1.38465	Variance 1.91726

Retarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 2244.47	10% of values less than 2445.54	25% of values less than 2774.43
50% of values less than 3200.51	75% of values less than 3704.9	90% of values less than 4205.14
Minimum 1668.79s than 4534.71	Maximum 5497.32	
Mean 3271.67	SD 681.706	Variance 464723

Project: Celsa

Project Number: LMB_Celsa

Southern - Oils/Hydrocarbons

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 58.1891	10% of values less than 84.7949	25% of values less than 190.053
50% of values less than 381.569	75% of values less than 682.757	90% of values less than 1049.39
Minimum 10.2188s than 1324.8	Maximum 2841.9	
Mean 487.855	SD 411.079	Variance 168986

Southern - Zinc

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 476.836	10% of values less than 526.236	25% of values less than 634.966
50% of values less than 805.592	75% of values less than 997.871	90% of values less than 1187.69
Minimum 350.534s than 1306.26	Maximum 1883.54	
Mean 836.059	SD 260.071	Variance 67637.2

Project: Celsa

Project Number: LMB_Celsa

Southern - Oils/Hydrocarbons

Unretarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 3.09042	10% of values less than 3.43583	25% of values less than 4.04871
50% of values less than 4.93448	75% of values less than 5.88395	90% of values less than 6.9343
Minimum 1.92287s than 7.64368	Maximum 10.2463	
Mean 5.07819	SD 1.38465	Variance 1.91726

Retarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 214.037	10% of values less than 315.383	25% of values less than 666.859
50% of values less than 1226.25	75% of values less than 2083.22	90% of values less than 2950.51
Minimum 69.9628s than 3592.92	Maximum 6053.87	
Mean 1468.5	SD 1057.81	Variance 1.11896E+006

Project: Celsa

Project Number: LMB_Celsa

Southern - Zinc

Unretarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 0.539932	10% of values less than 0.641408	25% of values less than 0.853794
50% of values less than 1.19077	75% of values less than 1.62408	90% of values less than 1.98902
Minimum 0.317936 than 2.27029	Maximum 3.23885	
Mean 1.27098	SD 0.537394	Variance 0.288792

Retarded Travel Time to Base of Unsaturated Zone Made Ground [years]

05% of values less than 476.836	10% of values less than 526.236	25% of values less than 634.966
50% of values less than 805.592	75% of values less than 997.871	90% of values less than 1187.69
Minimum 350.534s than 1306.26	Maximum 1883.54	
Mean 836.059	SD 260.071	Variance 67637.2

Project: Celsa

Project Number: LMB_Celsa

Southern - Zinc

Unretarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 3.09042	10% of values less than 3.43583	25% of values less than 4.04871
50% of values less than 4.93448	75% of values less than 5.88395	90% of values less than 6.9343
Minimum 1.92287s than 7.64368	Maximum 10.2463	
Mean 5.07819	SD 1.38465	Variance 1.91726

Retarded Travel Time to Base of Unsaturated Zone TFD [years]

05% of values less than 1706.59	10% of values less than 1859.82	25% of values less than 2109.78
50% of values less than 2433.8	75% of values less than 2816.99	90% of values less than 3197.92
Minimum 1268.88s than 3447.95	Maximum 4180.07	
Mean 2487.69	SD 518.352	Variance 268689

Project: Celsa

Project Number: LMB_Celsa

Southern - Arsenic

Concentration at Base of Unsaturated Zone Made Ground [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0.874806	90% of values less than 0.986569
Minimum 0.996915	Maximum 0.99999	
Mean 0.373573	SD 0.432974	Variance 0.187466

Concentration at Base of Unsaturated Zone TFD [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0.996915	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Cadmium

Concentration at Base of Unsaturated Zone Made Ground [mg/l] - 1000 years

05% of values less than 1	10% of values less than 1	25% of values less than 1
50% of values less than 1	75% of values less than 1	90% of values less than 1
Minimum 1es less than 1	Maximum 1	
Mean 1	SD 4.1767E-008	Variance -1.74449E-015

Concentration at Base of Unsaturated Zone TFD [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Chromium

Concentration at Base of Unsaturated Zone Made Ground [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Concentration at Base of Unsaturated Zone TFD [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Copper

Concentration at Base of Unsaturated Zone Made Ground [mg/l] - 1000 years

05% of values less than 1	10% of values less than 1	25% of values less than 1
50% of values less than 1	75% of values less than 1	90% of values less than 1
Minimum 1es less than 1	Maximum 1	
Mean 1	SD 4.1767E-008	Variance -1.74449E-015

Concentration at Base of Unsaturated Zone TFD [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Lead

Concentration at Base of Unsaturated Zone Made Ground [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Concentration at Base of Unsaturated Zone TFD [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Mercury

Concentration at Base of Unsaturated Zone Made Ground [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0.874806	90% of values less than 0.986569
Minimum 0.996915	Maximum 0.99999	
Mean 0.373573	SD 0.432974	Variance 0.187466

Concentration at Base of Unsaturated Zone TFD [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0.996915	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Nickel

Concentration at Base of Unsaturated Zone Made Ground [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0.874806	90% of values less than 0.986569
Minimum 0.996915	Maximum 0.99999	
Mean 0.373573	SD 0.432974	Variance 0.187466

Concentration at Base of Unsaturated Zone TFD [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0.996915	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Oils/Hydrocarbons

Concentration at Base of Unsaturated Zone Made Ground [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0.497769
50% of values less than 0.499753	75% of values less than 0.499871	90% of values less than 0.499915
Minimum 0.es less than 0.49993	Maximum 0.499965	
Mean 0.436709	SD 0.156782	Variance 0.0245807

Concentration at Base of Unsaturated Zone TFD [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0.499836
Minimum 0.es less than 0.499888	Maximum 0.499951	
Mean 0.119115	SD 0.211175	Variance 0.0445948

Project: Celsa

Project Number: LMB_Celsa

Southern - Zinc

Concentration at Base of Unsaturated Zone Made Ground [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0.507272
50% of values less than 0.941345	75% of values less than 0.998277	90% of values less than 0.999959
Minimum 0.999995	Maximum 1	
Mean 0.688568	SD 0.41187	Variance 0.169637

Concentration at Base of Unsaturated Zone TFD [mg/l] - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0.999995	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Arsenic

Diluted Concentration [mg/l] TFD - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0.es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Cadmium

Diluted Concentration [mg/l] TFD - 1000 years

05% of values less than 0

10% of values less than 0

25% of values less than 0

50% of values less than 0

75% of values less than 0

90% of values less than 0

Minimum 0.es less than 0

Maximum 0

Mean 0

SD 0

Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Chromium

Diluted Concentration [mg/l] TFD - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0.es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Copper

Diluted Concentration [mg/l] TFD - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0.es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Lead

Diluted Concentration [mg/l] TFD - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0.es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Mercury

Diluted Concentration [mg/l] TFD - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0.es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Nickel

Diluted Concentration [mg/l] TFD - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0	90% of values less than 0
Minimum 0.es less than 0	Maximum 0	
Mean 0	SD 0	Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Oils/Hydrocarbons

Diluted Concentration [mg/l] TFD - 1000 years

05% of values less than 0	10% of values less than 0	25% of values less than 0
50% of values less than 0	75% of values less than 0.0190182	90% of values less than 0.0660902
Minimum 0.0es less than 0.119154	Maximum 0.306378	
Mean 0.0206204	SD 0.044677	Variance 0.00199603

Project: Celsa

Project Number: LMB_Celsa

Southern - Zinc

Diluted Concentration [mg/l] TFD - 1000 years

05% of values less than 0

10% of values less than 0

25% of values less than 0

50% of values less than 0

75% of values less than 0

90% of values less than 0

Minimum 0.es less than 0

Maximum 0

Mean 0

SD 0

Variance 0

Project: Celsa

Project Number: LMB_Celsa

Southern - Arsenic

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 1E+006	10% of values less than 1E+006	25% of values less than 1E+006
50% of values less than 1E+006	75% of values less than 1.00001E+006	90% of values less than 1.00001E+006
Minimum 1E+006s than 1.00001E+006	Maximum 1.00001E+006	
Mean 1.00001E+006	SD 1.38518	Variance 1.91872

Retarded Travel Time to Northern Receptor years

05% of values less than 2.84619E+009	10% of values less than 2.91716E+009	25% of values less than 3.09069E+009
50% of values less than 3.37109E+009	75% of values less than 3.76487E+009	90% of values less than 4.03245E+009
Minimum 2.69778E+009 4.15991E+009	Maximum 4.4498E+009	
Mean 3.43304E+009	SD 4.16718E+008	Variance 1.73654E+017

Project: Celsa

Project Number: LMB_Celsa

Southern - Cadmium

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 1E+006	10% of values less than 1E+006	25% of values less than 1E+006
50% of values less than 1E+006	75% of values less than 1.00001E+006	90% of values less than 1.00001E+006
Minimum 1E+006s than 1.00001E+006	Maximum 1.00001E+006	
Mean 1.00001E+006	SD 1.38518	Variance 1.91872

