

ALLIED EXPLORATION & GEOTECHNICS LIMITED

Head Office: Unit 25 Stella Gill Industrial Estate, Pelton Fell, Chester-le-Street, Co. Durham, DH2 2RG - Tel: 0191 387 4700 Fax: 0191 387 4710
Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL - Tel: 01772 735 300 Fax: 01772 735 999

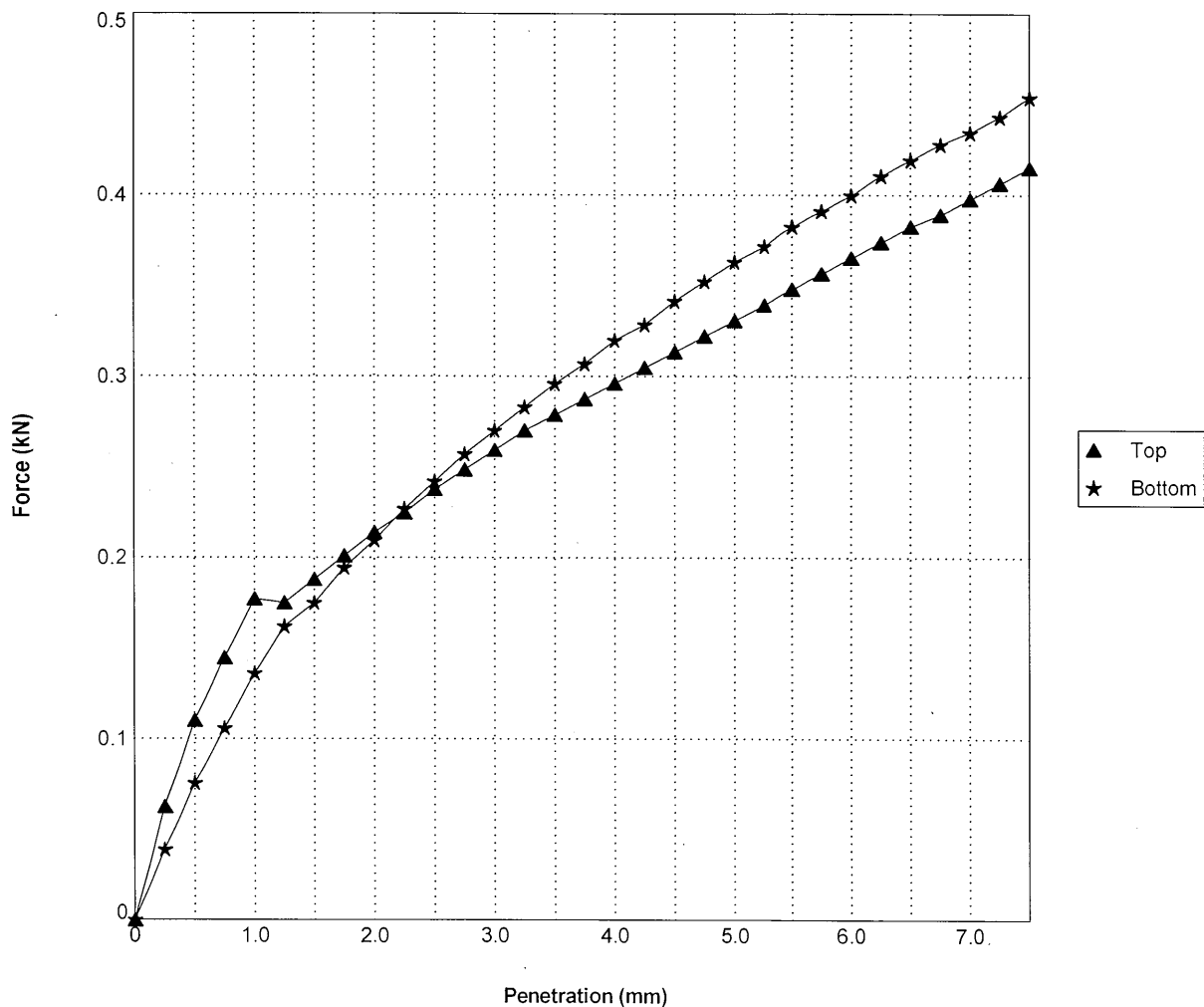
DETERMINATION OF THE CALIFORNIA BEARING RATIO

BS 1377 : Part 4 : 1990 and Part 2 : Clause 3.2 : 1990

Exploratory Hole No.- **PRAIRIE_AUK_TP162** Sample No.- **B6**

Depth (m)- **2.50**

"As Received" Moisture Content (%) :		Surcharge (Kg) :	6
Retained on 20mm (%) :	0.0	Seating Load (N) :	Top 10 / Bottom 10
Correction Needed :	No	Test Moisture Content (%) :	Top 31 / Bottom 30
Soaking Time (Days) :	N/A	Bulk Density (Mg/m ³) :	1.90
Swelling (mm) :	N/A	Dry Density (Mg/m ³) :	1.45
Date Tested :	29/09/2020	CBR Value (%) :	Top 1.8 / Bottom 1.8
Preparation Method :	2.5kg Compaction		
Remarks :			



For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :- **Prairie Site Ground Investigation Works**

Client :- **South Tees Development Corporation**



Signed :- *mzone*

Name :- *M. Zone*

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Date of issue :-
23/10/2020

Certificate No :-
CBR/4251/PRAIRIE_AUK_TP162/B6/2.50/1

AEG Contract No. :-
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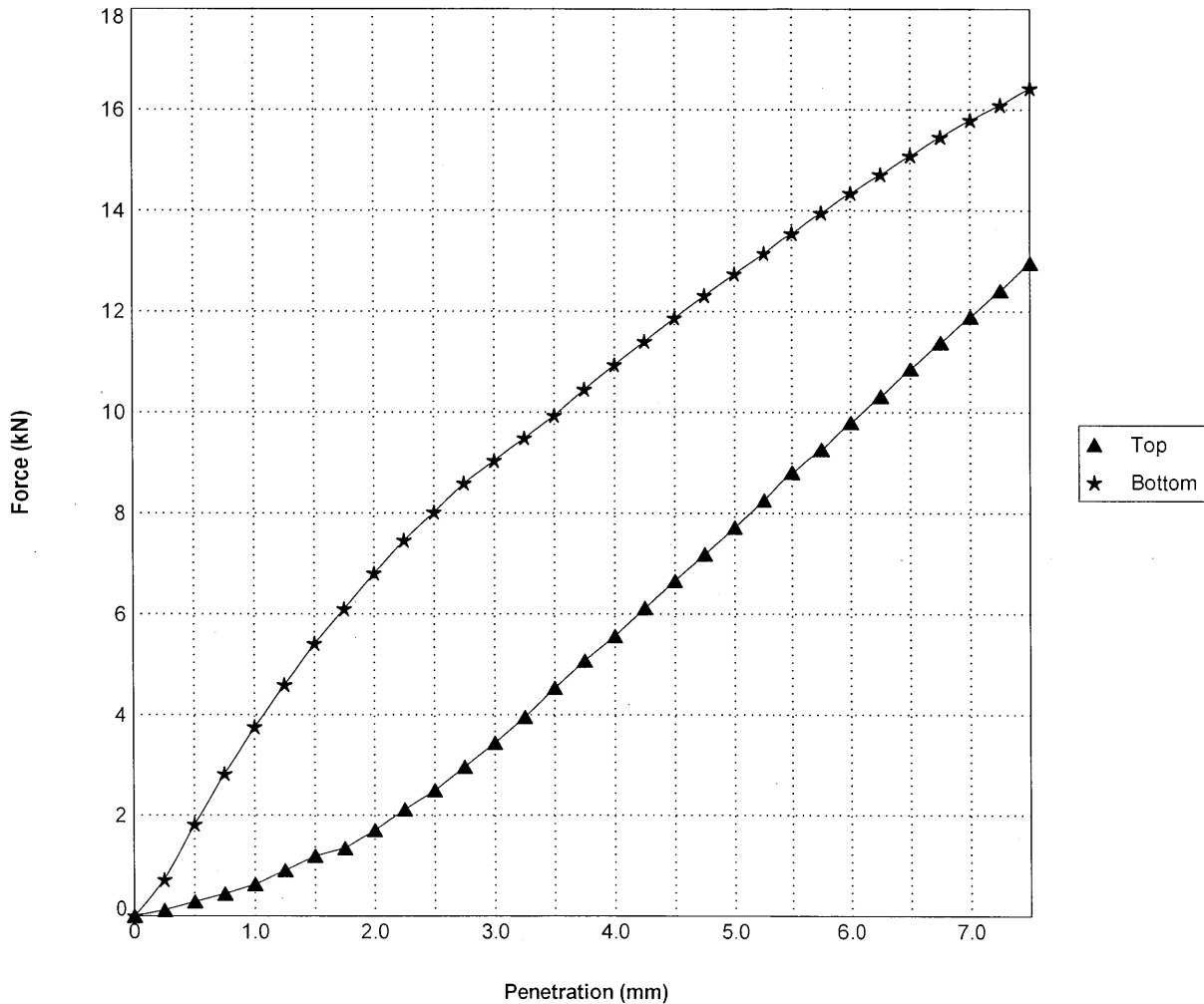
DETERMINATION OF THE CALIFORNIA BEARING RATIO

BS 1377 : Part 4 : 1990 and Part 2 : Clause 3.2 : 1990

Exploratory Hole No.- **PRAIRIE_AUK_TP163** Sample No.- **B2**

Depth (m)- **0.80**

"As Received" Moisture Content (%) :		Surcharge (Kg) :	6
Retained on 20mm (%) :	14.0	Seating Load (N) :	Top 50 / Bottom 50
Correction Needed :	No	Test Moisture Content (%) :	Top 14 / Bottom 14
Soaking Time (Days) :	N/A	Bulk Density (Mg/m ³) :	1.37
Swelling (mm) :	N/A	Dry Density (Mg/m ³) :	1.20
Date Tested :	05/10/2020	CBR Value (%) :	Top 39 / Bottom 64
Preparation Method :	2.5kg Compaction		
Remarks :			



For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :- Prairie Site Ground Investigation Works	Client :- South Tees Development Corporation
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Date of issue :- 23/10/2020	Certificate No :- CBR/4251/PRAIRIE_AUK_TP163/B2/0.80/1	AEG Contract No. :- 4251	
			 1367

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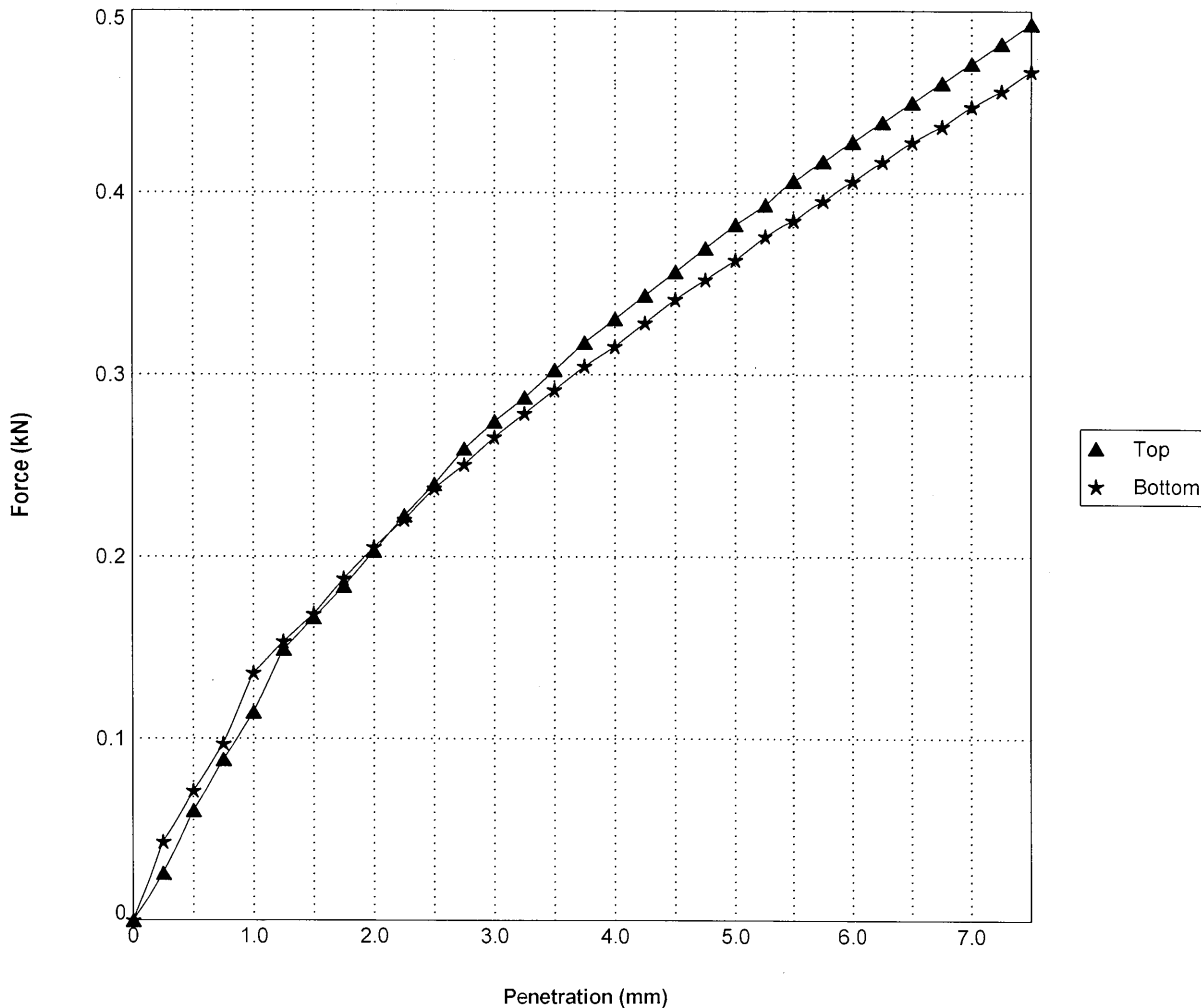
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DETERMINATION OF THE CALIFORNIA BEARING RATIO

BS 1377 : Part 4 : 1990 and Part 2 : Clause 3.2 : 1990

Exploratory Hole No.- **PRAIRIE_AUK_TP163** Sample No.- **B5** Depth (m)- **1.70**

"As Received" Moisture Content (%) :		Surcharge (Kg) :	6
Retained on 20mm (%) :	0.0	Seating Load (N) :	Top 10 / Bottom 10
Correction Needed :	No	Test Moisture Content (%) :	Top 27 / Bottom 27
Soaking Time (Days) :	N/A	Bulk Density (Mg/m ³) :	1.99
Swelling (mm) :	N/A	Dry Density (Mg/m ³) :	1.57
Date Tested :	01/10/2020	CBR Value (%) :	Top 1.9 / Bottom 1.8
Preparation Method :	2.5kg Compaction		
Remarks :			



For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :- Prairie Site Ground Investigation Works	Client :- South Tees Development Corporation
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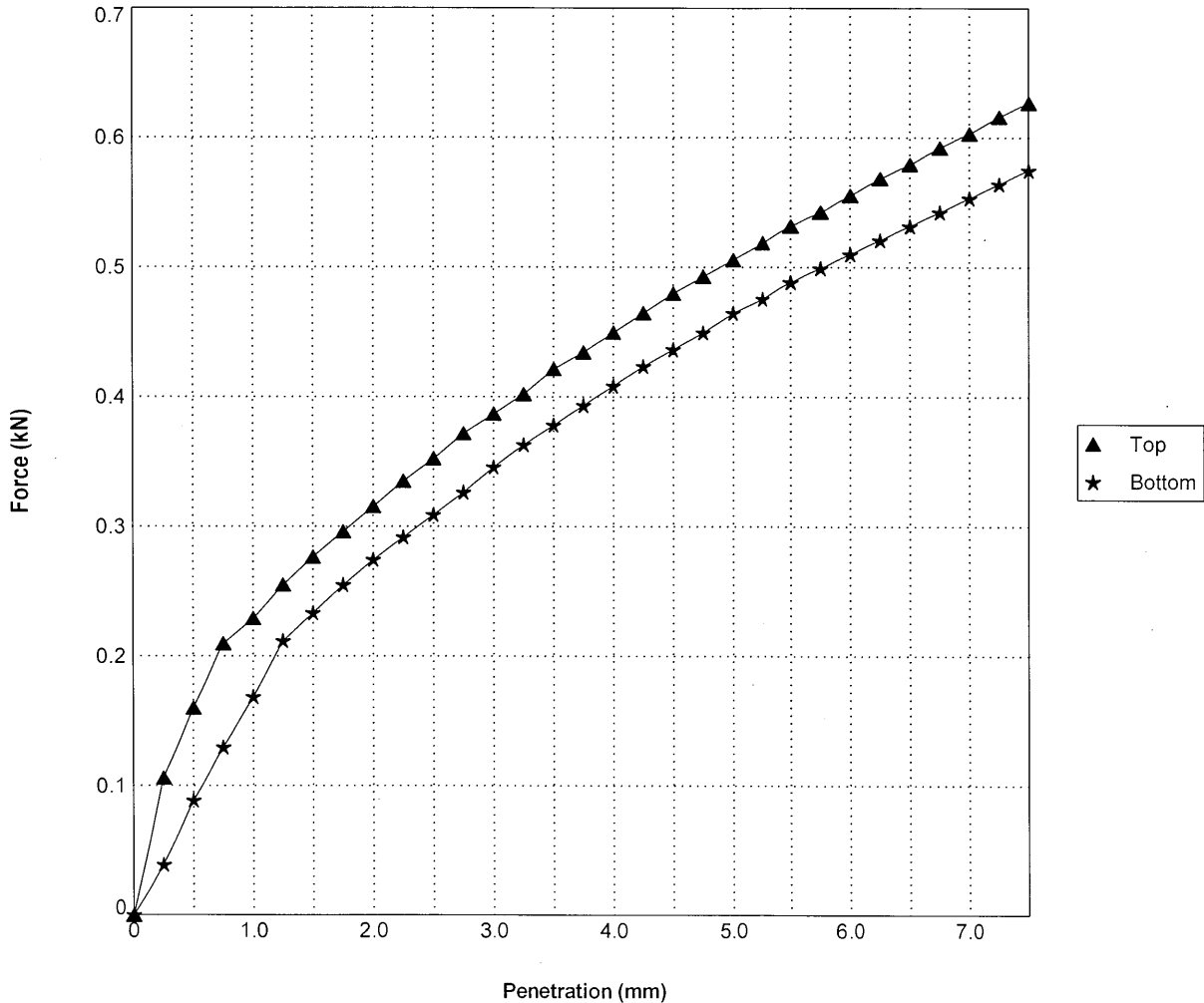
DETERMINATION OF THE CALIFORNIA BEARING RATIO

BS 1377 : Part 4 : 1990 and Part 2 : Clause 3.2 : 1990

Exploratory Hole No.- **PRAIRIE_AUK_TP168** Sample No.- **B7**



Depth (m)- **1.60**

"As Received" Moisture Content (%) :		Surcharge (Kg) :	6
Retained on 20mm (%) :	0.0	Seating Load (N) :	Top 10 / Bottom 10
Correction Needed :	No	Test Moisture Content (%) :	Top 29 / Bottom 30
Soaking Time (Days) :	N/A	Bulk Density (Mg/m ³) :	1.92
Swelling (mm) :	N/A	Dry Density (Mg/m ³) :	1.48
Date Tested :	30/09/2020	CBR Value (%) :	Top 2.7 / Bottom 2.3
Preparation Method :	2.5kg Compaction		
Remarks :			



For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :- Prairie Site Ground Investigation Works	Client :- South Tees Development Corporation
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	Signed :- <i>msere</i>	Name :-	Page 1 of 1
	Date of issue :- 23/10/2020	Certificate No :- CBR/4251/PRAIRIE_AUK_TP168/B7/1.60/1	AEG Contract No. :- 4251
			

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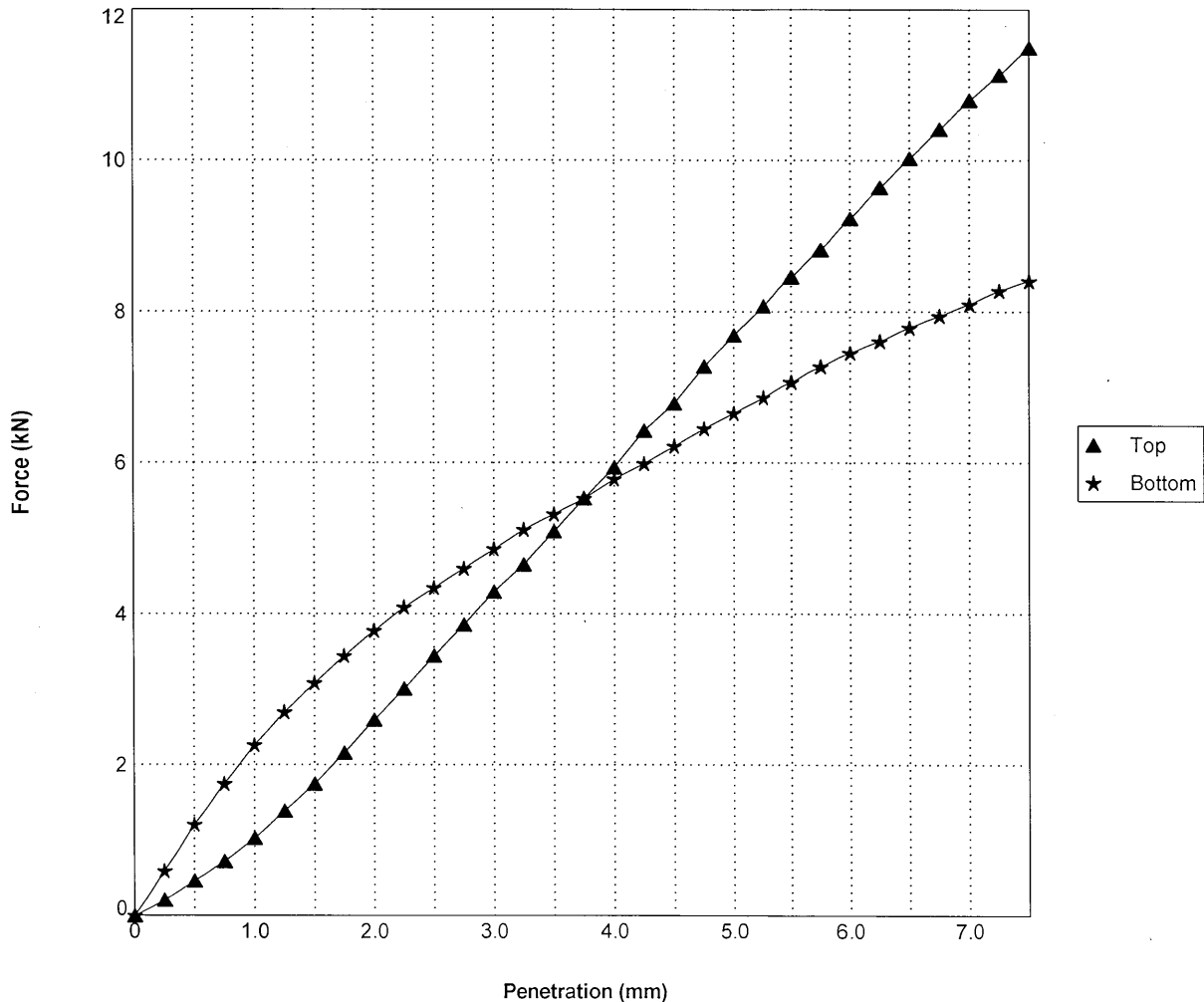
DETERMINATION OF THE CALIFORNIA BEARING RATIO

BS 1377 : Part 4 : 1990 and Part 2 : Clause 3.2 : 1990

Exploratory Hole No.- **PRAIRIE_AUK_TP173** Sample No.- **B2**

Depth (m)- **0.80**

"As Received" Moisture Content (%) :		Surcharge (Kg) :	6
Retained on 20mm (%) :	22.0	Seating Load (N) :	Top 250 / Bottom 250
Correction Needed :	No	Test Moisture Content (%) :	Top 20 / Bottom 20
Soaking Time (Days) :	N/A	Bulk Density (Mg/m ³) :	1.77
Swelling (mm) :	N/A	Dry Density (Mg/m ³) :	1.48
Date Tested :	30/09/2020	CBR Value (%) :	Top 39 / Bottom 33
Preparation Method :	2.5kg Compaction		
Remarks :			



For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :- **Prairie Site Ground Investigation Works**

Client :- **South Tees Development Corporation**



Signed :- *msare*
Date of issue :- 23/10/2020

Name :- *M. S. A. R. E.*
Certificate No :- CBR/4251/PRAIRIE_AUK_TP173/B2/0.80/1

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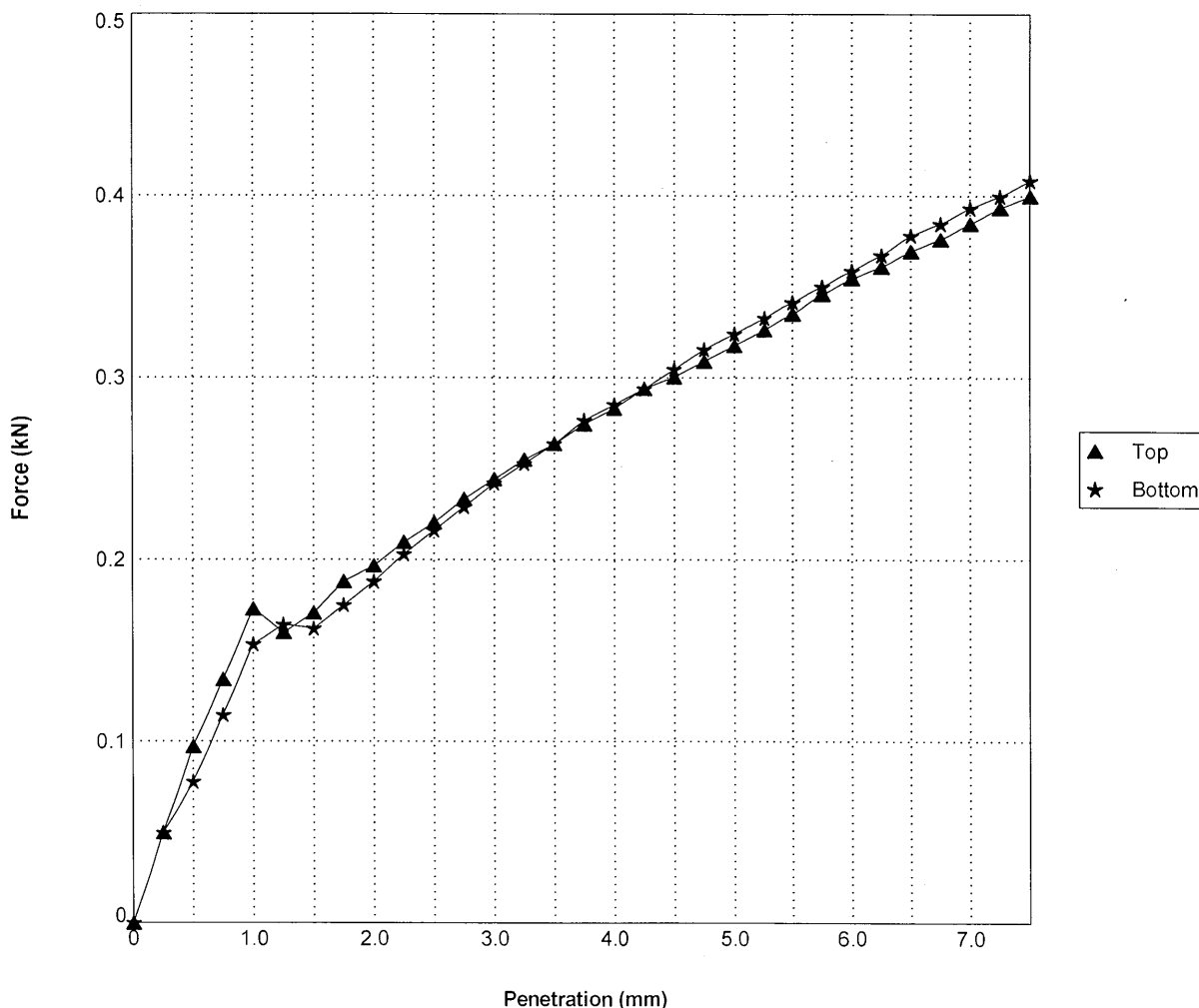
DETERMINATION OF THE CALIFORNIA BEARING RATIO

BS 1377 : Part 4 : 1990 and Part 2 : Clause 3.2 : 1990

Exploratory Hole No.- **PRAIRIE_AUK_TP176** Sample No.- **B5**

Depth (m)- **2.00**

"As Received" Moisture Content (%) :		Surcharge (Kg) :	6
Retained on 20mm (%) :	0.0	Seating Load (N) :	Top 10 / Bottom 10
Correction Needed :	No	Test Moisture Content (%) :	Top 26 / Bottom 25
Soaking Time (Days) :	N/A	Bulk Density (Mg/m ³) :	1.97
Swelling (mm) :	N/A	Dry Density (Mg/m ³) :	1.55
Date Tested :	29/09/2020	CBR Value (%) :	Top 1.7 / Bottom 1.6
Preparation Method :	2.5kg Compaction		
Remarks :			



For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :-

Prairie Site Ground Investigation Works

Client :-

South Tees Development Corporation



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Name :-

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CBR/4251/PRAIRIE_AUK_TP176/B5/2.00/1

AEG Contract No. :-

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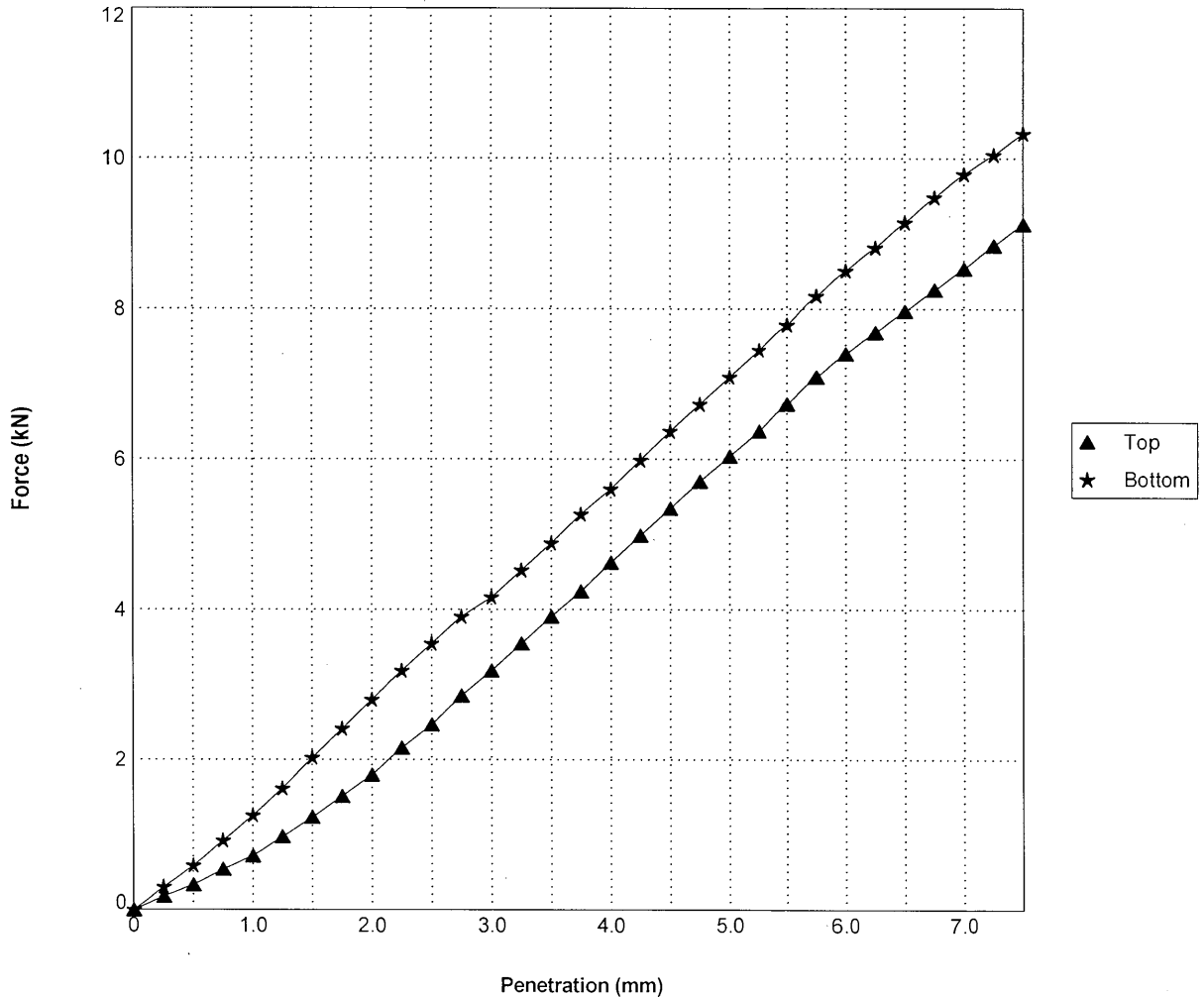
DETERMINATION OF THE CALIFORNIA BEARING RATIO

BS 1377 : Part 4 : 1990 and Part 2 : Clause 3.2 : 1990

Exploratory Hole No.- **PRAIRIE_AUK_TP178** Sample No.- **B2**


Depth (m)- **0.60**

"As Received" Moisture Content (%) :		Surcharge (Kg) :	6
Retained on 20mm (%) :	11.0	Seating Load (N) :	Top 250 / Bottom 250
Correction Needed :	No	Test Moisture Content (%) :	Top 33 / Bottom 34
Soaking Time (Days) :	N/A	Bulk Density (Mg/m ³) :	1.57
Swelling (mm) :	N/A	Dry Density (Mg/m ³) :	1.22
Date Tested :	05/10/2020	CBR Value (%) :	Top 30 / Bottom 36
Preparation Method :	2.5kg Compaction		
Remarks :			



For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :- Prairie Site Ground Investigation Works	Client :- South Tees Development Corporation
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	Signed :- <i>mbere</i>	Name :-	Page 1 of 1
	Date of issue :- 23/10/2020	Certificate No :- CBR/4251/PRAIRIE_AUK_TP178/B2/0.60/1	AEG Contract No. :- 4251