Retarded Travel Time to Northern Receptor years

05% of values less than 5.7004E+008	10% of values less than 5.84234E+008	25% of values less than 6.18938E+008
50% of values less than 6.7502E+008	75% of values less than 7.53775E+008	90% of values less than 8.07293E+008
Minimum 5.40357E+0088.32784E+008	Maximum 8.90762E+008	
Mean 6.8741E+008	SD 8.33436E+007	Variance 6.94615E+015

Project: Celsa

Project Number: LMB_Celsa

Southern - Chromium

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 1E+006	10% of values less than 1E+006	25% of values less than 1E+006
50% of values less than 1E+006	75% of values less than 1.00001E+006	90% of values less than 1.00001E+006
Minimum 1E+006s than 1.00001E+006	Maximum 1.00001E+006	
Mean 1.00001E+006	SD 1.38518	Variance 1.91872

Retarded Travel Time to Northern Receptor years

05% of values less than 2.73148E+010	10% of values less than 2.79961E+010	25% of values less than 2.9662E+010
50% of values less than 3.23539E+010	75% of values less than 3.61341E+010	90% of values less than 3.87029E+010
Minimum 2.589E+010 in 3.99265E+010	Maximum 4.27094E+010	
Mean 3.29486E+010	SD 4.00049E+009	Variance 1.60039E+019

Project: Celsa

Project Number: LMB_Celsa

Southern - Copper

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 1E+006	10% of values less than 1E+006	25% of values less than 1E+006
50% of values less than 1E+006	75% of values less than 1.00001E+006	90% of values less than 1.00001E+006
Minimum 1E+006s than 1.00001E+006	Maximum 1.00001E+006	
Mean 1.00001E+006	SD 1.38518	Variance 1.91872

Retarded Travel Time to Northern Receptor years

05% of values less than 5.7004E+008	10% of values less than 5.84234E+008	25% of values less than 6.18938E+008
50% of values less than 6.7502E+008	75% of values less than 7.53775E+008	90% of values less than 8.07293E+008
Minimum 5.40357E+0088.32784E+008	Maximum 8.90762E+008	
Mean 6.8741E+008	SD 8.33436E+007	Variance 6.94615E+015

Project: Celsa

Project Number: LMB_Celsa

Southern - Lead

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 1E+006	10% of values less than 1E+006	25% of values less than 1E+006
50% of values less than 1E+006	75% of values less than 1.00001E+006	90% of values less than 1.00001E+006
Minimum 1E+006s than 1.00001E+006	Maximum 1.00001E+006	
Mean 1.00001E+006	SD 1.38518	Variance 1.91872

Retarded Travel Time to Northern Receptor years

05% of values less than 2.04864E+010	10% of values less than 2.09973E+010	25% of values less than 2.22467E+010
50% of values less than 2.42657E+010	75% of values less than 2.71008E+010	90% of values less than 2.90275E+010
Minimum 1.94178E+0102.99452E+010	Maximum 3.20323E+010	
Mean 2.47117E+010	SD 3.00037E+009	Variance 9.00221E+018

Project: Celsa

Project Number: LMB_Celsa

Southern - Mercury

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 1E+006	10% of values less than 1E+006	25% of values less than 1E+006
50% of values less than 1E+006	75% of values less than 1.00001E+006	90% of values less than 1.00001E+006
Minimum 1E+006s than 1.00001E+006	Maximum 1.00001E+006	
Mean 1.00001E+006	SD 1.38518	Variance 1.91872

Retarded Travel Time to Northern Receptor years

05% of values less than 2.84619E+009	10% of values less than 2.91716E+009	25% of values less than 3.09069E+009
50% of values less than 3.37109E+009	75% of values less than 3.76487E+009	90% of values less than 4.03245E+009
Minimum 2.69778E+009.15991E+009	Maximum 4.4498E+009	
Mean 3.43304E+009	SD 4.16718E+008	Variance 1.73654E+017

Project: Celsa

Project Number: LMB_Celsa

Southern - Nickel

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 1E+006	10% of values less than 1E+006	25% of values less than 1E+006
50% of values less than 1E+006	75% of values less than 1.00001E+006	90% of values less than 1.00001E+006
Minimum 1E+006s than 1.00001E+006	Maximum 1.00001E+006	
Mean 1.00001E+006	SD 1.38518	Variance 1.91872

Retarded Travel Time to Northern Receptor years

05% of values less than 2.84619E+009	10% of values less than 2.91716E+009	25% of values less than 3.09069E+009
50% of values less than 3.37109E+009	75% of values less than 3.76487E+009	90% of values less than 4.03245E+009
Minimum 2.69778E+009 4.15991E+009	Maximum 4.4498E+009	
Mean 3.43304E+009	SD 4.16718E+008	Variance 1.73654E+017

Project: Celsa

Project Number: LMB_Celsa

Southern - Oils/Hydrocarbons

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 1E+006	10% of values less than 1E+006	25% of values less than 1E+006
50% of values less than 1E+006	75% of values less than 1.00001E+006	90% of values less than 1.00001E+006
Minimum 1E+006s than 1.00001E+006	Maximum 1.00001E+006	
Mean 1.00001E+006	SD 1.38518	Variance 1.91872

Retarded Travel Time to Northern Receptor years

05% of values less than 2.17157E+007	10% of values less than 3.21694E+007	25% of values less than 6.05833E+007
50% of values less than 1.26475E+008	75% of values less than 2.16972E+008	90% of values less than 3.16402E+008
Minimum 5.36617E+0063.69646E+008	Maximum 5.78262E+008	
Mean 1.51426E+008	SD 1.11809E+008	Variance 1.25012E+016

Project: Celsa

Project Number: LMB_Celsa

Southern - Zinc

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 1E+006	10% of values less than 1E+006	25% of values less than 1E+006
50% of values less than 1E+006	75% of values less than 1.00001E+006	90% of values less than 1.00001E+006
Minimum 1E+006s than 1.00001E+006	Maximum 1.00001E+006	
Mean 1.00001E+006	SD 1.38518	Variance 1.91872

Retarded Travel Time to Northern Receptor years

05% of values less than 2.17237E+008	10% of values less than 2.22631E+008	25% of values less than 2.35818E+008
50% of values less than 2.57129E+008	75% of values less than 2.87056E+008	90% of values less than 3.07393E+008
Minimum 2.05957E+0083.1708E+008	Maximum 3.39112E+008	
Mean 2.61837E+008	SD 3.16706E+007	Variance 1.00302E+015

Project: Celsa

Project Number: LMB_Celsa

Southern - Arsenic

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.006466	10% of values less than 0.00732636	25% of values less than 0.00999781
50% of values less than 0.0149146	75% of values less than 0.0199853	90% of values less than 0.0233061
Minimum 0.0059035nan 0.02416	Maximum 0.0249738	
Mean 0.0151636	SD 0.00572158	Variance 3.27365E-005

Project: Celsa

Project Number: LMB_Celsa

Southern - Cadmium

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.000115653	10% of values less than 0.000122411	25% of values less than 0.000139807
50% of values less than 0.000165159	75% of values less than 0.000192563	90% of values less than 0.000208032
Minimum 0.000110393	Maximum 0.000219933	
Mean 0.000165708	SD 3.10786E-005	Variance 9.65878E-010

Project: Celsa

Project Number: LMB_Celsa

Southern - Chromium

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.00077604	10% of values less than 0.001	25% of values less than 0.00185482
50% of values less than 0.00318162	75% of values less than 0.00456281	90% of values less than 0.00542983
Minimum 0.00050379an 0.00565231	Maximum 0.00588929	
Mean 0.0032001	SD 0.00157912	Variance 2.49361E-006

Project: Celsa

Project Number: LMB_Celsa

Southern - Copper

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.000504486	10% of values less than 0.000510282	25% of values less than 0.000524052
50% of values less than 0.000548448	75% of values less than 0.000573473	90% of values less than 0.000589276
Minimum 0.000500034	Maximum 0.000599918	
Mean 0.000548883	SD 2.88125E-005	Variance 8.30163E-010

Project: Celsa

Project Number: LMB_Celsa

Southern - Lead

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.000505332	10% of values less than 0.000511432	25% of values less than 0.000527207
50% of values less than 0.000550597	75% of values less than 0.000574899	90% of values less than 0.000591363
Minimum 0.000500012	Maximum 0.000599838	
Mean 0.000551054	SD 2.85894E-005	Variance 8.17351E-010

Project: Celsa

Project Number: LMB_Celsa

Southern - Mercury

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 1E-005	10% of values less than 1E-005	25% of values less than 1E-005
50% of values less than 1E-005	75% of values less than 1E-005	90% of values less than 1E-005
Minimum 1E-005s than 1E-005	Maximum 1E-005	
Mean 1E-005	SD 1.67813E-012	Variance 2.81611E-024