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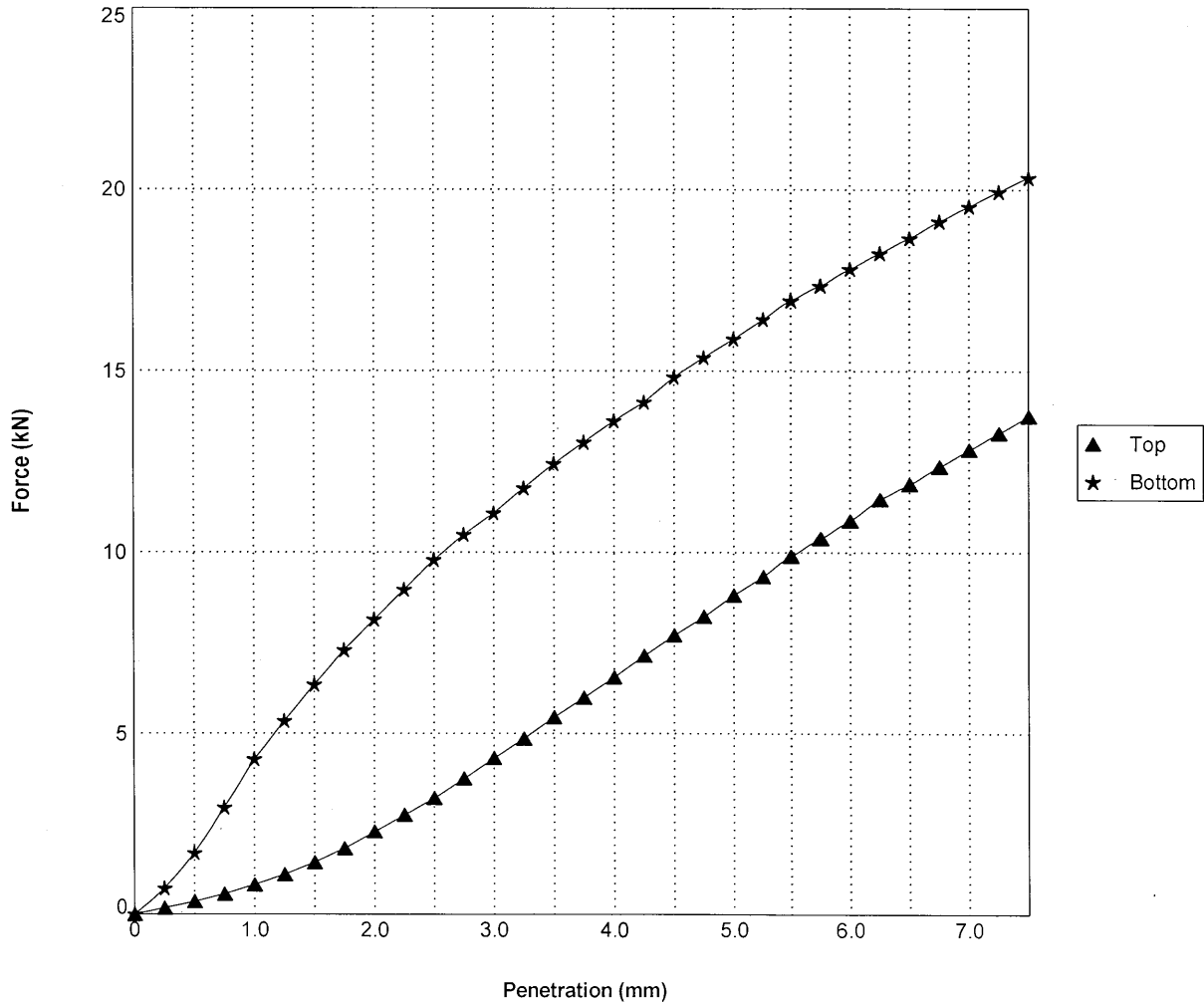
DETERMINATION OF THE CALIFORNIA BEARING RATIO

BS 1377 : Part 4 : 1990 and Part 2 : Clause 3.2 : 1990

Exploratory Hole No.- **PRAIRIE_AUK_TP181** Sample No.- **B2**

Depth (m)- **0.50**

"As Received" Moisture Content (%) :		Surcharge (Kg) :	6
Retained on 20mm (%) :	25.0	Seating Load (N) :	Top 250 / Bottom 250
Correction Needed :	No	Test Moisture Content (%) :	Top 15 / Bottom 15
Soaking Time (Days) :	N/A	Bulk Density (Mg/m ³) :	1.75
Swelling (mm) :	N/A	Dry Density (Mg/m ³) :	1.52
Date Tested :	02/10/2020	CBR Value (%) :	Top 44 / Bottom 80
Preparation Method :	2.5kg Compaction		
Remarks :			



For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :-

Prairie Site Ground Investigation Works

Client :-

South Tees Development Corporation



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Name :-

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Date of issue :-

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CBR/4251/PRAIRIE_AUK_TP181/B2/0.50/1

AEG Contract No. :-

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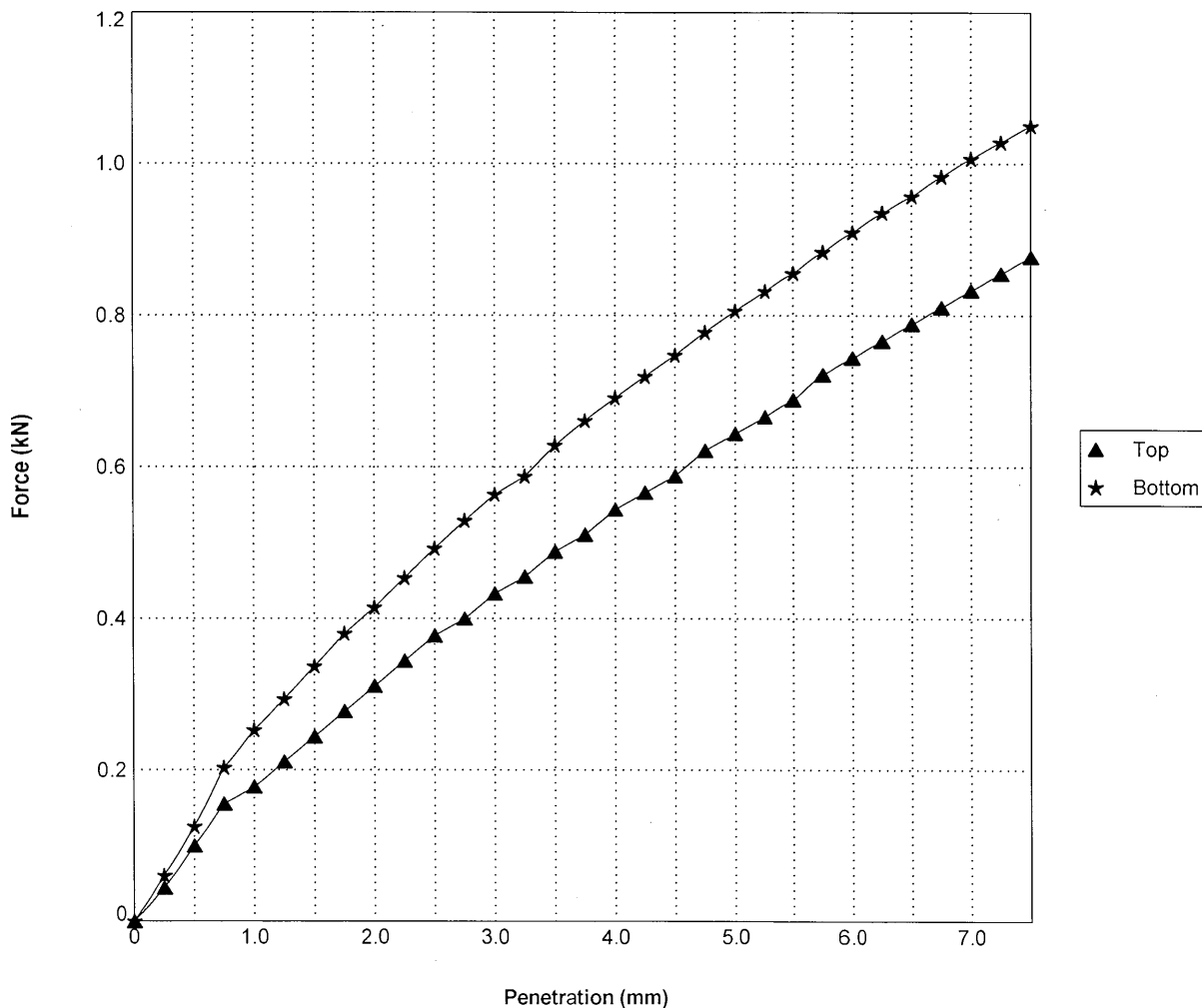
DETERMINATION OF THE CALIFORNIA BEARING RATIO

BS 1377 : Part 4 : 1990 and Part 2 : Clause 3.2 : 1990

Exploratory Hole No.- **PRAIRIE_AUK_TP181** Sample No.- **B6**


Depth (m)- **2.00**

"As Received" Moisture Content (%) :		Surcharge (Kg) :	6
Retained on 20mm (%) :	0.0	Seating Load (N) :	Top 50 / Bottom 50
Correction Needed :	No	Test Moisture Content (%) :	Top 23 / Bottom 23
Soaking Time (Days) :	N/A	Bulk Density (Mg/m ³) :	2.04
Swelling (mm) :	N/A	Dry Density (Mg/m ³) :	1.65
Date Tested :	02/10/2020	CBR Value (%) :	Top 3.2 / Bottom 4.0
Preparation Method :	2.5kg Compaction		
Remarks :			



For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :- Prairie Site Ground Investigation Works	Client :- South Tees Development Corporation
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	Signed :- <i>msore</i>	Name :- <i>[Signature]</i>	Page 1 of 1
	Date of issue :- 23/10/2020	Certificate No :- CBR/4251/PRAIRIE_AUK_TP181/B6/2.00/1	AEG Contract No. :- 4251



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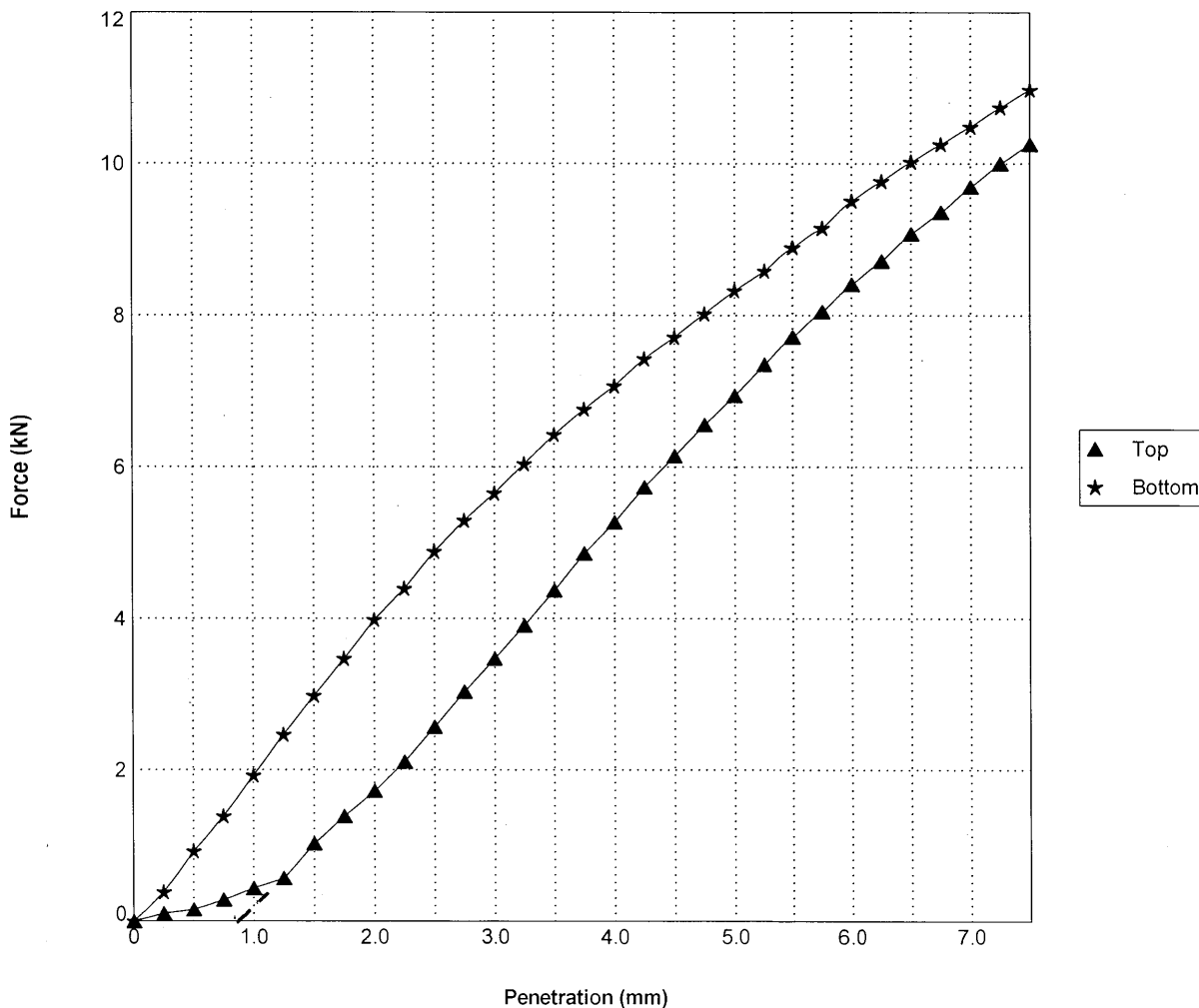
DETERMINATION OF THE CALIFORNIA BEARING RATIO

BS 1377 : Part 4 : 1990 and Part 2 : Clause 3.2 : 1990

Exploratory Hole No.- **PRAIRIE_AUK_TP182** Sample No.- **B2**

Depth (m)- **0.60**

"As Received" Moisture Content (%) :	Surcharge (Kg) :	10
Retained on 20mm (%) :	Seating Load (N) :	Top 250 / Bottom 250
Correction Needed :	Test Moisture Content (%) :	Top 16 / Bottom 16
Soaking Time (Days) :	Bulk Density (Mg/m ³) :	1.48
Swelling (mm) :	Dry Density (Mg/m ³) :	1.28
Date Tested :	CBR Value (%) :	Top 40 / Bottom 42
Preparation Method :	2.5kg Compaction	
Remarks :		



For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :-

Prairie Site Ground Investigation Works

Client :-

South Tees Development Corporation



Signed :-

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Name :-

M. S. S. S.

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Certificate No :-

CBR/4251/PRAIRIE_AUK_TP182/B2/0.60/1

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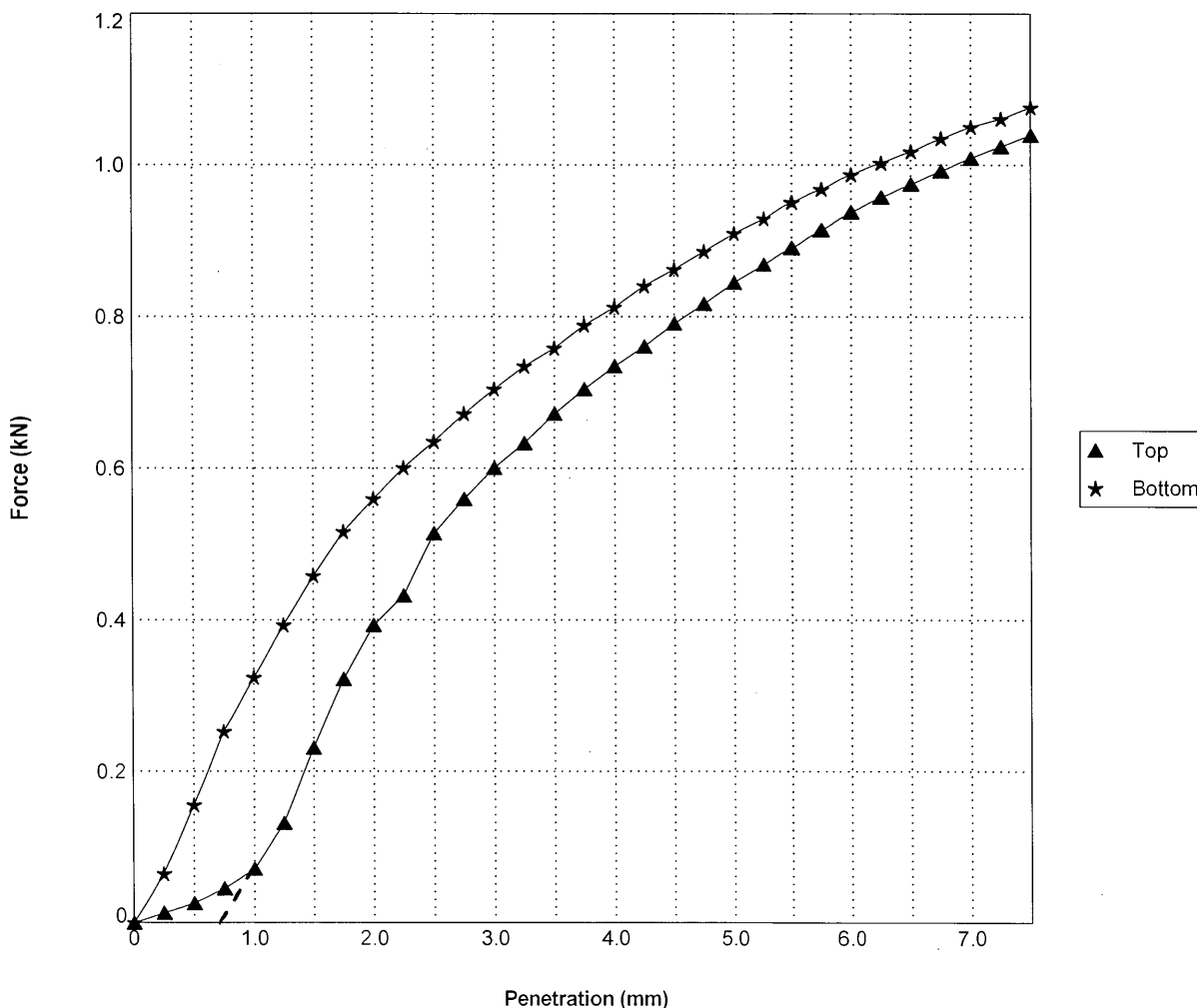
DETERMINATION OF THE CALIFORNIA BEARING RATIO

BS 1377 : Part 4 : 1990 and Part 2 : Clause 3.2 : 1990

Exploratory Hole No.- PRAIRIE_AUK_TP182 Sample No.- B5

Depth (m)- 1.60

"As Received" Moisture Content (%) :		Surcharge (Kg) :	6
Retained on 20mm (%) :	0.0	Seating Load (N) :	Top 10 / Bottom 50
Correction Needed :	Yes	Test Moisture Content (%) :	Top 28 / Bottom 27
Soaking Time (Days) :	N/A	Bulk Density (Mg/m ³) :	1.94
Swelling (mm) :	N/A	Dry Density (Mg/m ³) :	1.52
Date Tested :	16/10/2020	CBR Value (%) :	Top 4.6 / Bottom 4.8
Preparation Method :	2.5kg Compaction		
Remarks :			



For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :-

Prairie Site Ground Investigation Works

Client :-

South Tees Development Corporation



Signed :-

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Name :-

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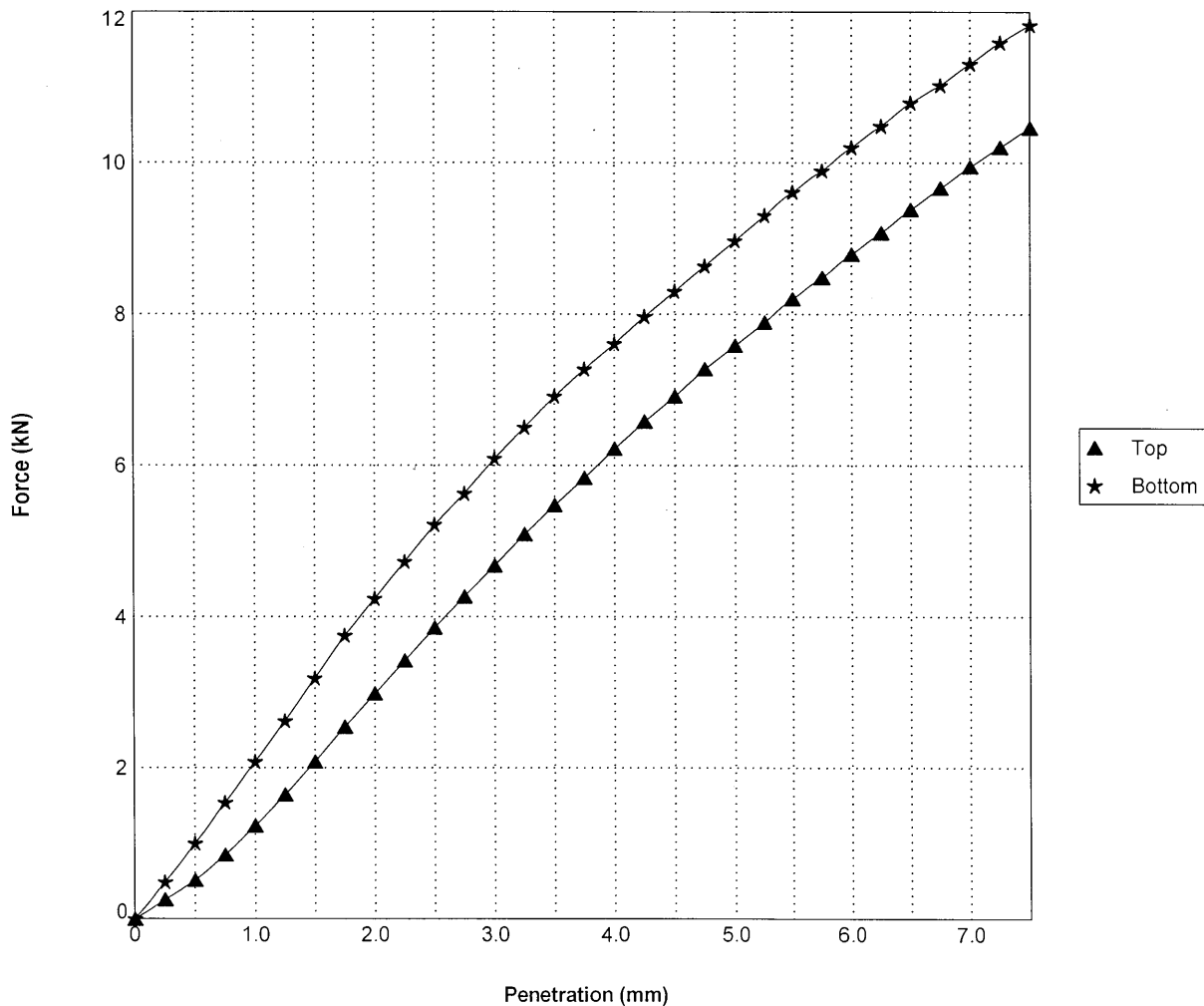
DETERMINATION OF THE CALIFORNIA BEARING RATIO

BS 1377 : Part 4 : 1990 and Part 2 : Clause 3.2 : 1990

Exploratory Hole No.- **PRAIRIE_AUK_TP189** Sample No.- **B2**



Depth (m)- **0.50**

"As Received" Moisture Content (%) :		Surcharge (Kg) :	6
Retained on 20mm (%) :	6.0	Seating Load (N) :	Top 250 / Bottom 250
Correction Needed :	No	Test Moisture Content (%) :	Top 17 / Bottom 17
Soaking Time (Days) :	N/A	Bulk Density (Mg/m ³) :	2.55
Swelling (mm) :	N/A	Dry Density (Mg/m ³) :	2.18
Date Tested :	01/10/2020	CBR Value (%) :	Top 38 / Bottom 45
Preparation Method :	2.5kg Compaction		
Remarks :			



For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :- Prairie Site Ground Investigation Works	Client :- South Tees Development Corporation
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Determination of One Dimensional Consolidation Properties

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ONE DIMENSIONAL CONSOLIDATION PROPERTIES BS 1377 : PART 5 : 1990 : CLAUSE 3

Exploratory Hole No	PRAIRIE_AUK_BH103	Sample	U2	Depth (m)	2.50m
Specimen Type	Undisturbed	Orientation	Vertical	Specific Depth (m)	2.55m
	INITIAL	FINAL			
Height	18.7	16.4	mm	Particle Density (Assumed)	2.70
Diameter	74.74	74.74	mm	Degree of Saturation (%)	98.2
Moisture Content	30.0	25.6	%	Test Duration (Days)	6
Wet Density	1.92	2.07	Mg/m ³	Date Tested	07/10/2020
Dry Density	1.48	1.65	Mg/m ³		

Square Root of Time Fitting Method				
Pressure Range kN/m ²	Mv m ² /MN	Cv m ² /yr	Temp C	Voids Ratio
Initial				0.825
0 - 50	0.828	.	21	0.749
50 - 100	0.438	2.25	21	0.711
100 - 50	0.058	Swelling	20	0.716
50 - 100	0.066	3.34	20	0.710
100 - 200	0.289	2.18	20	0.661
200 - 400	0.191	1.67	20	0.598

For sample description please refer to the Laboratory Sample Description Sheet.

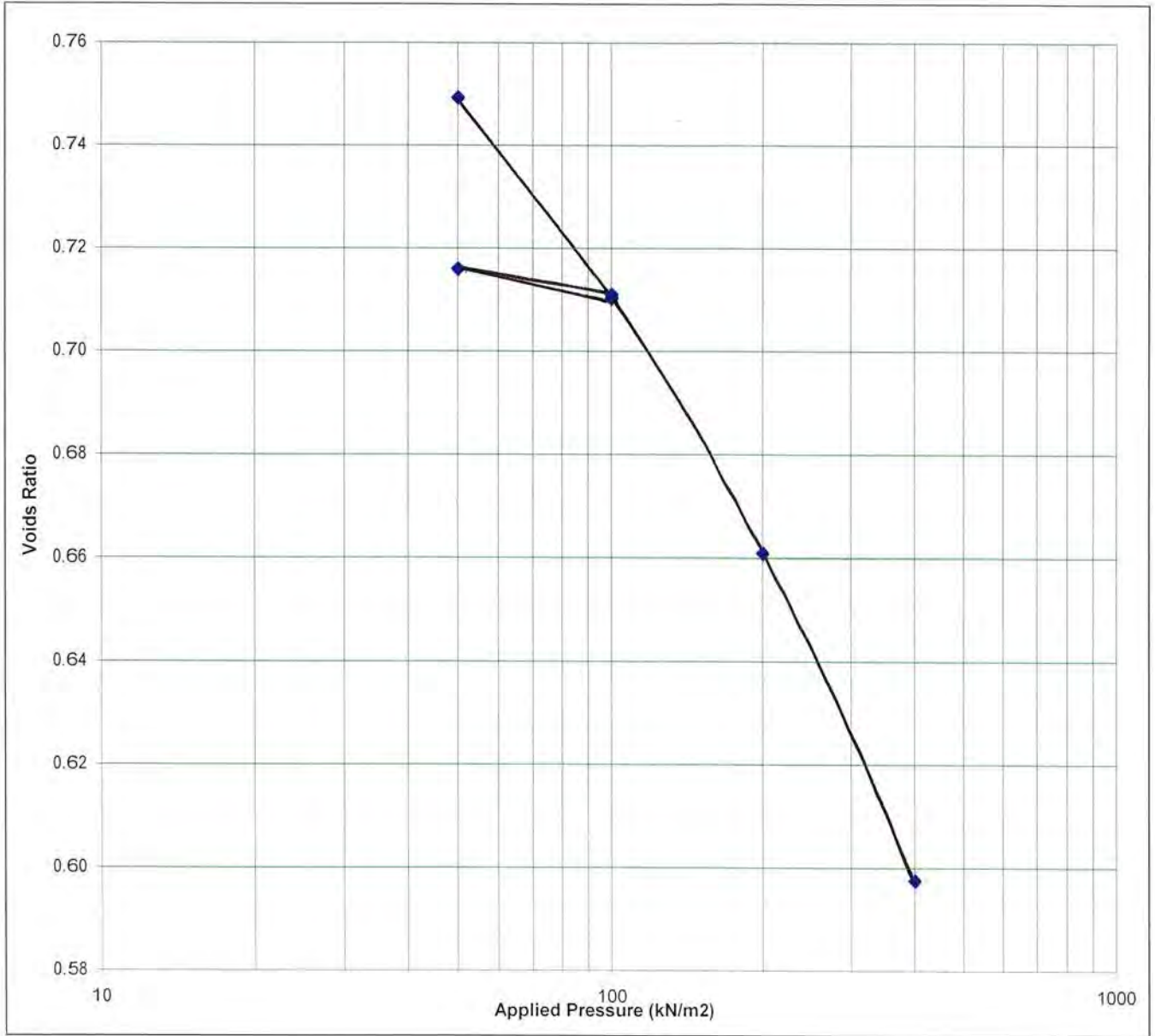
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	Signed:	Name:	Page 1 of 2
		M. SELKIRK	
	Date of Issue:	Certificate No:	AEG Contract No:
	16/10/2020	4251/A	4251
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ONE DIMENSIONAL CONSOLIDATION PROPERTIES BS 1377 : PART 5 : 1990 : CLAUSE 3

Exploratory Hole No	PRAIRIE_AUK_BH103	Sample	U2	Depth (m)	2.50m
Specimen Type	Undisturbed	Orientation	Vertical	Specific Depth (m)	2.55m



Contract Title:	Client:
Prairie Site Ground Investigation Works	South Tees Development Corporation

	Signed:	Name:	Page 2 of 2	
	<i>M. Selkirk</i>	M. SELKIRK		
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	16/10/2020	4251/A	4251	1367

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ONE DIMENSIONAL CONSOLIDATION PROPERTIES BS 1377 : PART 5 : 1990 : CLAUSE 3

Exploratory Hole No	PRAIRIE_AUK_BH106	Sample	U2	Depth (m)	5.50m
Specimen Type	Undisturbed	Orientation	Vertical	Specific Depth (m)	5.50m
	INITIAL	FINAL			
Height	18.6	16.7	mm	Particle Density (Assumed)	2.70
Diameter	74.91	74.91	mm	Degree of Saturation (%)	99.5
Moisture Content	22.4	18.5	%	Test Duration (Days)	6
Wet Density	2.06	2.24	Mg/m ³	Date Tested	07/10/2020
Dry Density	1.68	1.89	Mg/m ³		

Square Root of Time Fitting Method				
Pressure Range kN/m ²	Mv m ² /MN	Cv m ² /yr	Temp C	Voids Ratio
Initial				0.608
0 - 100	0.374	.	21	0.548
100 - 200	0.180	7.80	21	0.520
200 - 100	0.012	Swelling	20	0.522
100 - 200	0.018	13.47	20	0.519
200 - 400	0.119	8.40	20	0.483
400 - 800	0.070	8.83	20	0.441

For sample description please refer to the Laboratory Sample Description Sheet.

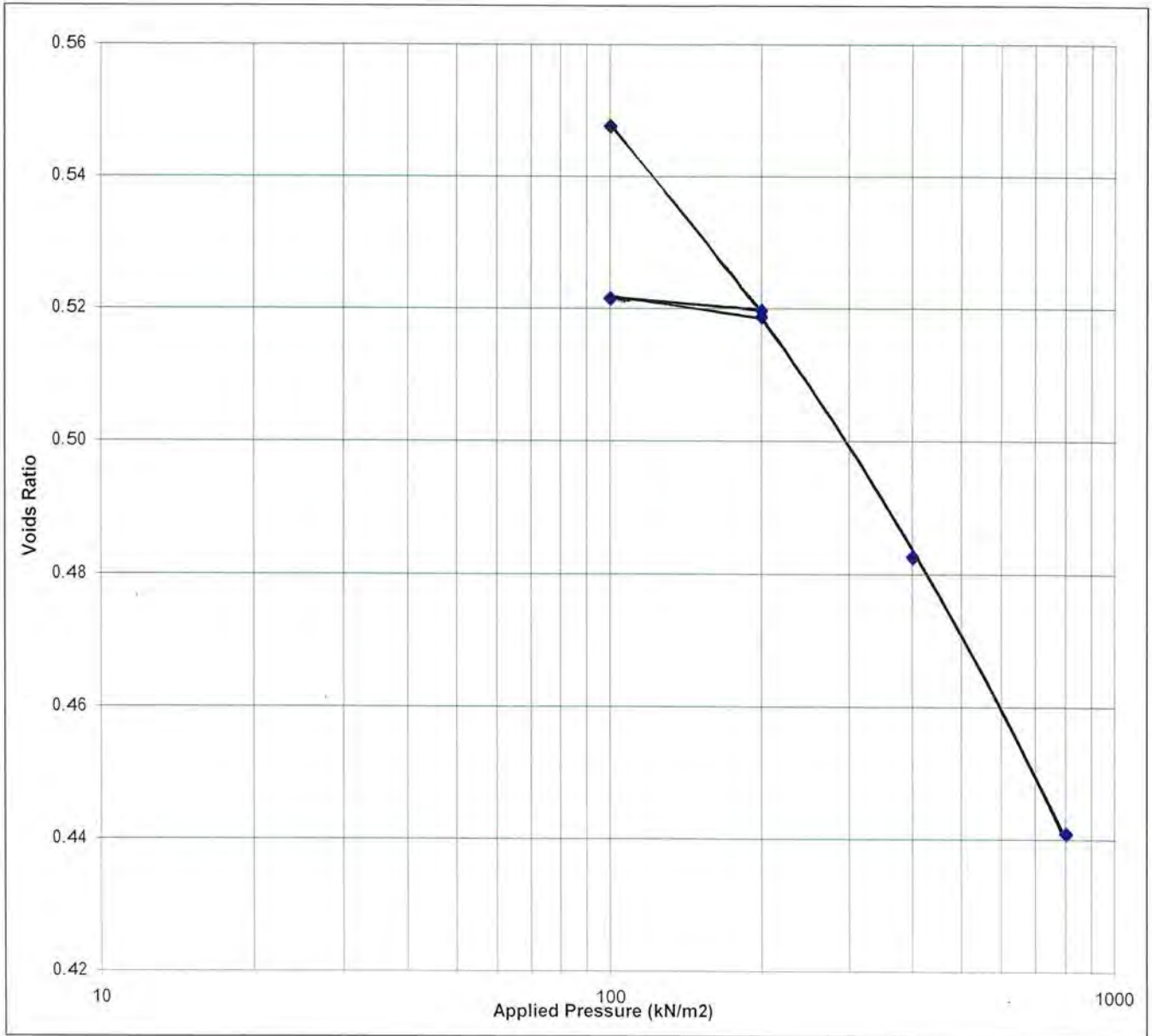
Contract Title: Prairie Site Ground Investigation Works			Client: South Tees Development Corporation	
	Signed: 	Name: M. SELKIRK		Page 1 of 2
	Date of Issue: 16/10/2020	Certificate No: 4251/B	AEG Contract No: 4251	
				 1367

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ONE DIMENSIONAL CONSOLIDATION PROPERTIES BS 1377 : PART 5 : 1990 : CLAUSE 3

Exploratory Hole No	PRAIRIE_AUK_BH106	Sample	U2	Depth (m)	5.50m
Specimen Type	Undisturbed	Orientation	Vertical	Specific Depth (m)	5.50m



Contract Title: Prairie Site Ground Investigation Works	Client: South Tees Development Corporation
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	Signed: <i>M. Selkirk</i>	Name: M. SELKIRK	Page 2 of 2	
	Date of Issue: 16/10/2020	Certificate No: 4251/B	AEG Contract No: 4251	

Shear Strength by Hand Vane

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Regional Office: Unit 20, Business Development Centre, Eanam Wharf, Blackburn, BB1 5BL - Tel: 01772 735 300 Fax: 01772 735 999

DETERMINATION OF SHEAR STRENGTH BY HAND VANE

Exploratory Hole No.	Sample Depth (m)	Sample ID	Specific Depth (m)	Vane Shear Strength (kPa)	Remarks
PRAIRIE_AUK_BH104	8.50	U8	8.50	>130	Reading exceeded apparatus limits
PRAIRIE_AUK_BH104	8.50	U8	8.95	>130	Reading exceeded apparatus limits
PRAIRIE_AUK_BH108	2.50	U2	2.50	109	
PRAIRIE_AUK_BH108	2.50	U2	2.95	94	
PRAIRIE_AUK_BH108	4.50	U7	4.50	65	
PRAIRIE_AUK_BH108	4.50	U7	4.95	87	
PRAIRIE_AUK_BH109	1.20	U6	1.20	41	
PRAIRIE_AUK_BH109	1.20	U6	1.65	>130	Reading exceeded apparatus limits
PRAIRIE_AUK_BH109	5.00	U19	5.00	42	
PRAIRIE_AUK_BH109	5.00	U19	5.45	82	