Project: Celsa

Project Number: LMB_Celsa

Southern - Nickel

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.000831184

10% of values less than 0.000952089

25% of values less than 0.00122035

50% of values less than 0.00170343

75% of values less than 0.00217466

90% of values less than 0.00251284

Minimum 0.000733607
0.00259876

Maximum 0.00269982

Mean 0.00170903

SD 0.000565154

Variance 3.19399E-007

Project: Celsa

Project Number: LMB_Celsa

Southern - Oils/Hydrocarbons

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.000607883

10% of values less than 0.000744682

25% of values less than 0.00112006

50% of values less than 0.00170228

75% of values less than 0.00234599

90% of values less than 0.00274532

Minimum 0.000502823 to 0.00286824

Maximum 0.0029987

Mean 0.00172593

SD 0.00071559

Variance 5.1207E-007

Project: Celsa

Project Number: LMB_Celsa

Southern - Zinc

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.00269717

10% of values less than 0.00295451

25% of values less than 0.00371117

50% of values less than 0.00501809

75% of values less than 0.00642142

90% of values less than 0.00725653

Minimum 0.0025ss than 0.00753425

Maximum 0.00779951

Mean 0.00508407

SD 0.00154823

Variance 2.39701E-006

Project: Celsa

Project Number: LMB_Celsa

Southern - Arsenic

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 3.95937	10% of values less than 4.48397	25% of values less than 5.29492
50% of values less than 6.80049	75% of values less than 9.0721	90% of values less than 13.5823
Minimum 2.30733s than 18.006	Maximum 35.5647	
Mean 8.17183	SD 4.7601	Variance 22.6585

Retarded Travel Time to Southern Receptor years

05% of values less than 3492.84	10% of values less than 4043.18	25% of values less than 5237
50% of values less than 8206.59	75% of values less than 15311.2	90% of values less than 29463.1
Minimum 2267.61s than 46241	Maximum 109464	
Mean 13713.6	SD 15117.4	Variance 2.28536E+008

Project: Celsa

Project Number: LMB_Celsa

Southern - Cadmium*Unretarded Travel Time to Southern Receptor [years]*

05% of values less than 3.95937	10% of values less than 4.48397	25% of values less than 5.29492
50% of values less than 6.80049	75% of values less than 9.0721	90% of values less than 13.5823
Minimum 2.30733s than 18.006	Maximum 35.5647	
Mean 8.17183	SD 4.7601	Variance 22.6585

Retarded Travel Time to Southern Receptor years

05% of values less than 1976.3	10% of values less than 2206	25% of values less than 2722.31
50% of values less than 3486.48	75% of values less than 4939.4	90% of values less than 7863.37
Minimum 1384.04s than 11066.3	Maximum 23651.7	
Mean 4483.8	SD 3102.68	Variance 9.62661E+006

Project: Celsa

Project Number: LMB_Celsa

Southern - Chromium

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 3.95937	10% of values less than 4.48397	25% of values less than 5.29492
50% of values less than 6.80049	75% of values less than 9.0721	90% of values less than 13.5823
Minimum 2.30733s than 18.006	Maximum 35.5647	
Mean 8.17183	SD 4.7601	Variance 22.6585

Retarded Travel Time to Southern Receptor years

05% of values less than 33494.6	10% of values less than 38747.3	25% of values less than 50238.8
50% of values less than 78711.8	75% of values less than 146912	90% of values less than 282722
Minimum 21749.2s than 443746	Maximum 1.05058E+006	
Mean 131580	SD 145088	Variance 2.10506E+010

Project: Celsa

Project Number: LMB_Celsa

Southern - Copper

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 3.95937	10% of values less than 4.48397	25% of values less than 5.29492
50% of values less than 6.80049	75% of values less than 9.0721	90% of values less than 13.5823
Minimum 2.30733s than 18.006	Maximum 35.5647	
Mean 8.17183	SD 4.7601	Variance 22.6585

Retarded Travel Time to Southern Receptor years

05% of values less than 1976.3	10% of values less than 2206	25% of values less than 2722.31
50% of values less than 3486.48	75% of values less than 4939.4	90% of values less than 7863.37
Minimum 1384.04s than 11066.3	Maximum 23651.7	
Mean 4483.8	SD 3102.68	Variance 9.62661E+006

Project: Celsa

Project Number: LMB_Celsa

Southern - Lead

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 3.95937	10% of values less than 4.48397	25% of values less than 5.29492
50% of values less than 6.80049	75% of values less than 9.0721	90% of values less than 13.5823
Minimum 2.30733s than 18.006	Maximum 35.5647	
Mean 8.17183	SD 4.7601	Variance 22.6585

Retarded Travel Time to Southern Receptor years

05% of values less than 25122	10% of values less than 29062.4	25% of values less than 37680.2
50% of values less than 59035.9	75% of values less than 110186	90% of values less than 212045
Minimum 16312.5s than 332814	Maximum 787942	
Mean 98686.9	SD 108817	Variance 1.18412E+010

Project: Celsa

Project Number: LMB_Celsa

Southern - Mercury

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 3.95937	10% of values less than 4.48397	25% of values less than 5.29492
50% of values less than 6.80049	75% of values less than 9.0721	90% of values less than 13.5823
Minimum 2.30733s than 18.006	Maximum 35.5647	
Mean 8.17183	SD 4.7601	Variance 22.6585

Retarded Travel Time to Southern Receptor years

05% of values less than 3492.84	10% of values less than 4043.18	25% of values less than 5237
50% of values less than 8206.59	75% of values less than 15311.2	90% of values less than 29463.1
Minimum 2267.61s than 46241	Maximum 109464	
Mean 13713.6	SD 15117.4	Variance 2.28536E+008

Project: Celsa

Project Number: LMB_Celsa

Southern - Nickel

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 3.95937	10% of values less than 4.48397	25% of values less than 5.29492
50% of values less than 6.80049	75% of values less than 9.0721	90% of values less than 13.5823
Minimum 2.30733s than 18.006	Maximum 35.5647	
Mean 8.17183	SD 4.7601	Variance 22.6585

Retarded Travel Time to Southern Receptor years

05% of values less than 3492.84	10% of values less than 4043.18	25% of values less than 5237
50% of values less than 8206.59	75% of values less than 15311.2	90% of values less than 29463.1
Minimum 2267.61s than 46241	Maximum 109464	
Mean 13713.6	SD 15117.4	Variance 2.28536E+008

Project: Celsa

Project Number: LMB_Celsa

Southern - Oils/Hydrocarbons

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 3.95937	10% of values less than 4.48397	25% of values less than 5.29492
50% of values less than 6.80049	75% of values less than 9.0721	90% of values less than 13.5823
Minimum 2.30733s than 18.006	Maximum 35.5647	
Mean 8.17183	SD 4.7601	Variance 22.6585

Retarded Travel Time to Southern Receptor years

05% of values less than 284.231	10% of values less than 416.977	25% of values less than 884.358
50% of values less than 1537.35	75% of values less than 2575.85	90% of values less than 3866.02
Minimum 72.8961s than 4619.53	Maximum 8309.22	
Mean 1903.45	SD 1409.92	Variance 1.98789E+006

Project: Celsa

Project Number: LMB_Celsa

Southern - Zinc

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 3.95937	10% of values less than 4.48397	25% of values less than 5.29492
50% of values less than 6.80049	75% of values less than 9.0721	90% of values less than 13.5823
Minimum 2.30733s than 18.006	Maximum 35.5647	
Mean 8.17183	SD 4.7601	Variance 22.6585

Retarded Travel Time to Southern Receptor years

05% of values less than 2009.02	10% of values less than 2181.67	25% of values less than 2487.08
50% of values less than 2980.39	75% of values less than 3621.74	90% of values less than 4651.09
Minimum 1513.62s than 5868.84	Maximum 10795	
Mean 3284.13	SD 1279.04	Variance 1.63594E+006

Project: Celsa

Project Number: LMB_Celsa

Southern - Arsenic

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.006466

10% of values less than 0.00732636

25% of values less than 0.00999781

50% of values less than 0.0149146

75% of values less than 0.0199853

90% of values less than 0.0233061

Minimum 0.0059035nan 0.02416

Maximum 0.0249738

Mean 0.0151636

SD 0.00572158

Variance 3.27365E-005

Project: Celsa

Project Number: LMB_Celsa

Southern - Cadmium

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.000115653	10% of values less than 0.000122411	25% of values less than 0.000139807
50% of values less than 0.000165159	75% of values less than 0.000192563	90% of values less than 0.000208032
Minimum 0.000110393	Maximum 0.000219933	
Mean 0.000165708	SD 3.10786E-005	Variance 9.65878E-010

Project: Celsa

Project Number: LMB_Celsa

Southern - Chromium

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.00077604	10% of values less than 0.001	25% of values less than 0.00185482
50% of values less than 0.00318162	75% of values less than 0.00456281	90% of values less than 0.00542983
Minimum 0.00050379an 0.00565231	Maximum 0.00588929	
Mean 0.0032001	SD 0.00157912	Variance 2.49361E-006

Project: Celsa

Project Number: LMB_Celsa

Southern - Copper

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.000504486	10% of values less than 0.000510282	25% of values less than 0.000524052
50% of values less than 0.000548448	75% of values less than 0.000573473	90% of values less than 0.000589276
Minimum 0.000500034	Maximum 0.000599918	
Mean 0.000548883	SD 2.88125E-005	Variance 8.30163E-010

Project: Celsa

Project Number: LMB_Celsa

Southern - Lead

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.000505332	10% of values less than 0.000511432	25% of values less than 0.000527207
50% of values less than 0.000550597	75% of values less than 0.000574899	90% of values less than 0.000591363
Minimum 0.000500012	Maximum 0.000599838	
Mean 0.000551054	SD 2.85894E-005	Variance 8.17351E-010

Project: Celsa

Project Number: LMB_Celsa

Southern - Mercury

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 1E-005	10% of values less than 1E-005	25% of values less than 1E-005
50% of values less than 1E-005	75% of values less than 1E-005	90% of values less than 1E-005
Minimum 1E-005s than 1E-005	Maximum 1E-005	
Mean 1E-005	SD 1.67813E-012	Variance 2.81611E-024

Project: Celsa

Project Number: LMB_Celsa

Southern - Nickel

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.000831184

10% of values less than 0.000952089

25% of values less than 0.00122035

50% of values less than 0.00170343

75% of values less than 0.00217466

90% of values less than 0.00251284

Minimum 0.000733607 to 0.00259876

Maximum 0.00269982

Mean 0.00170903

SD 0.000565154

Variance 3.19399E-007

Project: Celsa

Project Number: LMB_Celsa

Southern - Oils/Hydrocarbons

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.00066274	10% of values less than 0.000824793	25% of values less than 0.00125147
50% of values less than 0.00196573	75% of values less than 0.00270733	90% of values less than 0.0169837
Minimum 0.000502823 to 0.0452383	Maximum 0.202907	
Mean 0.00833421	SD 0.023633	Variance 0.00055852

Project: Celsa

Project Number: LMB_Celsa

Southern - Zinc

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.00269717	10% of values less than 0.00295451	25% of values less than 0.00371117
50% of values less than 0.00501809	75% of values less than 0.00642142	90% of values less than 0.00725653
Minimum 0.0025ss than 0.00753425	Maximum 0.00779951	
Mean 0.00508407	SD 0.00154823	Variance 2.39701E-006

Project: Celsa

Project Number: LMB_Celsa

Southern - Arsenic

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 4.62573	10% of values less than 5.21743	25% of values less than 6.40134
50% of values less than 8.30781	75% of values less than 12.2757	90% of values less than 20.311
Minimum 3.20182s than 27.0241	Maximum 49.5747	
Mean 10.8568	SD 7.32815	Variance 53.7018

Retarded Travel Time to 50m compliance point years

05% of values less than 5380.22	10% of values less than 6159.51	25% of values less than 8089.24
50% of values less than 13455.6	75% of values less than 27460.5	90% of values less than 54166.4
Minimum 3673.68s than 73880.9	Maximum 162694	
Mean 22767.6	SD 23935.8	Variance 5.72923E+008

Project: Celsa

Project Number: LMB_Celsa

Southern - Cadmium

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 4.62573	10% of values less than 5.21743	25% of values less than 6.40134
50% of values less than 8.30781	75% of values less than 12.2757	90% of values less than 20.311
Minimum 3.20182s than 27.0241	Maximum 49.5747	
Mean 10.8568	SD 7.32815	Variance 53.7018

Retarded Travel Time to 50m compliance point years

05% of values less than 2463.1	10% of values less than 2714.83	25% of values less than 3337.01
50% of values less than 4516.92	75% of values less than 7088.05	90% of values less than 12463.6
Minimum 1710.47s than 16627.8	Maximum 34907.7	
Mean 6296.76	SD 4846.4	Variance 2.34876E+007

Project: Celsa

Project Number: LMB_Celsa

Southern - Chromium

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 4.62573	10% of values less than 5.21743	25% of values less than 6.40134
50% of values less than 8.30781	75% of values less than 12.2757	90% of values less than 20.311
Minimum 3.20182s than 27.0241	Maximum 49.5747	
Mean 10.8568	SD 7.32815	Variance 53.7018

Retarded Travel Time to 50m compliance point years

05% of values less than 51602.9	10% of values less than 59070.3	25% of values less than 77607.2
50% of values less than 129109	75% of values less than 263515	90% of values less than 519804
Minimum 35233.1s than 709060	Maximum 1.56146E+006	
Mean 218476	SD 229722	Variance 5.27724E+010

Project: Celsa

Project Number: LMB_Celsa

Southern - Copper

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 4.62573	10% of values less than 5.21743	25% of values less than 6.40134
50% of values less than 8.30781	75% of values less than 12.2757	90% of values less than 20.311
Minimum 3.20182s than 27.0241	Maximum 49.5747	
Mean 10.8568	SD 7.32815	Variance 53.7018

Retarded Travel Time to 50m compliance point years

05% of values less than 2463.1	10% of values less than 2714.83	25% of values less than 3337.01
50% of values less than 4516.92	75% of values less than 7088.05	90% of values less than 12463.6
Minimum 1710.47s than 16627.8	Maximum 34907.7	
Mean 6296.76	SD 4846.4	Variance 2.34876E+007

Project: Celsa

Project Number: LMB_Celsa

Southern - Lead

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 4.62573	10% of values less than 5.21743	25% of values less than 6.40134
50% of values less than 8.30781	75% of values less than 12.2757	90% of values less than 20.311
Minimum 3.20182s than 27.0241	Maximum 49.5747	
Mean 10.8568	SD 7.32815	Variance 53.7018

Retarded Travel Time to 50m compliance point years

05% of values less than 38703.5	10% of values less than 44304.5	25% of values less than 58206.9
50% of values less than 96833.6	75% of values less than 197640	90% of values less than 389858
Minimum 26425.9s than 531801	Maximum 1.17111E+006	
Mean 163859	SD 172294	Variance 2.96851E+010

Project: Celsa

Project Number: LMB_Celsa

Southern - Mercury

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 4.62573	10% of values less than 5.21743	25% of values less than 6.40134
50% of values less than 8.30781	75% of values less than 12.2757	90% of values less than 20.311
Minimum 3.20182s than 27.0241	Maximum 49.5747	
Mean 10.8568	SD 7.32815	Variance 53.7018

Retarded Travel Time to 50m compliance point years

05% of values less than 5380.22	10% of values less than 6159.51	25% of values less than 8089.24
50% of values less than 13455.6	75% of values less than 27460.5	90% of values less than 54166.4
Minimum 3673.68s than 73880.9	Maximum 162694	
Mean 22767.6	SD 23935.8	Variance 5.72923E+008

Project: Celsa

Project Number: LMB_Celsa

Southern - Nickel

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 4.62573	10% of values less than 5.21743	25% of values less than 6.40134
50% of values less than 8.30781	75% of values less than 12.2757	90% of values less than 20.311
Minimum 3.20182s than 27.0241	Maximum 49.5747	
Mean 10.8568	SD 7.32815	Variance 53.7018

Retarded Travel Time to 50m compliance point years

05% of values less than 5380.22	10% of values less than 6159.51	25% of values less than 8089.24
50% of values less than 13455.6	75% of values less than 27460.5	90% of values less than 54166.4
Minimum 3673.68s than 73880.9	Maximum 162694	
Mean 22767.6	SD 23935.8	Variance 5.72923E+008

Project: Celsa

Project Number: LMB_Celsa

Southern - Oils/Hydrocarbons

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 4.62573	10% of values less than 5.21743	25% of values less than 6.40134
50% of values less than 8.30781	75% of values less than 12.2757	90% of values less than 20.311
Minimum 3.20182s than 27.0241	Maximum 49.5747	
Mean 10.8568	SD 7.32815	Variance 53.7018

Retarded Travel Time to 50m compliance point years

05% of values less than 325.833	10% of values less than 497.956	25% of values less than 1025.16
50% of values less than 1826.06	75% of values less than 2999.32	90% of values less than 4754.62
Minimum 81.0114s than 5690.51	Maximum 14008.4	
Mean 2287.06	SD 1805.23	Variance 3.25886E+006

Project: Celsa

Project Number: LMB_Celsa

Southern - Zinc

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 4.62573	10% of values less than 5.21743	25% of values less than 6.40134
50% of values less than 8.30781	75% of values less than 12.2757	90% of values less than 20.311
Minimum 3.20182s than 27.0241	Maximum 49.5747	
Mean 10.8568	SD 7.32815	Variance 53.7018