For description of sample please refer to the Laboratory Sample Description Sheet

Contract Title :- Prairie Site Ground Investigation Works	Client :- South Tees Development Corporation
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	Signed :- <i>msene</i>	Name :-	Page 1 of 1	
	Date of issue :- 03/11/2020	Certificate No :- HSV/4251/1	AEG Contract No. :- 4251	

**Undrained Shear Strength in Triaxial Cell
without Pore Water Pressure Measurement**

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UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION WITHOUT MEASUREMENT OF PORE PRESSURE

BS 1377 : Part 7 : Clauses 8 & 9 : 1990 Part 2 Clause 3.2

Exploratory Hole	Sample ID	Sample Depth (m)	Type	Specific Depth (m)	Diameter (mm)	Length (mm)	Prep. Method	Stage No.	Initial Moisture Content (%)	Bulk Density (Mg/m ³)	Dry Density (Mg/m ³)	Membrane Thickness (mm)	Membrane Correction (kPa)	Cell Pressure (kPa)	Corrected Deviator Stress (kPa)	Failure Strain (%)	Mode of Failure	cu (kPa)	Date Tested
PRAIRIE_AUK_BH101	3.00	U2		3.02	103.6	209.5	UNDISTURBED	1	32.7	1.95	1.47	0.3	1.10	60	52	20.0	P	26	17/06/2020
PRAIRIE_AUK_BH101	5.00	U7		5.18	104.0	211.0	UNDISTURBED	1	32.9	1.93	1.46	0.3	0.79	80	63	13.0	P	32	17/06/2020
PRAIRIE_AUK_BH101	8.00	U12		8.01	103.0	210.0	UNDISTURBED	1	27.3	1.98	1.55	0.4	0.94	110	87	11.0	BR	43	17/06/2020
PRAIRIE_AUK_BH101	11.00	U18		11.01	104.7	210.7	UNDISTURBED	1	16.1	2.19	1.89	0.9	0.85	140	251	14.5	P	125	17/06/2020
PRAIRIE_AUK_BH103	2.50	U2		2.60	103.5	210.4	UNDISTURBED	1	31.1	1.94	1.48	0.3	1.10	50	84	20.0	P	42	06/10/2020
PRAIRIE_AUK_BH103	4.50	U8		4.56	103.7	211.0	UNDISTURBED	1	26.4	1.97	1.56	0.4	0.88	100	147	10.0	C	74	06/10/2020
PRAIRIE_AUK_BH103	7.00	U14		7.02	102.9	210.8	UNDISTURBED	1	27.4	1.97	1.55	0.3	0.43	150	105	6.0	BR	53	06/10/2020
PRAIRIE_AUK_BH103	10.00	U21		10.25	103.5	211.7	UNDISTURBED	1	17.2	2.07	1.77	0.3	0.92	200	185	16.0	C	93	06/10/2020
PRAIRIE_AUK_BH104	5.50	U2		5.53	101.8	211.5	UNDISTURBED	1	25.8	1.92	1.53	0.4	0.58	110	230	6.0	BR	115	06/10/2020
PRAIRIE_AUK_BH106	5.50	U2		5.57	103.3	210.1	UNDISTURBED	1	23.0	2.06	1.68	0.3	1.08	110	136	19.5	C	68	06/10/2020
PRAIRIE_AUK_BH106	8.50	U8		8.60	104.6	211.2	UNDISTURBED	1	14.3	2.25	1.97	0.4	1.24	175	502	16.5	C	251	06/10/2020
PRAIRIE_AUK_BH107	3.00	U2		3.00	102.6	212.7	UNDISTURBED	1	29.9	1.95	1.50	0.4	1.36	60	51	18.0	P	25	10/07/2020
PRAIRIE_AUK_BH107	5.00	U7		5.06	103.4	211.1	UNDISTURBED	1	23.6	2.05	1.66	0.3	1.01	100	134	18.0	BR	67	13/07/2020
PRAIRIE_AUK_BH109	3.00	U13		3.05	103.2	211.2	UNDISTURBED	1	23.6	2.04	1.65	0.3	0.82	60	142	13.5	BR	71	13/07/2020
PRAIRIE_AUK_BH110	3.00	U2		3.03	103.1	211.1	UNDISTURBED	1	30.4	1.91	1.47	0.3	0.66	60	71	10.0	BR	36	13/07/2020

For description of sample please refer to the Laboratory Sample Description Sheet. Please note the rate of strain was 2% per minute and the orientation of the test specimen was vertical. Latex membrane used.



Date of issue :- 23/10/2020

Certificate No :- TXL/4251/1

Signed :- *MSOR*

Name :-

Page 1 of 2



Client :- South Tees Development Corporation

Contract Title :- Prairie Site Ground Investigation Works

AEG Contract No :- 4251

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UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION WITHOUT MEASUREMENT OF PORE PRESSURE

BS 1377 : Part 7 : Clauses 8 & 9 : 1990 Part 2 Clause 3.2

Exploratory Hole	Sample ID Depth (m)	Sample Type	Specific Depth (m)	Diameter (mm)	Length (mm)	Prep. Method	Stage No.	Initial Moisture Content (%)	Bulk Density (Mg/m ³)	Dry Density (Mg/m ³)	Membrane Thickness (mm)	Membrane Correction (kPa)	Cell Pressure (kPa)	Corrected Deviator Stress (kPa)	Failure Strain (%)	Mode of Failure	cu (kPa)	Date Tested
PRAIRIE_AUK_BH110	5.00	U6	5.10	100.7	210.6	UNDISTURBED	1	24.2	2.04	1.64	0.3	0.80	100	105	12.5	C	53	10/07/2020
PRAIRIE_AUK_BH110	8.00	U12	8.05	103.6	212.2	UNDISTURBED	1	20.1	2.15	1.79	0.3	1.08	160	144	19.5	C	72	10/07/2020
PRAIRIE_AUK_BH110	11.00	U18	11.02	104.8	211.0	UNDISTURBED	1	10.4	2.30	2.09	0.7	2.54	220	782	20.0	C	391	13/07/2020

For description of sample please refer to the Laboratory Sample Description Sheet. Please note the rate of strain was 2% per minute and the orientation of the test specimen was vertical. Latex membrane used.



Date of issue :- 23/10/2020	Certificate No :- TXL/4251/2	Signed :- <i>MSO</i>	Name :-
Client :- South Tees Development Corporation	Contract Title :- Prairie Site Ground Investigation Works	AEG Contract No :- 4251	
			Page 2 of 2



Determination of Point Load Index

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POINT LOAD STRENGTH INDEX

ISRM : 1985

Exploratory Hole No	Depth (m)	Type/Orientation	Width (mm)	Platen Separation (mm)+	Failure Load (kN)*	De ² (mm ²)	Point Load (IS) (MPa)	Size Factor	Point Load Index (IS50) (MPa)	Type	Date Tested
PRAIRIE_AUK_BH109	7.70	Axial	85.6	58.4	0.4	6365.0	0.06	1.23	0.078	Sandstone	17/06/2020

NOTES - + Tested specimen measured using calibrated vernier callipers #-Invalid Failure (Did not pass through both points) !-Too soft to register a reading

	Date of issue :- 29/06/2020	Certificate No :- PL/4251/1	Signed :- <i>mson</i>	Name :- <i>M. SPURK</i>	Page 1 of 1
	Client :- South Tees Development Corporation	Contract Title :- Prairie Site Ground Investigation Works	AEG Contract No :- 4251		

**Determination of Unconfined Compressive Strength
(Tested Externally)**



LABORATORY TEST CERTIFICATE

10 Queenslie Point
Queenslie Industrial Estate
120 Stepps Road
Glasgow
G33 3NQ

Certificate No : 20/504 - 01
To : Michelle Selkirk
Client : **Allied Exploration & Geotechnics Ltd.**
Unit 25 Stella Gill Industrial Estate
Pelton Fell
Chester-le-Street
County Durham
DH2 2RG

Tel: 0141 774 4032

email: info@mattest.org
Website: www.mattest.org

Dear Sirs,

LABORATORY TESTING OF ROCK

Introduction

We refer to samples taken from Prairie Site Ground Investigation Works and delivered to our laboratory on 18th June 2020.

Material & Source

Sample Reference : See Report Plate
Sampled By : Client
Sampling Certificate : Not Supplied
Location : See Report Plate
Description : Rock Cores
Date Sampled : Not Supplied
Date Tested : 18th June 2020 Onwards
Source : 4251 - Prairie Site Ground Investigation Works

Test Results;


As Detailed On Page 2

Comments;

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation
This report should not be reproduced except in full without the written approval of the laboratory
All remaining samples for this project will be disposed of 28 days after issue of this test certificate

Remarks;

Approved for Issue



T McLelland (Director)

Date 10/11/2020



BOREHOLE	PRAIRIE_AUK_BH109	
SAMPLE	C	
DEPTH	m	9.00
SAMPLE DIAMETER	mm	81.64
SAMPLE HEIGHT	mm	169.33
TEST CONDITION	As Received	
RATE OF LOADING	kN/s	0.4
TEST DURATION	min.sec	4.37
DATE OF TESTING	22/06/2020	
LOAD FRAME USED	2000kN	
LOAD DIRECTION WITH RESPECT TO LITHOLOGY	Unknown	
FAILURE LOAD	kN	105.9
UNCONFINED COMPRESSIVE STRENGTH	MPa	20.2
WATER CONTENT (ISRM Suggested Methods)	%	3.5
BULK DENSITY (ISRM Suggested Methods)	Mg/m ³	2.60
DRY DENSITY (ISRM Suggested Methods)	Mg/m ³	2.51

BOREHOLE	PRAIRIE_AUK_BH109	
SAMPLE	C	
DEPTH	m	11.30
SAMPLE DIAMETER	mm	83.10
SAMPLE HEIGHT	mm	186.89
TEST CONDITION	As Received	
RATE OF LOADING	kN/s	0.7
TEST DURATION	min.sec	3.28
DATE OF TESTING	22/06/2020	
LOAD FRAME USED	2000kN	
LOAD DIRECTION WITH RESPECT TO LITHOLOGY	Unknown	
FAILURE LOAD	kN	132.2
UNCONFINED COMPRESSIVE STRENGTH	MPa	24.4
WATER CONTENT (ISRM Suggested Methods)	%	1.7
BULK DENSITY (ISRM Suggested Methods)	Mg/m ³	2.58
DRY DENSITY (ISRM Suggested Methods)	Mg/m ³	2.54

BOREHOLE		
SAMPLE		
DEPTH	m	
SAMPLE DIAMETER	mm	
SAMPLE HEIGHT	mm	
TEST CONDITION		
RATE OF LOADING	kN/s	
TEST DURATION	min.sec	
DATE OF TESTING		
LOAD FRAME USED		
LOAD DIRECTION WITH RESPECT TO LITHOLOGY		
FAILURE LOAD	kN	
UNCONFINED COMPRESSIVE STRENGTH	MPa	
WATER CONTENT (ISRM Suggested Methods)	%	
BULK DENSITY (ISRM Suggested Methods)	Mg/m ³	
DRY DENSITY (ISRM Suggested Methods)	Mg/m ³	

Tested in accordance with ASTM D7012 - 14

SUMMARY OF UNCONFINED COMPRESSIVE STRENGTH

Slag Analysis
(Tested Externally)



TRS REPORT

Report Ref: BG0E-F/AEG/PSR/TRS/07/20/RP2
Date Issued: 31 July 2020
TRS Sample Refs: BG0E01-04/BG0F01-02
Order No: LA2343

**EXAMINATION OF SIX SAMPLES
FROM
4251 PRAIRIE SITE GROUND INVESTIGATION
WORKS, REDCAR
FOR
ALLIED EXPLORATION & GEOTECHNICS LTD**



Thomas Research Services Ltd.

Tel: +44 (0) 1469 532 929

www.slagtest.co.uk

Unit 7, Tattershall Castle Court, Morgan Way, New Holland,
North Lincolnshire, DN19 7PZ, United Kingdom

A Limited Company registered in England. Company Registration No: 2518421

**EXAMINATION OF SIX SAMPLES
FROM
4251 PRAIRIE SITE GROUND INVESTIGATION
WORKS, REDCAR
FOR
ALLIED EXPLORATION & GEOTECHNICS LTD**

1. BACKGROUND

Four bulk samples were received from the above site on 11th May 2020, with a further two samples arriving on 16th June 2020. Each sample was weighed and allocated a unique TRS reference number, the details of which are recorded below:-

TRS Ref	Site Ref	Depth/m	Mass/kg
BG0E01	TP109 B2	1.0	11.8
BG0E02	TP116 B2	1.0	12.3
BG0E03	TP117 B2	1.0	16.3
BG0E04	TP121 B5	1.8	12.1
BG0F01	TP131 B4	1.5	10.0
BG0F02	TP132 B3	1.0	9.8

There was a delay in processing these samples due to the Coronavirus lockdown.

The purpose of the exercise was to identify the range and relative concentrations of any iron and steelmaking slags present in the samples, and whether there was any potential for volumetric instability from the materials.

2. SAMPLE PREPARATION & PROGRAMME OF ANALYSIS

The samples were primary crushed to reduce particle size down to <50mm, portions then being selected and dried at low temperature to constant weight. The dried material was subjected to a regime of stage crushing and quartering to further reduce particle size down to <5mm. Portions of this <5mm material were made up into resin bound blocks, one face of which was ground flat and polished using diamond pastes. Further portions of the <5mm material were milled to a fine powder. Fractions of material were extracted throughout the preparation procedure to provide the materials necessary for the further tests and analyses required in the programme.

A petrological examination was made of the polished blocks using reflected light microscopy, the complete findings of which are recorded in appendix A. The results of this examination were discussed in our report of 10th July 2020. On the basis of that report, the following tests and analyses were carried out on the samples:-

Samples BG0E01-02 were subjected to the following tests & analyses to assess the potential for expansion of the blast furnace slag.

- Water soluble sulphate (table 1)
- Acid soluble sulphate (table 1)
- Total sulphur (table 1)
- Thermal analysis (table 3)
- TRS accelerated expansion test (table 4)

Samples BG0E04 & BG0F01-02 were subjected to the following tests & analyses to assess the potential for expansion of the basic steel slag.

- Free CaO (table 2)
- Free MgO (table 2)
- Thermal analysis (table 3)
- TRS accelerated expansion test (table 4)

Sample BG0E03 were subjected to the following tests & analyses to assess the potential for expansion of the mixed slag.

- Water soluble sulphate (table 1)
- Acid soluble sulphate (table 1)
- Total sulphur (table 1)
- Free CaO (table 2)
- Free MgO (table 2)
- Thermal analysis (table 3)
- TRS accelerated expansion test (table 4)

3. DISCUSSION OF RESULTS

3.1 Petrology

A petrological examination was made of the six samples using reflected light microscopy. The complete findings of this examination are recorded in appendices A and B.

Blast furnace slag was present in all six samples, with substantial quantities present in samples BG0E01-03 and small amounts in samples BG0E04 & BG0F01-02. The blast furnace slag was predominantly crystalline with only minor amounts of glassy material seen. Secondary alteration due to weathering was moderate, consisting mainly of pore infill and surface rinds. Products of alteration included calcite, with other products being difficult to identify specifically under the microscope. Old weathered blast furnace slag may occasionally contain pockets of potentially expansive material (see appendix C). This potential can only be assessed by direct expansion testing (see sections 3.2-3.5). The unaltered slag consisted predominantly of melilite, along with more minor amounts of larnite, bredigite, spinel, metallic iron and sulphides.

Basic steel slag was present in all six samples. Samples BG0E01-02 contained minor amounts (small/very small), sample BG0E03 contained a medium amount, but samples BG0E04 & BG0F01-02 comprised predominantly of basic steel slag. The slag was extensively altered due to weathering, the secondary phases being difficult to identify specifically under the microscope. The unaltered basic steel slag consisted largely of dicalcium silicate, along with more minor amounts of RO

& R_3O_4 phase, CaF phase, tricalcium silicate, lime phase and periclase. The mineralogy of the basic steel slag would suggest that it may have significant potential for expansion (see appendix C). This potential can only be assessed by direct expansion testing (see sections 3.2-3.5).

Minor amounts (small / very small) of basic refractory material were seen in four of the samples. This material, even in minor amounts, can have significant potential for expansion (see appendix C).

Other constituents seen in the samples in minor concentrations included alumino-silicate brick, quartz, limestone, iron ore, iron ore sinter, cinder, metal, coal, coke and fume. A cementitious material often bound the smaller particles together. This material appeared similar to the slag alteration products.

3.2 Sulphur Species

The following range of analyses were performed on samples BG0E01-03 (These samples contained significant amounts of blast furnace slag). The results are recorded in table 1:-

- Water soluble sulphate
- Acid soluble sulphate
- Total sulphur

Total sulphur values were in the range 0.62 to 1.07 percent. Acid soluble sulphates were in the range 0.30 to 0.87 percent, with corresponding water soluble sulphates of 0.17 to 0.35 g/l. These sulphate and sulphur values were fairly typical for blast furnace slag. However, care should be taken when specifying concrete that may come into contact with the slag. Calculations show that between 19 and 33 percent of the available sulphur is present as sulphate.

3.3 Thermal Analysis

Simultaneous differential thermal analysis (DTA) and thermo-gravimetric analysis (TGA) were performed on all six samples. The results are recorded in table three.