Retarded Travel Time to 50m compliance point years

05% of values less than 2198.77	10% of values less than 2394.51	25% of values less than 2768.44
50% of values less than 3412.66	75% of values less than 4399.41	90% of values less than 6429.84
Minimum 1614.09s than 7884.78	Maximum 15551.2	
Mean 3974.72	SD 1915.99	Variance 3.67102E+006

Project: Celsa

Project Number: LMB_Celsa

Southern - Arsenic

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.006466

10% of values less than 0.00732636

25% of values less than 0.00999781

50% of values less than 0.0149146

75% of values less than 0.0199853

90% of values less than 0.0233061

Minimum 0.0059035nan 0.02416

Maximum 0.0249738

Mean 0.0151636

SD 0.00572158

Variance 3.27365E-005

Project: Celsa

Project Number: LMB_Celsa

Southern - Cadmium

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.000115653	10% of values less than 0.000122411	25% of values less than 0.000139807
50% of values less than 0.000165159	75% of values less than 0.000192563	90% of values less than 0.000208032
Minimum 0.000110393	Maximum 0.000219933	
Mean 0.000165708	SD 3.10786E-005	Variance 9.65878E-010

Project: Celsa

Project Number: LMB_Celsa

Southern - Chromium

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.00077604

10% of values less than 0.001

25% of values less than 0.00185482

50% of values less than 0.00318162

75% of values less than 0.00456281

90% of values less than 0.00542983

Minimum 0.00050379an 0.00565231

Maximum 0.00588929

Mean 0.0032001

SD 0.00157912

Variance 2.49361E-006

Project: Celsa

Project Number: LMB_Celsa

Southern - Copper

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.000504486	10% of values less than 0.000510282	25% of values less than 0.000524052
50% of values less than 0.000548448	75% of values less than 0.000573473	90% of values less than 0.000589276
Minimum 0.000500034	Maximum 0.000599918	
Mean 0.000548883	SD 2.88125E-005	Variance 8.30163E-010

Project: Celsa

Project Number: LMB_Celsa

Southern - Lead

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.000505332	10% of values less than 0.000511432	25% of values less than 0.000527207
50% of values less than 0.000550597	75% of values less than 0.000574899	90% of values less than 0.000591363
Minimum 0.000500012	Maximum 0.000599838	
Mean 0.000551054	SD 2.85894E-005	Variance 8.17351E-010

Project: Celsa

Project Number: LMB_Celsa

Southern - Mercury

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 1E-005	10% of values less than 1E-005	25% of values less than 1E-005
50% of values less than 1E-005	75% of values less than 1E-005	90% of values less than 1E-005
Minimum 1E-005s than 1E-005	Maximum 1E-005	
Mean 1E-005	SD 1.67813E-012	Variance 2.81611E-024

Project: Celsa

Project Number: LMB_Celsa

Southern - Nickel

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.000831184

10% of values less than 0.000952089

25% of values less than 0.00122035

50% of values less than 0.00170343

75% of values less than 0.00217466

90% of values less than 0.00251284

Minimum 0.000733607 to 0.00259876

Maximum 0.00269982

Mean 0.00170903

SD 0.000565154

Variance 3.19399E-007

Project: Celsa

Project Number: LMB_Celsa

Southern - Oils/Hydrocarbons

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.000660451	10% of values less than 0.000828532	25% of values less than 0.00131072
50% of values less than 0.00208254	75% of values less than 0.00295201	90% of values less than 0.0212994
Minimum 0.0005028231 0.0425095	Maximum 0.222754	
Mean 0.00864226	SD 0.0215195	Variance 0.000463088

Project: Celsa

Project Number: LMB_Celsa

Southern - Zinc

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.00269717	10% of values less than 0.00295451	25% of values less than 0.00371117
50% of values less than 0.00501809	75% of values less than 0.00642142	90% of values less than 0.00725653
Minimum 0.0025ss than 0.00753425	Maximum 0.00779951	
Mean 0.00508407	SD 0.00154823	Variance 2.39701E-006

Project: Celsa

Project Number: LMB_Celsa

Arsenic

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 4.47133	10% of values less than 5.01889	25% of values less than 6.26866
50% of values less than 8.28524	75% of values less than 12.1884	90% of values less than 19.7805
Minimum 2.69926s than 26.8909	Maximum 64.5954	
Mean 10.8539	SD 7.76562	Variance 60.3049

Retarded Travel Time to Northern Receptor [years]

05% of values less than 4097.19	10% of values less than 4858.09	25% of values less than 7573.82
50% of values less than 13111.5	75% of values less than 26998.6	90% of values less than 51768.4
Minimum 2154.42s than 75103.2	Maximum 210552	
Mean 22618.3	SD 25446.2	Variance 6.4751E+008

Project: Celsa

Project Number: LMB_Celsa

Cadmium

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 4.47133	10% of values less than 5.01889	25% of values less than 6.26866
50% of values less than 8.28524	75% of values less than 12.1884	90% of values less than 19.7805
Minimum 2.69926s than 26.8909	Maximum 64.5954	
Mean 10.8539	SD 7.76562	Variance 60.3049

Retarded Travel Time to Northern Receptor [years]

05% of values less than 2227.54	10% of values less than 2530.24	25% of values less than 3228.7
50% of values less than 4462.17	75% of values less than 7185.68	90% of values less than 12081.6
Minimum 1396.32s than 16795	Maximum 44606.1	
Mean 6263.8	SD 5156.9	Variance 2.65936E+007

Project: Celsa

Project Number: LMB_Celsa

Chromium

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 4.47133	10% of values less than 5.01889	25% of values less than 6.26866
50% of values less than 8.28524	75% of values less than 12.1884	90% of values less than 19.7805
Minimum 2.69926s than 26.8909	Maximum 64.5954	
Mean 10.8539	SD 7.76562	Variance 60.3049

Retarded Travel Time to Northern Receptor [years]

05% of values less than 39281.5	10% of values less than 46597.2	25% of values less than 72661.2
50% of values less than 125798	75% of values less than 259107	90% of values less than 496792
Minimum 20650ss than 720768	Maximum 2.02075E+006	
Mean 217043	SD 244218	Variance 5.96427E+010

Project: Celsa

Project Number: LMB_Celsa

Copper

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 4.47133	10% of values less than 5.01889	25% of values less than 6.26866
50% of values less than 8.28524	75% of values less than 12.1884	90% of values less than 19.7805
Minimum 2.69926s than 26.8909	Maximum 64.5954	
Mean 10.8539	SD 7.76562	Variance 60.3049

Retarded Travel Time to Northern Receptor [years]

05% of values less than 2227.54	10% of values less than 2530.24	25% of values less than 3228.7
50% of values less than 4462.17	75% of values less than 7185.68	90% of values less than 12081.6
Minimum 1396.32s than 16795	Maximum 44606.1	
Mean 6263.8	SD 5156.9	Variance 2.65936E+007

Project: Celsa

Project Number: LMB_Celsa

Lead

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 4.47133	10% of values less than 5.01889	25% of values less than 6.26866
50% of values less than 8.28524	75% of values less than 12.1884	90% of values less than 19.7805
Minimum 2.69926s than 26.8909	Maximum 64.5954	
Mean 10.8539	SD 7.76562	Variance 60.3049

Retarded Travel Time to Northern Receptor [years]

05% of values less than 29462.6	10% of values less than 34949.1	25% of values less than 54497.3
50% of values less than 94350.7	75% of values less than 194333	90% of values less than 372600
Minimum 15488.5s than 540582	Maximum 1.51557E+006	
Mean 162785	SD 183166	Variance 3.35497E+010

Project: Celsa

Project Number: LMB_Celsa

Mercury

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 4.47133	10% of values less than 5.01889	25% of values less than 6.26866
50% of values less than 8.28524	75% of values less than 12.1884	90% of values less than 19.7805
Minimum 2.69926s than 26.8909	Maximum 64.5954	
Mean 10.8539	SD 7.76562	Variance 60.3049

Retarded Travel Time to Northern Receptor [years]

05% of values less than 4097.19	10% of values less than 4858.09	25% of values less than 7573.82
50% of values less than 13111.5	75% of values less than 26998.6	90% of values less than 51768.4
Minimum 2154.42s than 75103.2	Maximum 210552	
Mean 22618.3	SD 25446.2	Variance 6.4751E+008

Project: Celsa

Project Number: LMB_Celsa

Nickel

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 4.47133	10% of values less than 5.01889	25% of values less than 6.26866
50% of values less than 8.28524	75% of values less than 12.1884	90% of values less than 19.7805
Minimum 2.69926s than 26.8909	Maximum 64.5954	
Mean 10.8539	SD 7.76562	Variance 60.3049

Retarded Travel Time to Northern Receptor [years]

05% of values less than 4097.19	10% of values less than 4858.09	25% of values less than 7573.82
50% of values less than 13111.5	75% of values less than 26998.6	90% of values less than 51768.4
Minimum 2154.42s than 75103.2	Maximum 210552	
Mean 22618.3	SD 25446.2	Variance 6.4751E+008

Project: Celsa

Project Number: LMB_Celsa

Oils/Hydrocarbons

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 4.47133	10% of values less than 5.01889	25% of values less than 6.26866
50% of values less than 8.28524	75% of values less than 12.1884	90% of values less than 19.7805
Minimum 2.69926s than 26.8909	Maximum 64.5954	
Mean 10.8539	SD 7.76562	Variance 60.3049

Retarded Travel Time to Northern Receptor [years]

05% of values less than 128.363	10% of values less than 207.763	25% of values less than 432.214
50% of values less than 804.706	75% of values less than 1438.68	90% of values less than 2565.09
Minimum 36.0082s than 3903.2	Maximum 13264	
Mean 1227.75	SD 1445.18	Variance 2.08855E+006

Project: Celsa

Project Number: LMB_Celsa

Zinc

Unretarded Travel Time to Northern Receptor [years]

05% of values less than 4.47133	10% of values less than 5.01889	25% of values less than 6.26866
50% of values less than 8.28524	75% of values less than 12.1884	90% of values less than 19.7805
Minimum 2.69926s than 26.8909	Maximum 64.5954	
Mean 10.8539	SD 7.76562	Variance 60.3049

Retarded Travel Time to Northern Receptor [years]

05% of values less than 2147.29	10% of values less than 2349.27	25% of values less than 2738.81
50% of values less than 3374	75% of values less than 4378.9	90% of values less than 6221.78
Minimum 1482.69s than 8089.5	Maximum 18734.5	
Mean 3962.39	SD 2031.29	Variance 4.12613E+006

Project: Celsa

Project Number: LMB_Celsa

Arsenic

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.006466	10% of values less than 0.00732636	25% of values less than 0.00999781
50% of values less than 0.0149146	75% of values less than 0.0199853	90% of values less than 0.0233061
Minimum 0.0059035nan 0.02416	Maximum 0.0249738	
Mean 0.0151636	SD 0.00572158	Variance 3.27365E-005

Project: Celsa

Project Number: LMB_Celsa

Cadmium

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.000115653	10% of values less than 0.000122411	25% of values less than 0.000139807
50% of values less than 0.000165159	75% of values less than 0.000192563	90% of values less than 0.000208032
Minimum 0.000110393	Maximum 0.000219933	
Mean 0.000165708	SD 3.10786E-005	Variance 9.65878E-010

Project: Celsa

Project Number: LMB_Celsa

Chromium

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.00077604

10% of values less than 0.001

25% of values less than 0.00185482

50% of values less than 0.00318162

75% of values less than 0.00456281

90% of values less than 0.00542983

Minimum 0.00050379an 0.00565231

Maximum 0.00588929

Mean 0.0032001

SD 0.00157912

Variance 2.49361E-006

Project: Celsa

Project Number: LMB_Celsa

Copper

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.000504486	10% of values less than 0.000510282	25% of values less than 0.000524052
50% of values less than 0.000548448	75% of values less than 0.000573473	90% of values less than 0.000589276
Minimum 0.000500034	Maximum 0.000599918	
Mean 0.000548883	SD 2.88125E-005	Variance 8.30163E-010

Project: Celsa

Project Number: LMB_Celsa

Lead

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.000505332	10% of values less than 0.000511432	25% of values less than 0.000527207
50% of values less than 0.000550597	75% of values less than 0.000574899	90% of values less than 0.000591363
Minimum 0.000500012	Maximum 0.000599838	
Mean 0.000551054	SD 2.85894E-005	Variance 8.17351E-010

Project: Celsa

Project Number: LMB_Celsa

Mercury

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 1E-005	10% of values less than 1E-005	25% of values less than 1E-005
50% of values less than 1E-005	75% of values less than 1E-005	90% of values less than 1E-005
Minimum 1E-005s than 1E-005	Maximum 1E-005	
Mean 1E-005	SD 1.67813E-012	Variance 2.81611E-024

Project: Celsa

Project Number: LMB_Celsa

Nickel

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.000831184

10% of values less than 0.000952089

25% of values less than 0.00122035

50% of values less than 0.00170343

75% of values less than 0.00217466

90% of values less than 0.00251284

Minimum 0.000733607 0.00259876

Maximum 0.00269982

Mean 0.00170903

SD 0.000565154

Variance 3.19399E-007

Project: Celsa

Project Number: LMB_Celsa

Oils/Hydrocarbons

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.000761696	10% of values less than 0.00105002	25% of values less than 0.00178674
50% of values less than 0.00294118	75% of values less than 0.028418	90% of values less than 0.0796007
Minimum 0.000502823 to 0.119178	Maximum 0.384178	
Mean 0.0259119	SD 0.0474054	Variance 0.00224727

Project: Celsa

Project Number: LMB_Celsa

Zinc

Concentration at Northern Receptor [mg/l] - 1000 years

05% of values less than 0.00269717

10% of values less than 0.00295451

25% of values less than 0.00371117

50% of values less than 0.00501809

75% of values less than 0.00642142

90% of values less than 0.00725653

Minimum 0.0025ss than 0.00753425

Maximum 0.00779951

Mean 0.00508407

SD 0.00154823

Variance 2.39701E-006

Project: Celsa

Project Number: LMB_Celsa

Arsenic

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 3.95937	10% of values less than 4.48397	25% of values less than 5.28887
50% of values less than 6.77199	75% of values less than 9.03475	90% of values less than 13.5823
Minimum 2.30733s than 18.006	Maximum 35.5647	
Mean 8.1436	SD 4.76281	Variance 22.6843

Retarded Travel Time to Southern Receptor [years]

05% of values less than 3492.84	10% of values less than 4043.18	25% of values less than 5237
50% of values less than 8206.59	75% of values less than 15311.2	90% of values less than 29463.1
Minimum 2267.61s than 46241	Maximum 109464	
Mean 13713.6	SD 15117.4	Variance 2.28536E+008

Project: Celsa

Project Number: LMB_Celsa

Cadmium

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 3.95937	10% of values less than 4.48397	25% of values less than 5.28887
50% of values less than 6.77199	75% of values less than 9.03475	90% of values less than 13.5823
Minimum 2.30733s than 18.006	Maximum 35.5647	
Mean 8.1436	SD 4.76281	Variance 22.6843

Retarded Travel Time to Southern Receptor [years]

05% of values less than 1976.3	10% of values less than 2206	25% of values less than 2719.4
50% of values less than 3477.46	75% of values less than 4925.53	90% of values less than 7863.37
Minimum 1384.04s than 11066.3	Maximum 23651.7	
Mean 4477.43	SD 3104.23	Variance 9.63625E+006

Project: Celsa

Project Number: LMB_Celsa

Chromium

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 3.95937	10% of values less than 4.48397	25% of values less than 5.28887
50% of values less than 6.77199	75% of values less than 9.03475	90% of values less than 13.5823
Minimum 2.30733s than 18.006	Maximum 35.5647	
Mean 8.1436	SD 4.76281	Variance 22.6843

Retarded Travel Time to Southern Receptor [years]

05% of values less than 33494.6	10% of values less than 38747.3	25% of values less than 50238.8
50% of values less than 78711.8	75% of values less than 146912	90% of values less than 282722
Minimum 21749.2s than 443746	Maximum 1.05058E+006	
Mean 131580	SD 145088	Variance 2.10506E+010

Project: Celsa

Project Number: LMB_Celsa

Copper

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 3.95937	10% of values less than 4.48397	25% of values less than 5.28887
50% of values less than 6.77199	75% of values less than 9.03475	90% of values less than 13.5823
Minimum 2.30733s than 18.006	Maximum 35.5647	
Mean 8.1436	SD 4.76281	Variance 22.6843

Retarded Travel Time to Southern Receptor [years]

05% of values less than 1976.3	10% of values less than 2206	25% of values less than 2719.4
50% of values less than 3477.46	75% of values less than 4925.53	90% of values less than 7863.37
Minimum 1384.04s than 11066.3	Maximum 23651.7	
Mean 4477.43	SD 3104.23	Variance 9.63625E+006

Project: Celsa

Project Number: LMB_Celsa

Lead

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 3.95937	10% of values less than 4.48397	25% of values less than 5.28887
50% of values less than 6.77199	75% of values less than 9.03475	90% of values less than 13.5823
Minimum 2.30733s than 18.006	Maximum 35.5647	
Mean 8.1436	SD 4.76281	Variance 22.6843

Retarded Travel Time to Southern Receptor [years]