Ettringite was seen in three of the samples examined, at trace levels only. Gypsum was seen in all but one of the samples, at between trace and 3.7 percent. On comparing the gypsum values with the acid soluble sulphates, some of the gypsum values were overstated. This is common in old weathered blast furnace slag, and is usually an indicator of the presence of thaumasite. The presence of ettringite and possibly thaumasite would suggest some past expansion has occurred in the blast furnace slag.

Calcium hydroxide was recorded in four of the samples, at between 0.5 and 2.5 percent. Magnesium hydroxide was measured in three of the samples, at between 0.5 and 1.0 percent. These values were used to correct the free CaO and free MgO analyses recorded in table 2.

Calcite was present in all of the samples examined at between 2.4 and 5.6 percent. This product is an indicator as to the weathered state of the slag.

3.4 Free CaO & Free MgO

Free CaO & free MgO analyses were carried out on samples BG0E03-04 & BG0F01-02 (These samples contained medium or more mounts of basic steel slag). The results are recorded in table 2. Both original and corrected values are recorded. The original values include both the oxide (CaO and MgO) and the hydroxide ((Ca(OH)₂ and Mg(OH)₂)) contents. The corrected values report only the oxide content (CaO and MgO) after correction using the hydroxide values

from the thermal analyses. These corrected values are the more significant, as it is only the oxides that are still free to hydrate, i.e. expand.

Free lime was recorded in the samples at between 1.5 and 5.2 percent. Free magnesia was recorded at between 0.3 and 3.3 percent. These corrected free lime and free magnesia levels record oxides that are potentially still free to hydrate (i.e. expand).

3.5 TRS Accelerated Expansion Test

The TRS accelerated expansion test was performed on all six samples. The results are recorded in table four. Note that the test measures potential for future expansion, and is not a measure of expansion that may have taken place in the past.

Samples consisting predominantly of blast furnace slag, with only minor amounts of basic steel slag recorded expansion results of between 0.22 and 0.25 percent. The sample containing mixed blast furnace slag and basic steel slag recorded an expansion result of between 0.50 percent. Samples consisting predominantly of basic steel slag recorded expansion results of between 2.56 and 3.11 percent.

4. CONCLUSIONS & RECOMMENDATIONS

The following conclusions can be drawn:-

- Blast furnace slag was a dominant constituent in three of the samples (BG0E01-03) and a minor constituent in the remaining three. The slag was mainly crystalline although minor amounts of glassy material were seen. The slag showed some alteration due to weathering. Old weathered blast furnace slag may occasionally contain pockets of potentially expansive material. Potential for expansion can only be assessed with direct expansion testing.
- Further testing of samples consisting predominantly of blast furnace slag (with up to medium amounts of basic steel slag) recorded expansion results of between 0.22 and 0.50 percent. Thermal analysis indicated some evidence of past expansion of the blast furnace slag (presence of ettringite and possibly thaumasite). The sulphate values should be taken into consideration when specifying concrete that may come into contact with the slag.
- Basic steel slag was the dominant constituent in samples BG0E4 and BG0F01-02. It was also present in more minor amounts (vs to m) in the remaining three samples. This material is likely to present a significant risk of expansion. Potential for expansion can only be assessed with direct expansion testing.
- Expansion testing of the samples consisting mainly of basic steel slag (BG0E04 & BG0F01-02) recorded expansion results of between 2.56 and 3.11 percent.
- Minor amounts of basic refractory material were seen in four of the six samples examined. This product can be a significant source of expansion, even when present in relatively small amounts.

- Other products were seen in the samples in minor amounts including alumino-silicate brick, quartz, limestone, iron ore, iron ore sinter, cinder, metal, coal, coke and fume.

Note

These conclusions apply only to the samples tested and may not represent the bulk of the material on the site from which they were taken.

Ian D. Thomas

Ian D Thomas BSc(Hons)

31 July 2020

TABLE 1 **SULPHUR SPECIES ANALYSES**

TRS Ref	Site Ref	Water Sol. SO ₃ (g/l)	Acid Sol. SO ₃ (%)	Total S (%)
BG0E01	TP109	0.19	0.87	1.07
BG0E02	TP116	0.17	0.43	0.86
BG0E03	TP117	0.35	0.3	0.62
BG0E04	TP121	-	-	-
BG0F01	TP131	-	-	-
BG0F02	TP131	-	-	-

TABLE 2 **ANALYSIS FOR FREE CaO AND FREE MgO**

TRS Ref	Site Ref	Free CaO Original (%)	Free CaO Corrected (%)	Free MgO Original (%)	Free MgO Corrected (%)
BG0E01	TP109	-	-	-	-
BG0E02	TP116	-	-	-	-
BG0E03	TP117	2	1.5	1.7	1.7
BG0E04	TP121	7.1	5.2	1.1	0.8
BG0F01	TP131	4.9	4.3	3.7	3.3
BG0F02	TP131	5.6	4.6	1.0	0.3

TABLE 3 **RESULTS FROM THERMAL ANALYSIS**

TRS Ref	Site Ref	Mass % by Thermal Analysis						
		L.O.I.	Ettringite	Gypsum	Calcite	Ca(OH) ₂	Mg(OH) ₂	Others
BG0E01	TP109	6.29	trace	3.7	2.4	0.0	0.0	-
BG0E02	TP116	5.35	trace	1.2	4.4	0.0	0.0	clay?
BG0E03	TP117	5.60	0.0	trace	5.4	0.5	0.0	quartz
BG0E04	TP121	7.08	trace	trace	2.6	2.5	0.5	-
BG0F01	TP131	6.86	0.0	trace	5.6	0.8	0.6	quartz
BG0F02	TP131	3.67	0.0	0.0	3.4	1.3	1.0	-

TABLE 4 **TRS ACCELERATED EXPANSION TEST**

TRS Ref	Site Ref	7 day (%)	14 day (%)	21 day (%)	28 day (%)
BG0E01	TP109	0.15	0.22	-	-
BG0E02	TP116	0.20	0.25	-	-
BG0E03	TP117	0.36	0.45	0.48	0.50
BG0E04	TP121	0.91	1.59	2.11	2.56
BG0F01	TP131	1.87	2.76	3.05	3.11
BG0F02	TP131	1.23	1.99	2.90	2.93

APPENDIX A

PETROLOGICAL REPORT ON SAMPLES BG0E 01-04

A petrological examination has been carried out of four samples BG0E 01 to 04.

Polished blocks were prepared using particulate material crushed to a nominal size of ~ 5 mm. Representative material was made up into resin-bonded blocks. One face of each of these was ground flat and polished using diamond pastes. In addition, the surfaces were selectively etched with water and 0.1%N HCl in order to help with the phase identification.

The detailed results are given in the accompanying Table.

Samples 01, 02 and 03 consist largely of blast furnace slag and its alteration products.

Sample 04 is mainly basic steel slag whilst samples 01, 02 and 03 have very small, small and medium amounts respectively. Very little basic refractory material was seen.

Blast furnace slag

The unaltered blast furnace slag consists mainly of melilite (Ca,Mg,Al silicate). It is crystalline with crystals varying up to about 1mm in size. The matrix, the space between the melilite crystals, is partly occupied by silicate glass and partly with other silicates such as larnite (β -Ca₂SiO₄) and bredigite (Ca₂SiO₄ with some Mg in solid solution). Also, some spinel (MgAl₂O₄) occurs as a primary phase. The slag contains minor amounts of iron metal occurring as tiny globules and prills and, also, dendritic crystals of Ca,Mn sulphide. Secondary alteration is moderate. It is mainly restricted to pore infill and the formation of thin rinds and to the replacement of the matrix phases, especially the larnite. The secondary products are mostly finely granular and are difficult to identify specifically under the microscope. Some calcite (CaCO₃) is present but no well-crystallised gypsum (CaSO₄.2H₂O) was seen.

Basic steel slag

The unaltered basic steel slag consists mainly of dicalcium silicate, tricalcium silicate, RO and R₃O₄ phases (FeO and Fe₃O₄ with some Al, Mn, Mg and Ca in solid solution) and CaF phases (complex Ca alumino-ferrites). Individual particles vary considerably in composition. Lime phase (CaO with some Fe, Mn and Mg in solid solution) is present in substantial amounts. It occurs mainly as granular particles up to about 0.1 mm in size that are often packed together as macro-inclusions. Periclase (MgO with some Fe in solid solution) is uncommon. Some

metal is present as prills. The slag is extensively altered to secondary products that are difficult to identify specifically and are, probably, mainly hydrated silicates but also include some calcite (CaCO_3) and, probably, portlandite (Ca(OH)_2).

Other constituents

These include rare acid (silicic) slag, quartz, limestone, iron ore, iron ore sinter, metal and associated red (goethitic) rust, coke and fume. The particles are bonded together by cementitious material that is similar to the slag alteration products but probably also includes some clay. It consists mostly of complex hydrates difficult to identify under the optical microscope.

TRS SAMPLES BG0E 01-04

	1	2	3	4
BLAST FURNACE SLAG				
Amount	L	L	I	s
Phases present:-				
Melilite	L	L	I	I
Larnite & bredigite	vs	vs	vs	-
Matrix & other silicates	s	s	s	-
Ca & Fe sulphides	vs	vs	vs	-
Metallic iron	vs	vs	s	-
Spinel	s	s	s	-
Glassy slag	-	vs	s	-
Alteration products	m	m	I	m
Calcite	s	s	-	-
BASIC STEEL SLAG				
Amount	vs	s	m	L
Phases present:-				
Dicalcium silicate	-	m	m	m
Tricalcium silicate	-	-	s	-
RO phase	vs	m	m	m
CaF phase	-	s	s	s
R3O4 phase	-	s	s	s
Metal & rust	-	s	s	vs
Lime phase	-	s	s	m
Periclase	vs	s	s	s
Alteration products	L	I	I	L
BASIC REFRACTORIES				
Amount	vs	vs	-	-
OTHER CONSTITUENTS				
Quartz, etc.	s	vs	s	s
Acid (silicic) slag	vs	-	-	-
Metal, rust, scale, etc.	s	s	s	s
Limestone & dolomite	-	vs	s	-
Iron ore, ironstone, etc.	vs	vs	-	-
Coke	vs	vs	vs	vs
Cementitious alteration products	s	s	s	s

L = very large, I = large, m = medium, s = small and vs = very small amounts

GENERAL EXPLANATION

L = very large, l = large, m = medium, s = small and vs = very small amounts.

Blast furnace slag. When present this consists mainly of melilite (Ca,Mg,Al silicate ranging in composition between $\text{Ca}_2\text{Al}_2\text{SiO}_7$ and $\text{Ca}_2\text{MgSi}_2\text{O}_7$). Other common phases are merwinite ($\text{Ca}_3\text{MgSi}_2\text{O}_8$), The matrix often consists of some of the above phases, especially melilite, but may also contain other phases such as wollastonite (CaSiO_3), anorthite ($\text{CaAl}_2\text{Si}_2\text{O}_8$) and pyroxene ($(\text{CaMg})\text{SiO}_3$). Spinel (MgAl_2O_4) may be present. Sulphides and metal usually occur and are mostly finely dispersed, but the metal sometimes occurs as prills and may contain some graphite and Ti carbo-nitride (TiCN). Material reported as ceramic in appearance is very finely crystalline. The alteration products often include calcite and gypsum but are mostly silicate and/or sulpho-aluminate hydrates that are difficult to identify specifically under the microscope.

Basic steel slag. When present this consists mainly of dicalcium silicate, mostly the β -form (larnite) but sometimes the alpha form. Phosphoric slags may contain nagelschmidite (Ca_2SiO_4 with $\text{Ca}_3\text{P}_2\text{O}_8$ in solid solution). Other silicate often present in small amounts, unetched by dilute HCl, is probably melilite. RO, R_3O_4 and RF phases are typically present and are mainly FeO and Fe_3O_4 with some Mg, Mn, Ca, etc. in solid solution and complex Ca aluminoferrites. There may also be some Fe_2O_3 and spinel ($(\text{Mg,Fe})\text{Al}_2\text{O}_4$). The slag typically carries minor amounts of periclase (MgO with some Fe in solid solution) and lime phase (CaO with some Fe, Mn & Mg in solid solution). Other possible minor constituents include fluorite (CaF_2) and apatite (Ca fluoro-phosphate), the last present in phosphoric slags. The alteration products are, again, difficult to identify specifically but are probably, mainly, hydrated silicates. Portlandite ($\text{Ca}(\text{OH})_2$) may be present.

Basic refractory material. When present, this is mainly magnesian and consists of granular periclase (MgO) with interstitial silicates. Sometimes samples contain chrome-magnesia material with chromite present in addition to the other phases. Hot face material (from close to the furnace) may also occur. The periclase and interstitial silicates show secondary alteration similar to that of the basic steel slag. Brucite ($\text{Mg}(\text{OH})_2$) is likely.

Acid steel slag. When present this consists mainly of fayalite ($(\text{Fe,Mn})_2\text{SiO}_4$), Fe,Mn oxides and cristobalite (high temperature SiO_2).

Other slags. The 'intermediate slag' (probably primary flush slags from steel furnaces) has a variable phase assemblage, being mainly formed of silicates, particularly dicalcium silicate, melilite, merwinite and a complex olivine phase together with spinel and wustite (FeO). Sometimes it contains significant amounts of periclase, well embedded in the slag. The 'ferrous slag' (probably from foundry operations) has similar silicates but much more substantial content of iron oxides, usually wustite. It is often associated with scale (iron oxides formed on the surface of steel during reheating/cooling). When present, the 'cindery slag' consists of various silicates and silicate glass with Fe oxides, hercynite (FeAl_2O_4) and, sometimes, corundum (Al_2O_3). It is usually derived from heating furnaces and is often associated with burnt shale. When present, the 'siliceous clinker' is similar but devoid of iron oxides.

Other constituents The aluminosilicate brick includes a range of refractory firebrick, common brick and alumina-rich refractories. The 'quartz, sandstone, etc.' may include used silica refractory material consisting of quartz and its high temperature forms. Sometimes there is a distinct granular texture and it is derived from silcrete, a kind of chert. Cementitious material may bond the finer particles together. It is similar to the other alteration products consisting mostly of complex hydrates difficult to identify under the microscope. Sometimes some is used Portland cement recognised by the relict textures of the clinker and the embedded quartz sand.

APPENDIX B

PETROLOGICAL REPORT ON SAMPLES BG0F 01 & 02

A petrological examination has been carried out of two samples BG0F 01 and 02.

Polished blocks were prepared using particulate material crushed to a nominal size of -5mm . Representative material was made up into resin-bonded blocks. One face of each of these was ground flat and polished using diamond pastes. In addition, the surfaces were selectively etched with water and 0.1%N HCl in order to help with the phase identification.

The detailed results are given in the accompanying Table.

Both samples consist mainly of basic steel slag with small but significant amounts of basic refractory material.

There are small amounts of blast furnace slag and its alteration products.

Blast furnace slag

The unaltered blast furnace slag consists mainly of melilite (Ca,Mg,Al silicate). It is crystalline with crystals varying up to about 1mm in size. The matrix, the space between the melilite crystals, is partly occupied by silicate glass and partly with other silicates. Also, some spinel (MgAl_2O_4) occurs as a primary phase. The slag contains minor amounts of iron metal. Secondary alteration is moderate. It is mainly restricted to pore infill and the formation of thin rinds. The secondary products are mostly finely granular and are difficult to identify specifically under the microscope. Some calcite (CaCO_3) is present but no well-crystallised gypsum ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$) was seen.

Basic steel slag

Although the individual particles vary considerably in composition the two samples are broadly similar to one another.

The unaltered basic steel slag consists mainly of dicalcium silicate, tricalcium silicate, RO, R_3O_4 and R_2O_3 phases (FeO, Fe_3O_4 and Fe_2O_3 with some Al, Mn, Mg and Ca in solid solution), and CaF phases (complex Ca alumino-ferrites). Lime phase (CaO with some Fe, Mn and Mg in solid solution) is present in substantial amounts and is widespread. It occurs mainly as granular particles up to about 0.1 mm in size that tends to be packed together as macro-inclusions. Periclase (MgO with some Fe in solid solution) is present in small amounts and like lime phase is widespread. It tends to be present in the grain cores protected by marginal RO phase that is more iron rich. Some metal is present as small prills partly rusted. The slag is extensively altered to secondary products that are

difficult to identify specifically and are, probably, mainly hydrated silicates but also include some calcite (CaCO₃).

Basic refractory material

This is mainly magnesian and consists of two types: (a) coarsely crystalline granular periclase (MgO) with bonding by magnesian silicates and (b) finely crystalline material probably seawater magnesia.

Other constituents

These include quartz, alumino-silicate brick, cinder, metal with associated red (goethitic) rust, coke, coal and fume. The particles are bonded together by cementitious material that is similar to the slag alteration products but probably also includes some clay. It consists mostly of complex hydrates difficult to identify under the optical microscope.

TRS SAMPLES BG0F 01 & 02

	1	2
BLAST FURNACE SLAG		
Amount	s	s
Phases present:-		
Melilite	l	l
Matrix & other silicates	s	m
Metallic iron	-	vs
Spinel	-	s
Glassy slag	s	s
Alteration products	m	m
Calcite	-	s
BASIC STEEL SLAG		
Amount	L	L
Phases present:-		
Dicalcium silicate	l	m
Tricalcium silicate	-	s
Unetched silicate	-	s
RO phase	m	m
CaF phase	s	s
R3O4 & R2O3 phases	s	s
Metal & rust	s	s
Lime phase	s	s
Periclase	s	s
Alteration products	m	m
BASIC REFRACTORIES		
Amount	s	s
OTHER CONSTITUENTS		
Alumino-silicate brick	s	vs
Quartz, etc.	s	s
Cindery slag	vs	-
Fume	vs	vs
Metal, rust, scale, etc.	s	s
Coke	s	vs
Coal & char	s	-
Cementitious alteration products	s	s

L = very large, l = large, m = medium, s = small and vs = very small amounts

GENERAL EXPLANATION

L = very large, l = large, m = medium, s = small and vs = very small amounts.