05% of values less than 25122	10% of values less than 29062.4	25% of values less than 37680.2
50% of values less than 59035.9	75% of values less than 110186	90% of values less than 212045
Minimum 16312.5s than 332814	Maximum 787942	
Mean 98686.9	SD 108817	Variance 1.18412E+010

Project: Celsa

Project Number: LMB_Celsa

Mercury

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 3.95937	10% of values less than 4.48397	25% of values less than 5.28887
50% of values less than 6.77199	75% of values less than 9.03475	90% of values less than 13.5823
Minimum 2.30733s than 18.006	Maximum 35.5647	
Mean 8.1436	SD 4.76281	Variance 22.6843

Retarded Travel Time to Southern Receptor [years]

05% of values less than 3492.84	10% of values less than 4043.18	25% of values less than 5237
50% of values less than 8206.59	75% of values less than 15311.2	90% of values less than 29463.1
Minimum 2267.61s than 46241	Maximum 109464	
Mean 13713.6	SD 15117.4	Variance 2.28536E+008

Project: Celsa

Project Number: LMB_Celsa

Nickel

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 3.95937	10% of values less than 4.48397	25% of values less than 5.28887
50% of values less than 6.77199	75% of values less than 9.03475	90% of values less than 13.5823
Minimum 2.30733s than 18.006	Maximum 35.5647	
Mean 8.1436	SD 4.76281	Variance 22.6843

Retarded Travel Time to Southern Receptor [years]

05% of values less than 3492.84	10% of values less than 4043.18	25% of values less than 5237
50% of values less than 8206.59	75% of values less than 15311.2	90% of values less than 29463.1
Minimum 2267.61s than 46241	Maximum 109464	
Mean 13713.6	SD 15117.4	Variance 2.28536E+008

Project: Celsa

Project Number: LMB_Celsa

Oils/Hydrocarbons

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 3.95937	10% of values less than 4.48397	25% of values less than 5.28887
50% of values less than 6.77199	75% of values less than 9.03475	90% of values less than 13.5823
Minimum 2.30733s than 18.006	Maximum 35.5647	
Mean 8.1436	SD 4.76281	Variance 22.6843

Retarded Travel Time to Southern Receptor [years]

05% of values less than 221.869	10% of values less than 327.205	25% of values less than 679.909
50% of values less than 1200.73	75% of values less than 2048.17	90% of values less than 3384.45
Minimum 56.979ss than 4197.19	Maximum 8309.22	
Mean 1571.98	SD 1314.52	Variance 1.72797E+006

Project: Celsa

Project Number: LMB_Celsa

Zinc

Unretarded Travel Time to Southern Receptor [years]

05% of values less than 3.95937	10% of values less than 4.48397	25% of values less than 5.28887
50% of values less than 6.77199	75% of values less than 9.03475	90% of values less than 13.5823
Minimum 2.30733s than 18.006	Maximum 35.5647	
Mean 8.1436	SD 4.76281	Variance 22.6843

Retarded Travel Time to Southern Receptor [years]

05% of values less than 2007.77	10% of values less than 2172.1	25% of values less than 2474.76
50% of values less than 2938.83	75% of values less than 3567.57	90% of values less than 4613.33
Minimum 1513.62s than 5868.84	Maximum 10795	
Mean 3262.22	SD 1280.47	Variance 1.6396E+006

Project: Celsa

Project Number: LMB_Celsa

Arsenic

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.006466	10% of values less than 0.00732636	25% of values less than 0.00999781
50% of values less than 0.0149146	75% of values less than 0.0199853	90% of values less than 0.0233061
Minimum 0.0059035nan 0.02416	Maximum 0.0249738	
Mean 0.0151636	SD 0.00572158	Variance 3.27365E-005

Project: Celsa

Project Number: LMB_Celsa

Cadmium

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.000115653	10% of values less than 0.000122411	25% of values less than 0.000139807
50% of values less than 0.000165159	75% of values less than 0.000192563	90% of values less than 0.000208032
Minimum 0.000110393	Maximum 0.000219933	
Mean 0.000165708	SD 3.10786E-005	Variance 9.65878E-010

Project: Celsa

Project Number: LMB_Celsa

Chromium

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.00077604

10% of values less than 0.001

25% of values less than 0.00185482

50% of values less than 0.00318162

75% of values less than 0.00456281

90% of values less than 0.00542983

Minimum 0.00050379an 0.00565231

Maximum 0.00588929

Mean 0.0032001

SD 0.00157912

Variance 2.49361E-006

Project: Celsa

Project Number: LMB_Celsa

Copper

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.000504486	10% of values less than 0.000510282	25% of values less than 0.000524052
50% of values less than 0.000548448	75% of values less than 0.000573473	90% of values less than 0.000589276
Minimum 0.000500034	Maximum 0.000599918	
Mean 0.000548883	SD 2.88125E-005	Variance 8.30163E-010

Project: Celsa

Project Number: LMB_Celsa

Lead

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.000505332	10% of values less than 0.000511432	25% of values less than 0.000527207
50% of values less than 0.000550597	75% of values less than 0.000574899	90% of values less than 0.000591363
Minimum 0.000500012	Maximum 0.000599838	
Mean 0.000551054	SD 2.85894E-005	Variance 8.17351E-010

Project: Celsa

Project Number: LMB_Celsa

Mercury

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 1E-005	10% of values less than 1E-005	25% of values less than 1E-005
50% of values less than 1E-005	75% of values less than 1E-005	90% of values less than 1E-005
Minimum 1E-005s than 1E-005	Maximum 1E-005	
Mean 1E-005	SD 1.67813E-012	Variance 2.81611E-024

Project: Celsa

Project Number: LMB_Celsa

Nickel

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.000831184

10% of values less than 0.000952089

25% of values less than 0.00122035

50% of values less than 0.00170343

75% of values less than 0.00217466

90% of values less than 0.00251284

Minimum 0.000733607 0.00259876

Maximum 0.00269982

Mean 0.00170903

SD 0.000565154

Variance 3.19399E-007

Project: Celsa

Project Number: LMB_Celsa

Oils/Hydrocarbons

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.000711035

10% of values less than 0.000912152

25% of values less than 0.00153832

50% of values less than 0.00247714

75% of values less than 0.0185157

90% of values less than 0.0521466

Minimum 0.000502823 0.0890843

Maximum 0.337008

Mean 0.0182157

SD 0.0363775

Variance 0.00132332

Project: Celsa

Project Number: LMB_Celsa

Zinc

Concentration at Southern Receptor [mg/l] - 1000 years

05% of values less than 0.00269717	10% of values less than 0.00295451	25% of values less than 0.00371117
50% of values less than 0.00501809	75% of values less than 0.00642142	90% of values less than 0.00725653
Minimum 0.0025ss than 0.00753425	Maximum 0.00779951	
Mean 0.00508407	SD 0.00154823	Variance 2.39701E-006

Project: Celsa

Project Number: LMB_Celsa

Arsenic

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 4.62573	10% of values less than 5.21743	25% of values less than 6.36479
50% of values less than 8.1303	75% of values less than 12.2757	90% of values less than 20.311
Minimum 3.20182s than 27.0241	Maximum 49.5747	
Mean 10.8283	SD 7.33857	Variance 53.8547

Retarded Travel Time to 50m compliance point [years]

05% of values less than 5380.22	10% of values less than 6159.51	25% of values less than 8089.24
50% of values less than 13455.6	75% of values less than 27460.5	90% of values less than 54166.4
Minimum 3673.68s than 73880.9	Maximum 162694	
Mean 22767.6	SD 23935.8	Variance 5.72923E+008

Project: Celsa

Project Number: LMB_Celsa

Cadmium

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 4.62573	10% of values less than 5.21743	25% of values less than 6.36479
50% of values less than 8.1303	75% of values less than 12.2757	90% of values less than 20.311
Minimum 3.20182s than 27.0241	Maximum 49.5747	
Mean 10.8283	SD 7.33857	Variance 53.8547

Retarded Travel Time to 50m compliance point [years]

05% of values less than 2463.1	10% of values less than 2708.86	25% of values less than 3331.51
50% of values less than 4492.05	75% of values less than 7088.05	90% of values less than 12463.6
Minimum 1710.47s than 16627.8	Maximum 34907.7	
Mean 6290.24	SD 4849.47	Variance 2.35173E+007

Project: Celsa

Project Number: LMB_Celsa

Chromium

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 4.62573	10% of values less than 5.21743	25% of values less than 6.36479
50% of values less than 8.1303	75% of values less than 12.2757	90% of values less than 20.311
Minimum 3.20182s than 27.0241	Maximum 49.5747	
Mean 10.8283	SD 7.33857	Variance 53.8547

Retarded Travel Time to 50m compliance point [years]

05% of values less than 51602.9	10% of values less than 59070.3	25% of values less than 77607.2
50% of values less than 129109	75% of values less than 263515	90% of values less than 519804
Minimum 35233.1s than 709060	Maximum 1.56146E+006	
Mean 218476	SD 229722	Variance 5.27724E+010