Blast furnace slag. When present this consists mainly of melilite (Ca,Mg,Al silicate ranging in composition between $\text{Ca}_2\text{Al}_2\text{SiO}_7$ and $\text{Ca}_2\text{MgSi}_2\text{O}_7$). Other common phases are merwinite ($\text{Ca}_3\text{MgSi}_2\text{O}_8$), The matrix often consists of some of the above phases, especially melilite, but may also contain other phases such as wollastonite (CaSiO_3), anorthite ($\text{CaAl}_2\text{Si}_2\text{O}_8$) and pyroxene ($(\text{CaMg})\text{SiO}_3$). Spinel (MgAl_2O_4) may be present. Sulphides and metal usually occur and are mostly finely dispersed, but the metal sometimes occurs as prills and may contain some graphite and Ti carbo-nitride (TiCN). Material reported as ceramic in appearance is very finely crystalline. The alteration products often include calcite and gypsum but are mostly silicate and/or sulpho-aluminate hydrates that are difficult to identify specifically under the microscope.

Basic steel slag. When present this consists mainly of dicalcium silicate, mostly the β -form (larnite) but sometimes the alpha form. Phosphoric slags may contain nagelschmidite (Ca_2SiO_4 with $\text{Ca}_3\text{P}_2\text{O}_8$ in solid solution). Other silicate often present in small amounts, unetched by dilute HCl, is probably melilite. RO, R_3O_4 and RF phases are typically present and are mainly FeO and Fe_3O_4 with some Mg, Mn, Ca, etc. in solid solution and complex Ca alumino-ferrites. There may also be some Fe_2O_3 and spinel ($(\text{Mg,Fe})\text{Al}_2\text{O}_4$). The slag typically carries minor amounts of periclase (MgO with some Fe in solid solution) and lime phase (CaO with some Fe, Mn & Mg in solid solution). Other possible minor constituents include fluorite (CaF_2) and apatite (Ca fluoro-phosphate), the last present in phosphoric slags. The alteration products are, again, difficult to identify specifically but are probably, mainly, hydrated silicates. Portlandite ($\text{Ca}(\text{OH})_2$) may be present.

Basic refractory material. When present, this is mainly magnesian and consists of granular periclase (MgO) with interstitial silicates. Sometimes samples contain chrome-magnesia material with chromite present in addition to the other phases. Hot face material (from close to the furnace) may also occur. The periclase and interstitial silicates show secondary alteration similar to that of the basic steel slag. Brucite ($\text{Mg}(\text{OH})_2$) is likely.

Acid steel slag. When present this consists mainly of fayalite ($(\text{Fe,Mn})_2\text{SiO}_4$), Fe,Mn oxides and cristobalite (high temperature SiO_2).

Other slags. The 'intermediate slag' (probably primary flush slags from steel furnaces) has a variable phase assemblage, being mainly formed of silicates, particularly dicalcium silicate, melilite, merwinite and a complex olivine phase together with spinel and wustite (FeO). Sometimes it contains significant amounts of periclase, well embedded in the slag. The 'ferrous slag' (probably from foundry operations) has similar silicates but much more substantial content of iron oxides, usually wustite. It is often associated with scale (iron oxides formed on the surface of steel during reheating/cooling). When present, the 'cindery slag' consists of various silicates and silicate glass with Fe oxides, hercynite (FeAl_2O_4) and, sometimes, corundum (Al_2O_3). It is usually derived from heating furnaces and is often associated with burnt shale. When present, the 'siliceous clinker' is similar but devoid of iron oxides.

Other constituents The alumino-silicate brick includes a range of refractory firebrick, common brick and alumina-rich refractories. The 'quartz, sandstone, etc.' may include used silica refractory material consisting of quartz and its high temperature forms. Sometimes there is a distinct granular texture and it is derived from silcrete, a kind of chert. Cementitious material may bond the finer particles together. It is similar to the other alteration products consisting mostly of complex hydrates difficult to identify under the microscope. Sometimes some is used Portland cement recognised by the relict textures of the clinker and the embedded quartz sand.

APPENDIX C

MECHANISMS OF VOLUMETRIC INSTABILITY IN IRON AND STEEL INDUSTRY SLAGS

Volumetric change with time can occur in some types of iron and steel industry slags. These mechanisms are briefly described in this section.

Blast Furnace Slags

Fresh-make air-cooled, i.e. crystalline, blast furnace slags are almost always volumetrically stable after cooling. The two mechanisms for volumetric instability listed in BS1047:1983 – “Air Cooled Blast furnace Slag for use in Construction” are:-

- a) Beta to gamma inversion of dicalcium silicate.**
- b) Iron unsoundness.**

a) Research by G H Thomas on this phase transformation has shown the transformation to be athermal rather than isothermal. In practical terms this means that inversion, and the expansion associated with it, can only occur during the cooling cycle. In fully cooled material there would appear to be no further risk of instability from this mechanism.

b) Iron unsoundness is a very rare form of instability frequently associated with operating problems in the blast furnace. TRS know of only one instance in over 40 years. The mechanism, which is a hydrolysis reaction, is immediately triggered off by the presence of water. Once water has initiated the reaction, the mechanism proceeds to completion. It is impossible to arrest the process once started; at least by methods operating in normal ambient conditions.

It follows that the risk of late expansion from either of these mechanisms in blast furnace slag is remote.

c) Sulphoaluminate Type Activity

Some years ago, G. H. Thomas discovered a third mechanism that may give rise to volumetric instability. The process is possible only in some old blast furnace slag altered by weathering. When the sulphide sulphur in the blast furnace slags is oxidised during

weathering to sulphate, under some circumstances reactions can take place within the slag to produce an 'ettringite' type product. The process is somewhat analogous to sulphatic attack on concrete and has a similar result - expansion of the mass and associated disruption.

For the mechanism to have any significance, the slag needs to have residual potential for this reaction. Evidence of past activity does not necessarily indicate further reaction is possible.

The TRS accelerated expansion test is, we believe, uniquely capable of identifying such slags, as well as instability attributable to free CaO and free MgO in steel slag & etc.

Basic Steel Slags

Basic steel slags commonly contain significant quantities of free CaO and free MgO. These free oxides are well known for the massive expansion associated with their hydration. In practical terms, it is impossible to forecast when hydration will take place, but it can be up to decades after the material was cooled – or placed. The reasons are complex, but include the varying density of the oxides, due to the variation in temperatures at which the products have been held in the furnace. Other factors influencing rate of hydration include:-

- the protection of slags by a reaction product at the oxide interface with the slag.
- the presence of the oxides as lime or magnesia rich solid solutions instead of the pure oxide.

The result is potential future volumetric instability but at an unforeseeable date. Periclase, i.e. free MgO, is relatively much slower than free CaO to hydrate.

Scrap High Magnesia Refractories

These are particularly undesirable components in fill as they commonly result in high concentrations of free MgO. The problems associated with these concentrations are similar to those where periclase is found in basic steel slag.

**Specialist Chemical Testing
(Tested Externally)**



DETS

Certificate of Analysis

Certificate Number Combined 4251 Prairie

10-Nov-20

Client Allied Exploration & Geotechnics Limited
Unit 25
Stella Gill Industrial Estate
Pelton Fell
DH2 2RG

Our Reference Combined 4251 Prairie

Client Reference 4251

Order No (not supplied)

Contract Title Prairie Site Ground Investigation Works

Description 120 Soil samples, 24 Leachate samples, 42 Water samples.

Date Received 06-Apr-20

Date Started 06-Apr-20

Date Completed 10-Nov-20

Test Procedures Identified by prefix DETSn (details on request).

Notes Opinions and interpretations are outside the laboratory's scope of ISO 17025 accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By



Adam Fenwick
Contracts Manager





Summary of Chemical Analysis

Matrix Descriptions

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Sample ID	Other ID	Depth	Lab No	Completed	Matrix Description
PRAIRIE_AUK_TP13 2	4	1.3	1663605	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP13 1	5	1.8	1663606	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP10 1	5	1	1663734	05/08/2020	Dark brown gravelly SAND (Possible made ground - brick)
PRAIRIE_AUK_TP10 1	9	2.2	1663735	05/08/2020	Dark brown sandy, clayey GRAVEL (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP10 4	5	1.5	1663736	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP10 5	11	2.5	1663737	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_BH10 4	1	5.5	1663978	05/08/2020	Dark brown gravelly, sandy CLAY
PRAIRIE_AUK_TP17 2	3	0.8	1665133	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP17 5	3	0.8	1665134	05/08/2020	Dark brown sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP17 5	6	1.8	1665135	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_TP17 8	3	0.8	1665136	05/08/2020	Dark brown sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_BH10 6	1	5.5	1665137	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP10 7	6	1.8	1665138	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP10 7	11	0.8	1665139	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_TP10 8	5	1	1665140	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP10 8	8	2	1665141	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP11 3	5	1.3	1665142	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_BH10 3	1	2.5	1665286	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_TP11 5	6	1.9	1665288	05/08/2020	Dark grey sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP12 2	3	1	1665290	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP12 3	3	0.6	1665291	05/08/2020	Dark brown gravelly, clayey SAND
PRAIRIE_AUK_TP18 5	5	4.3	1665292	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_TP18 6	3	0.5	1665293	05/08/2020	Dark brown gravelly, sandy CLAY (Possible made ground - brick)
PRAIRIE_AUK_TP18 8	3	1	1665295	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP12 1	4	1.5	1665450	05/08/2020	Dark brown sandy, clayey GRAVEL (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP13 8	3	1.2	1665451	05/08/2020	Dark brown gravelly SAND (Possible made ground - brick)
PRAIRIE_AUK_TP14 9	3	1.3	1665452	05/08/2020	Dark brown gravelly, clayey SAND
PRAIRIE_AUK_TP16 8	1	0.05	1665453	05/08/2020	Dark brown gravelly, clayey SAND

Summary of Chemical Analysis

Matrix Descriptions

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Sample ID	Other ID	Depth	Lab No	Completed	Matrix Description
PRAIRIE_AUK_TP17 3	3	0.9	1665454	05/08/2020	Dark brown gravelly, clayey SAND
PRAIRIE_AUK_SURF ACE1	1	0	1665455	05/08/2020	Cream, gravelly, sandy and CLAY
PRAIRIE_AUK_TP11 4	6	0.9	1665588	05/08/2020	U/S (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP12 4	5	1.5	1665589	05/08/2020	Dark brown gravelly, very sandy CLAY
PRAIRIE_AUK_TP17 4	3	0.8	1665590	05/08/2020	Dark brown gravelly, very sandy CLAY
PRAIRIE_AUK_TP17 4	6	1.6	1665591	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_TP17 6	3	0.9	1665592	05/08/2020	Dark brown gravelly, very sandy CLAY
PRAIRIE_AUK_TP17 7	2	0.6	1665593	05/08/2020	Dark brown gravelly, very sandy CLAY
PRAIRIE_AUK_TP18 9	7	3	1665594	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_TP17 9	4	1.4	1665610	05/08/2020	U/S (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP17 9	7	2	1665611	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_TP18 1	3	0.6	1665612	05/08/2020	Dark brown gravelly, very, sandy CLAY
PRAIRIE_AUK_TP18 2	3	0.9	1665613	05/08/2020	U/S (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP14 5	4	1.6	1665990	05/08/2020	Dark brown gravelly, sandy CLAY
PRAIRIE_AUK_TP14 6C	5	1.3	1665991	05/08/2020	Dark brown gravelly, sandy CLAY
PRAIRIE_AUK_TP15 6A	2	0.3	1665992	05/08/2020	Dark brown gravelly, very sandy CLAY
PRAIRIE_AUK_TP16 2	3A	1.7	1665993	05/08/2020	Dark brown gravelly, very sandy CLAY including some rootlets
PRAIRIE_AUK_TP18 0	3	0.3	1665994	05/08/2020	Dark brown gravelly, very sandy CLAY including some rootlets
PRAIRIE_AUK_TP16 3	3	1.2	1665995	05/08/2020	U/S (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP13 5	5	1.3	1666343	05/08/2020	Dark brown clayey, sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP13 6	3	0.8	1666344	05/08/2020	Dark brown sandy, clayey GRAVEL (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP13 6	10	2.9	1666345	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_TP16 5	3	1	1666346	05/08/2020	Dark brown gravelly, clayey SAND
PRAIRIE_AUK_TP16 7	6	2.5	1666347	05/08/2020	Dark brown gravelly, clayey SAND
PRAIRIE_AUK_TP16 9	3	1.5	1666348	05/08/2020	Dark brown gravelly, clayey SAND
PRAIRIE_AUK_BH10 8	1	2.5	1666610	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_TP13 9B	3	0.3	1666611	05/08/2020	Dark brown very sandy GRAVEL (Possible made ground - brick) (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP13 9B	6	3.3	1666612	05/08/2020	Dark brown sandy CLAY



Summary of Chemical Analysis

Matrix Descriptions

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Sample ID	Other ID	Depth	Lab No	Completed	Matrix Description
PRAIRIE_AUK_TP14 8A	5	1.4	1666613	05/08/2020	Dark brown very sandy GRAVEL (Possible made ground - brick) (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP15 0	3	1.5	1666614	05/08/2020	Dark brown very sandy GRAVEL (Possible made ground - brick) (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP15 9	3	0.6	1666615	05/08/2020	Dark brown very sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP19 0A	3	1.1	1666616	05/08/2020	Dark brown gravelly, clayey SAND
PRAIRIE_AUK_BH10 5	1	3	1667231	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_TP12 6	5	2.6	1667232	05/08/2020	Dark brown gravelly, sandy CLAY
PRAIRIE_AUK_TP12 8	3	0.9	1667233	05/08/2020	U/S (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP12 9	4A	2.1	1667234	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_TP13 0	4A	1	1667235	05/08/2020	Dark brown gravelly, clayey SAND
PRAIRIE_AUK_TP14 7	4	1.5	1667236	05/08/2020	Dark brown gravelly, sandy CLAY
PRAIRIE_AUK_TP15 8	3	1.3	1667237	05/08/2020	Dark brown gravelly, clayey SAND
PRAIRIE_AUK_TP15 7	2	0.8	1667238	05/08/2020	Dark brown gravelly, clayey SAND
PRAIRIE_AUK_TP12 0A	3	1	1667501	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP13 4	3	1	1667502	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP13 4	6	2	1667503	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_TP16 1	3	1	1667504	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP16 6	3	0.45	1667505	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP16 6	8	1.2	1667506	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_TP17 1	3	0.75	1667507	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_TP18 7	3	0.7	1667508	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_BH11 0	1	3	1668118	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_TP10 2	4	1	1668119	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP10 2	11	3	1668120	05/08/2020	Dark brown gravelly, sandy CLAY
PRAIRIE_AUK_TP10 3	3	1	1668121	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP10 9	3	1	1668122	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP11 0	3	1	1668123	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP11 0	7	2	1668124	05/08/2020	Dark brown gravelly, sandy CLAY
PRAIRIE_AUK_TP11 1	4	1.5	1668125	05/08/2020	Dark brown gravelly SAND



Summary of Chemical Analysis

Matrix Descriptions

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Sample ID	Other ID	Depth	Lab No	Completed	Matrix Description
PRAIRIE_AUK_TP11 2	4	1.5	1668126	05/08/2020	Dark brown gravelly SAND (Possible made ground - brick)
PRAIRIE_AUK_TP11 9	3	1.5	1668127	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP11 9	7	2.5	1668128	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_TP13 3	2	0.5	1668129	05/08/2020	Dark brown, gravelly SAND
PRAIRIE_AUK_TP15 2	6	2	1668130	05/08/2020	Dark brown gravelly, very sandy CLAY
PRAIRIE_AUK_TP15 3	4	1.1	1668131	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP15 4	3	0.85	1668132	05/08/2020	Dark brown very gravelly SAND
PRAIRIE_AUK_TP15 5	3	0.7	1668133	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP16 0	4	0.75	1668134	05/08/2020	Dark brown gravelly SAND (Possible made ground - brick)
PRAIRIE_AUK_TP17 0	4	1	1668135	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_TP16 4	3	0.7	1668557	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP16 4	5	1.3	1668558	05/08/2020	Dark brown gravelly, slightly clayey SAND
PRAIRIE_AUK_TP18 4	2	0.3	1668559	05/08/2020	Dark brown sandy GRAVEL including odd rootlets (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP10 6	3	1	1668560	05/08/2020	Dark brown gravelly, sandy CLAY
PRAIRIE_AUK_TP11 6	3	1.3	1668561	05/08/2020	Dark brown gravelly, clayey SAND
PRAIRIE_AUK_TP11 7	8	3	1668562	05/08/2020	Dark brown sandy, clayey GRAVEL (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP11 8	3	1.2	1668563	05/08/2020	Dark brown gravelly SAND
PRAIRIE_AUK_TP12 7	3	0.3	1668564	05/08/2020	Dark brown gravelly SAND (Possible made ground - brick)
PRAIRIE_AUK_TP12 7A	3	2.8	1668565	05/08/2020	Brown sandy CLAY
PRAIRIE_AUK_TP14 0	3	1	1668566	05/08/2020	Dark brown gravelly, clayey SAND
PRAIRIE_AUK_TP14 1	4	2	1668567	05/08/2020	U/S (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP14 2	3	0.9	1668568	05/08/2020	U/S (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP14 2	4	1.5	1668569	05/08/2020	U/S (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP14 3	3	0.8	1668570	05/08/2020	Dark brown gravelly, clayey SAND
PRAIRIE_AUK_TP14 3	6	1.6	1668571	05/08/2020	Dark brown gravelly, sandy CLAY
PRAIRIE_AUK_TP15 1	5	1.2	1668572	05/08/2020	Dark brown gravelly, clayey SAND
PRAIRIE_AUK_TP13 9	4	1.1	1668657	05/08/2020	Dark brown very gravelly, sandy CLAY
PRAIRIE_AUK_TP14 4	3	0.8	1668869	05/08/2020	Dark brown very sandy, clayey GRAVEL (sample matrix outside MCERTS scope of accreditation)