Project: Celsa

Project Number: LMB_Celsa

Copper

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 4.62573	10% of values less than 5.21743	25% of values less than 6.36479
50% of values less than 8.1303	75% of values less than 12.2757	90% of values less than 20.311
Minimum 3.20182s than 27.0241	Maximum 49.5747	
Mean 10.8283	SD 7.33857	Variance 53.8547

Retarded Travel Time to 50m compliance point [years]

05% of values less than 2463.1	10% of values less than 2708.86	25% of values less than 3331.51
50% of values less than 4492.05	75% of values less than 7088.05	90% of values less than 12463.6
Minimum 1710.47s than 16627.8	Maximum 34907.7	
Mean 6290.24	SD 4849.47	Variance 2.35173E+007

Project: Celsa

Project Number: LMB_Celsa

Lead

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 4.62573	10% of values less than 5.21743	25% of values less than 6.36479
50% of values less than 8.1303	75% of values less than 12.2757	90% of values less than 20.311
Minimum 3.20182s than 27.0241	Maximum 49.5747	
Mean 10.8283	SD 7.33857	Variance 53.8547

Retarded Travel Time to 50m compliance point [years]

05% of values less than 38703.5	10% of values less than 44304.5	25% of values less than 58206.9
50% of values less than 96833.6	75% of values less than 197640	90% of values less than 389858
Minimum 26425.9s than 531801	Maximum 1.17111E+006	
Mean 163859	SD 172294	Variance 2.96851E+010

Project: Celsa

Project Number: LMB_Celsa

Mercury

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 4.62573	10% of values less than 5.21743	25% of values less than 6.36479
50% of values less than 8.1303	75% of values less than 12.2757	90% of values less than 20.311
Minimum 3.20182s than 27.0241	Maximum 49.5747	
Mean 10.8283	SD 7.33857	Variance 53.8547

Retarded Travel Time to 50m compliance point [years]

05% of values less than 5380.22	10% of values less than 6159.51	25% of values less than 8089.24
50% of values less than 13455.6	75% of values less than 27460.5	90% of values less than 54166.4
Minimum 3673.68s than 73880.9	Maximum 162694	
Mean 22767.6	SD 23935.8	Variance 5.72923E+008

Project: Celsa

Project Number: LMB_Celsa

Nickel*Unretarded Travel Time to 50m compliance point [years]*

05% of values less than 4.62573	10% of values less than 5.21743	25% of values less than 6.36479
50% of values less than 8.1303	75% of values less than 12.2757	90% of values less than 20.311
Minimum 3.20182s than 27.0241	Maximum 49.5747	
Mean 10.8283	SD 7.33857	Variance 53.8547

Retarded Travel Time to 50m compliance point [years]

05% of values less than 5380.22	10% of values less than 6159.51	25% of values less than 8089.24
50% of values less than 13455.6	75% of values less than 27460.5	90% of values less than 54166.4
Minimum 3673.68s than 73880.9	Maximum 162694	
Mean 22767.6	SD 23935.8	Variance 5.72923E+008

Project: Celsa

Project Number: LMB_Celsa

Oils/Hydrocarbons

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 4.62573	10% of values less than 5.21743	25% of values less than 6.36479
50% of values less than 8.1303	75% of values less than 12.2757	90% of values less than 20.311
Minimum 3.20182s than 27.0241	Maximum 49.5747	
Mean 10.8283	SD 7.33857	Variance 53.8547

Retarded Travel Time to 50m compliance point [years]

05% of values less than 253.034	10% of values less than 385.534	25% of values less than 773.102
50% of values less than 1425.52	75% of values less than 2487.51	90% of values less than 4352.41
Minimum 61.436ss than 5526.71	Maximum 14008.4	
Mean 1952.15	SD 1777.13	Variance 3.15818E+006

Project: Celsa

Project Number: LMB_Celsa

Zinc

Unretarded Travel Time to 50m compliance point [years]

05% of values less than 4.62573	10% of values less than 5.21743	25% of values less than 6.36479
50% of values less than 8.1303	75% of values less than 12.2757	90% of values less than 20.311
Minimum 3.20182s than 27.0241	Maximum 49.5747	
Mean 10.8283	SD 7.33857	Variance 53.8547

Retarded Travel Time to 50m compliance point [years]

05% of values less than 2195.26	10% of values less than 2385.2	25% of values less than 2738.56
50% of values less than 3355.85	75% of values less than 4397.6	90% of values less than 6429.84
Minimum 1614.09s than 7884.78	Maximum 15551.2	
Mean 3952.5	SD 1923.38	Variance 3.69939E+006

Project: Celsa

Project Number: LMB_Celsa

Arsenic

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.006466	10% of values less than 0.00732636	25% of values less than 0.00999781
50% of values less than 0.0149146	75% of values less than 0.0199853	90% of values less than 0.0233061
Minimum 0.0059035nan 0.02416	Maximum 0.0249738	
Mean 0.0151636	SD 0.00572158	Variance 3.27365E-005

Project: Celsa

Project Number: LMB_Celsa

Cadmium

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.000115653	10% of values less than 0.000122411	25% of values less than 0.000139807
50% of values less than 0.000165159	75% of values less than 0.000192563	90% of values less than 0.000208032
Minimum 0.000110393	Maximum 0.000219933	
Mean 0.000165708	SD 3.10786E-005	Variance 9.65878E-010

Project: Celsa

Project Number: LMB_Celsa

Chromium

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.00077604	10% of values less than 0.001	25% of values less than 0.00185482
50% of values less than 0.00318162	75% of values less than 0.00456281	90% of values less than 0.00542983
Minimum 0.00050379an 0.00565231	Maximum 0.00588929	
Mean 0.0032001	SD 0.00157912	Variance 2.49361E-006

Project: Celsa

Project Number: LMB_Celsa

Copper

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.000504486	10% of values less than 0.000510282	25% of values less than 0.000524052
50% of values less than 0.000548448	75% of values less than 0.000573473	90% of values less than 0.000589276
Minimum 0.000500034	Maximum 0.000599918	
Mean 0.000548883	SD 2.88125E-005	Variance 8.30163E-010

Project: Celsa

Project Number: LMB_Celsa

Lead

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.000505332	10% of values less than 0.000511432	25% of values less than 0.000527207
50% of values less than 0.000550597	75% of values less than 0.000574899	90% of values less than 0.000591363
Minimum 0.000500012	Maximum 0.000599838	
Mean 0.000551054	SD 2.85894E-005	Variance 8.17351E-010

Project: Celsa

Project Number: LMB_Celsa

Mercury

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 1E-005	10% of values less than 1E-005	25% of values less than 1E-005
50% of values less than 1E-005	75% of values less than 1E-005	90% of values less than 1E-005
Minimum 1E-005s than 1E-005	Maximum 1E-005	
Mean 1E-005	SD 1.67813E-012	Variance 2.81611E-024

Project: Celsa

Project Number: LMB_Celsa

Nickel

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.000831184

10% of values less than 0.000952089

25% of values less than 0.00122035

50% of values less than 0.00170343

75% of values less than 0.00217466

90% of values less than 0.00251284

Minimum 0.000733607 0.00259876

Maximum 0.00269982

Mean 0.00170903

SD 0.000565154

Variance 3.19399E-007

Project: Celsa

Project Number: LMB_Celsa

Oils/Hydrocarbons

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.000674718	10% of values less than 0.000867443	25% of values less than 0.00144195
50% of values less than 0.0023292	75% of values less than 0.0113152	90% of values less than 0.0418153
Minimum 0.000502823 0.0638384	Maximum 0.454298	
Mean 0.0141013	SD 0.0322812	Variance 0.00104208

Project: Celsa

Project Number: LMB_Celsa

Zinc

Concentration at 50m compliance point [mg/l] - 1000 years

05% of values less than 0.00269717	10% of values less than 0.00295451	25% of values less than 0.00371117
50% of values less than 0.00501809	75% of values less than 0.00642142	90% of values less than 0.00725653
Minimum 0.0025ss than 0.00753425	Maximum 0.00779951	
Mean 0.00508407	SD 0.00154823	Variance 2.39701E-006

Project: Celsa

Project Number: LMB_Celsa

Aquifer Flow [m³/yr]

Northern

05% of values less than 51.0961	10% of values less than 82.2774	25% of values less than 201.519
50% of values less than 563.434	75% of values less than 1133.46	90% of values less than 1983.03
Minimum 18.4176s than 2744.88	Maximum 7013.22	
Mean 835.113	SD 893.78	Variance 798844

Southern

05% of values less than 67.1701	10% of values less than 108.16	25% of values less than 264.914
50% of values less than 740.68	75% of values less than 1490.03	90% of values less than 2606.86
Minimum 24.2114s than 3608.38	Maximum 9219.46	
Mean 1097.83	SD 1174.95	Variance 1.3805E+006