Summary of Chemical Analysis

Matrix Descriptions

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Sample ID	Other ID	Depth	Lab No	Completed	Matrix Description
PRAIRIE_AUK_TP11 2	7	2.1	1669251	05/08/2020	Dark brown sandy GRAVEL (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP19 4A	1	1.4	1670142	05/08/2020	U/S (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP19 6A	1	1.4	1670143	05/08/2020	U/S (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_TP20 1	1	3.6	1670144	05/08/2020	Dark brown gravelly, clayey SAND
PRAIRIE_AUK_TP19 3	1	0.8	1670502	05/08/2020	U/S (sample matrix outside MCERTS scope of accreditation)
PRAIRIE_AUK_BH10 1	1	3	1675450	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_BH10 7	1	3	1675451	05/08/2020	Dark brown sandy CLAY
PRAIRIE_AUK_SW4	1	0	1700277	05/08/2020	Dark grey very gravelly SAND



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

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Lab No	1663605	1663606	1663734	1663735	1663736
Sample ID	PRAIRIE_AUK_TP132	PRAIRIE_AUK_TP131	PRAIRIE_AUK_TP101	PRAIRIE_AUK_TP101	PRAIRIE_AUK_TP104
Depth	1.30	1.80	1.00	2.20	1.50
Other ID	4	5	5	9	5
Sample Type	ES	ES	ES	ES	ES
Sampling Date	02/04/2020	02/04/2020	01/04/2020	01/04/2020	01/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Asbestos Quantification	DETSC 1102	0.001	%			0.001		
Metals								
Aluminium	DETSC 2301*	1	mg/kg	12000	15000	36000	32000	31000
Antimony	DETSC 2301*	1	mg/kg	7.7	9.1	1.4	1.5	3.4
Arsenic	DETSC 2301#	0.2	mg/kg	5.2	13	13	18	23
Barium	DETSC 2301#	1.5	mg/kg	220	1300	390	280	390
Beryllium	DETSC 2301#	0.2	mg/kg	0.7	1.4	4.4	4.0	3.5
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	5.4	1.3	3.1	4.3	3.4
Cadmium	DETSC 2301#	0.1	mg/kg	0.4	0.3	0.4	0.5	0.5
Chromium	DETSC 2301#	0.15	mg/kg	410	620	30	39	120
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	36	100	55	54	61
Iron	DETSC 2301	25	mg/kg	140000	99000	18000	31000	56000
Lead	DETSC 2301#	0.3	mg/kg	88	46	330	89	110
Magnesium	DETSC 2301*	1	mg/kg	41000	33000	23000	14000	25000
Manganese	DETSC 2301#	20	mg/kg	18000	17000	2900	1500	7700
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	0.07	0.25	0.24	0.34
Molybdenum	DETSC 2301#	0.4	mg/kg	3.9	1.5	1.0	1.6	1.4
Nickel	DETSC 2301#	1	mg/kg	17	12	9.7	23	21
Silicon	DETSC 2301*	10	mg/kg	42000	46000	67000	120000	64000
Vanadium	DETSC 2301#	0.8	mg/kg	430	3300	74	91	290
Zinc	DETSC 2301#	1	mg/kg	130	56	170	200	180
Inorganics								
Loss on Ignition at 440oC	DETSC 2003#	0.01	%					
pH	DETSC 2008#		pH	12.2	12.1	10.0	10.1	10.9
Calorific Value	DETSC 5008	1	MJ/kg					
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.7	0.4	0.6	0.2	0.3
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6	< 0.6	2.4	0.7	< 0.6
Organic matter	DETSC 2002#	0.1	%	1.0	1.6	4.5	2.8	2.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	17	24	850	590	490
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	1.9	120	16	5.0



Summary of Chemical Analysis

Soil Samples

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Lab No	1663605	1663606	1663734	1663735	1663736
Sample ID	PRAIRIE_AUK_ TP132	PRAIRIE_AUK_ TP131	PRAIRIE_AUK_ TP101	PRAIRIE_AUK_ TP101	PRAIRIE_AUK_ TP104
Depth	1.30	1.80	1.00	2.20	1.50
Other ID	4	5	5	9	5
Sample Type	ES	ES	ES	ES	ES
Sampling Date	02/04/2020	02/04/2020	01/04/2020	01/04/2020	01/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units	1663605	1663606	1663734	1663735	1663736
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	2.7	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	4.9	< 1.5	< 1.5	3.6	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	43	11	< 3.4	20	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	48	12	< 10	27	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	1.1	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	1.1	< 0.5	0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	1.9	< 0.6	19	1.5	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	7.7	< 1.4	38	16	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	12	< 10	58	18	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	60	12	58	45	< 10
EPH (C10-C40)	DETSC 3311#	10	mg/kg	290	68	1100	110	120
PAHs								
Naphthalene	DETSC 3303#	0.03	mg/kg	0.08	< 0.03	0.09	0.08	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.05	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.09	< 0.03	1.4	0.15	0.05
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	1.4	0.11	0.06
Phenanthrene	DETSC 3303#	0.03	mg/kg	1.6	0.42	22	1.1	1.1
Anthracene	DETSC 3303	0.03	mg/kg	0.08	0.08	2.7	0.21	0.14
Fluoranthene	DETSC 3303#	0.03	mg/kg	1.4	0.97	37	1.4	1.9
Pyrene	DETSC 3303#	0.03	mg/kg	0.91	0.74	31	1.0	1.6
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.24	0.33	7.8	0.39	0.66
Chrysene	DETSC 3303	0.03	mg/kg	0.44	0.40	7.1	0.49	0.79
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.44	0.45	6.7	0.36	0.75
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.18	0.18	2.6	0.15	0.31
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.14	0.22	3.7	0.23	0.43
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.14	0.13	2.0	0.10	0.20
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.04	0.04	0.55	0.03	0.06
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.19	0.16	2.3	0.11	0.27
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	6.0	4.1	130	5.9	8.3



Summary of Chemical Analysis

Soil Samples

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Lab No	1663605	1663606	1663734	1663735	1663736
PRAIRIE_AUK_	PRAIRIE_AUK_	PRAIRIE_AUK_	PRAIRIE_AUK_	PRAIRIE_AUK_	PRAIRIE_AUK_
Sample ID	TP132	TP131	TP101	TP101	TP104
Depth	1.30	1.80	1.00	2.20	1.50
Other ID	4	5	5	9	5
Sample Type	ES	ES	ES	ES	ES
Sampling Date	02/04/2020	02/04/2020	01/04/2020	01/04/2020	01/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units						
PCBs									
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg						
PCB 52	DETSC 3401#	0.01	mg/kg						
PCB 101	DETSC 3401#	0.01	mg/kg						
PCB 118	DETSC 3401#	0.01	mg/kg						
PCB 153	DETSC 3401#	0.01	mg/kg						
PCB 138	DETSC 3401#	0.01	mg/kg						
PCB 180	DETSC 3401#	0.01	mg/kg						
PCB 7 Total	DETSC 3401#	0.01	mg/kg						
Phenols									
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	0.4	0.3	0.4	< 0.3	< 0.3	

Summary of Chemical Analysis Soil Samples

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Lab No	1663737	1663978	1665133	1665134
Sample ID	PRAIRIE_AUK_TP105	PRAIRIE_AUK_BH104	PRAIRIE_AUK_TP172	PRAIRIE_AUK_TP175
Depth	2.50	5.50	0.80	0.80
Other ID	11	1	3	3
Sample Type	ES	ES	ES	ES
Sampling Date	01/04/2020	03/04/2020	06/04/2020	06/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0.001	%			0.001	
Metals							
Aluminium	DETSC 2301*	1	mg/kg	16000	9700	12000	18000
Antimony	DETSC 2301*	1	mg/kg	2.0	< 1.0	1.9	3.7
Arsenic	DETSC 2301#	0.2	mg/kg	14	5.9	20	13
Barium	DETSC 2301#	1.5	mg/kg	400	120	650	350
Beryllium	DETSC 2301#	0.2	mg/kg	1.7	0.7	1.5	2.8
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	2.2	1.1	7.7	3.3
Cadmium	DETSC 2301#	0.1	mg/kg	0.4	0.1	1.4	0.6
Chromium	DETSC 2301#	0.15	mg/kg	38	20	19	130
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	44	19	95	54
Iron	DETSC 2301	25	mg/kg	46000	24000	34000	57000
Lead	DETSC 2301#	0.3	mg/kg	45	11	120	1500
Magnesium	DETSC 2301*	1	mg/kg	7900	11000	8800	12000
Manganese	DETSC 2301#	20	mg/kg	1100	450	38000	8400
Mercury	DETSC 2325#	0.05	mg/kg	0.09	< 0.05	4.1	0.37
Molybdenum	DETSC 2301#	0.4	mg/kg	1.1	0.8	2.7	1.8
Nickel	DETSC 2301#	1	mg/kg	38	23	25	18
Silicon	DETSC 2301*	10	mg/kg	180000	120000	80000	79000
Vanadium	DETSC 2301#	0.8	mg/kg	48	28	39	280
Zinc	DETSC 2301#	1	mg/kg	160	48	280	170
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#		pH	9.1	8.1	10.0	10.4
Calorific Value	DETSC 5008	1	MJ/kg				
Cyanide, Total	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	52	6.7
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	0.5	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	0.6	< 0.6	3.6	0.9
Organic matter	DETSC 2002#	0.1	%	1.4	1.0	4.4	3.1
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	770	100	450	390
Sulphur (free)	DETSC 3049#	0.75	mg/kg	8.0	< 0.75	15	1000



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

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Lab No	1663737	1663978	1665133	1665134
Sample ID	PRAIRIE_AUK_TP105	PRAIRIE_AUK_BH104	PRAIRIE_AUK_TP172	PRAIRIE_AUK_TP175
Depth	2.50	5.50	0.80	0.80
Other ID	11	1	3	3
Sample Type	ES	ES	ES	ES
Sampling Date	01/04/2020	03/04/2020	06/04/2020	06/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	0.13
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	2.1
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	93
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	350
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	67
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	510
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	0.15
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	0.22
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	1.3
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	2.1	< 0.9	< 0.9	250
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	3.1	< 0.5	2.3	2100
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	7.6	< 0.6	21	830
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	9.7	< 1.4	33	210
Aromatic C5-C35	DETSC 3072*	10	mg/kg	23	< 10	57	3400
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	23	< 10	57	3900
EPH (C10-C40)	DETSC 3311#	10	mg/kg	78	< 10	360	10000
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	0.06	< 0.03	0.35	24
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.92	19
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.62	< 0.03	0.99	98
Fluorene	DETSC 3303	0.03	mg/kg	0.57	< 0.03	1.6	74
Phenanthrene	DETSC 3303#	0.03	mg/kg	3.1	< 0.03	8.0	98
Anthracene	DETSC 3303	0.03	mg/kg	0.53	< 0.03	8.0	30
Fluoranthene	DETSC 3303#	0.03	mg/kg	3.0	< 0.03	12	41
Pyrene	DETSC 3303#	0.03	mg/kg	2.3	< 0.03	11	30
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.74	< 0.03	6.5	13
Chrysene	DETSC 3303	0.03	mg/kg	0.85	< 0.03	4.8	12
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.92	< 0.03	5.6	12
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.30	< 0.03	2.8	59
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.55	< 0.03	3.9	120
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.28	< 0.03	2.4	53
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.08	< 0.03	0.61	15
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.35	< 0.03	2.9	64
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	14	< 0.10	72	760



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1663737	1663978	1665133	1665134
Sample ID	PRAIRIE_AUK_TP105	PRAIRIE_AUK_BH104	PRAIRIE_AUK_TP172	PRAIRIE_AUK_TP175
Depth	2.50	5.50	0.80	0.80
Other ID	11	1	3	3
Sample Type	ES	ES	ES	ES
Sampling Date	01/04/2020	03/04/2020	06/04/2020	06/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	1.4	< 0.3	5.3

Summary of Chemical Analysis Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665135	1665136	1665137	1665138
Sample ID	PRAIRIE_AUK_ TP175	PRAIRIE_AUK_ TP178	PRAIRIE_AUK_ BH106	PRAIRIE_AUK_ TP107
Depth	1.80	0.80	5.50	1.80
Other ID	6	3	1	6
Sample Type	ES	ES	ES	ES
Sampling Date	06/04/2020	06/04/2020	06/04/2020	06/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0.001	%				
Metals							
Aluminium	DETSC 2301*	1	mg/kg	14000	16000	15000	12000
Antimony	DETSC 2301*	1	mg/kg	1.2	2.4	1.5	4.8
Arsenic	DETSC 2301#	0.2	mg/kg	8.4	18	6.4	33
Barium	DETSC 2301#	1.5	mg/kg	340	250	160	270
Beryllium	DETSC 2301#	0.2	mg/kg	1.2	2.2	1.2	2.6
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	0.8	1.5	1.1	2.3
Cadmium	DETSC 2301#	0.1	mg/kg	0.2	0.4	0.2	1.4
Chromium	DETSC 2301#	0.15	mg/kg	28	18	52	90
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	31	91	32	120
Iron	DETSC 2301	25	mg/kg	35000	70000	32000	87000
Lead	DETSC 2301#	0.3	mg/kg	30	70	20	120
Magnesium	DETSC 2301*	1	mg/kg	6000	5900	14000	7400
Manganese	DETSC 2301#	20	mg/kg	900	670	1200	3200
Mercury	DETSC 2325#	0.05	mg/kg	0.19	0.13	0.78	0.07
Molybdenum	DETSC 2301#	0.4	mg/kg	< 0.4	3.6	0.6	4.0
Nickel	DETSC 2301#	1	mg/kg	34	41	25	58
Silicon	DETSC 2301*	10	mg/kg	180000	66000	140000	50000
Vanadium	DETSC 2301#	0.8	mg/kg	33	96	150	280
Zinc	DETSC 2301#	1	mg/kg	83	160	69	350
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%		26		
pH	DETSC 2008#		pH	8.4	8.0	11.1	9.7
Calorific Value	DETSC 5008	1	MJ/kg		13.5		
Cyanide, Total	DETSC 2130#	0.1	mg/kg	2.0	2.5	0.2	1.6
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6
Organic matter	DETSC 2002#	0.1	%	3.2	12	1.9	13
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	35	61	310	200
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	< 0.75	0.92	< 0.75



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1665135	1665136	1665137	1665138
Sample ID	PRAIRIE_AUK_ TP175	PRAIRIE_AUK_ TP178	PRAIRIE_AUK_ BH106	PRAIRIE_AUK_ TP107
Depth	1.80	0.80	5.50	1.80
Other ID	6	3	1	6
Sample Type	ES	ES	ES	ES
Sampling Date	06/04/2020	06/04/2020	06/04/2020	06/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	0.37	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	7.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	31	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	39	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	0.48	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	0.24	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	0.64	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	85	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	310	< 0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	160	< 0.6	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	96	< 1.4	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	650	< 10	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	690	< 10	< 10	< 10
EPH (C10-C40)	DETSC 3311#	10	mg/kg	1200	< 10	< 10	< 10
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	440	0.06	0.11	0.06
Acenaphthylene	DETSC 3303#	0.03	mg/kg	31	0.03	< 0.03	0.04
Acenaphthene	DETSC 3303#	0.03	mg/kg	340	0.09	0.13	0.07
Fluorene	DETSC 3303	0.03	mg/kg	220	0.09	0.12	0.06
Phenanthrene	DETSC 3303#	0.03	mg/kg	290	0.12	0.22	0.42
Anthracene	DETSC 3303	0.03	mg/kg	53	< 0.03	0.03	0.08
Fluoranthene	DETSC 3303#	0.03	mg/kg	87	0.11	0.13	1.2
Pyrene	DETSC 3303#	0.03	mg/kg	62	0.08	0.10	1.1
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	27	0.07	0.05	0.71
Chrysene	DETSC 3303	0.03	mg/kg	23	0.06	0.05	0.66
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	23	0.06	0.05	1.0
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	10	< 0.03	< 0.03	0.41
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	20	0.04	0.03	0.54
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	8.6	< 0.03	< 0.03	0.31
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	2.5	< 0.03	< 0.03	0.10
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	10	< 0.03	< 0.03	0.35
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	1700	0.76	0.97	7.1



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1665135	1665136	1665137	1665138
Sample ID	PRAIRIE_AUK_ TP175	PRAIRIE_AUK_ TP178	PRAIRIE_AUK_ BH106	PRAIRIE_AUK_ TP107
Depth	1.80	0.80	5.50	1.80
Other ID	6	3	1	6
Sample Type	ES	ES	ES	ES
Sampling Date	06/04/2020	06/04/2020	06/04/2020	06/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	3.9	0.5	< 0.3	< 0.3

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665139	1665140	1665141	1665142
Sample ID	PRAIRIE_AUK_ TP107	PRAIRIE_AUK_ TP108	PRAIRIE_AUK_ TP108	PRAIRIE_AUK_ TP113
Depth	0.80	1.00	2.00	1.30
Other ID	11	5	8	5
Sample Type	ES	ES	ES	ES
Sampling Date	06/04/2020	06/04/2020	06/04/2020	06/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0.001	%		0.001	0.002	0.006
Metals							
Aluminium	DETSC 2301*	1	mg/kg	12000	23000	10000	21000
Antimony	DETSC 2301*	1	mg/kg	< 1.0	5.3	11	4.5
Arsenic	DETSC 2301#	0.2	mg/kg	9.2	11	31	18
Barium	DETSC 2301#	1.5	mg/kg	290	650	830	320
Beryllium	DETSC 2301#	0.2	mg/kg	1.2	2.3	1.0	2.7
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	2.6	1.5	1.9	4.3
Cadmium	DETSC 2301#	0.1	mg/kg	0.2	1.5	5.8	1.3
Chromium	DETSC 2301#	0.15	mg/kg	25	340	620	150
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	23	40	89	72
Iron	DETSC 2301	25	mg/kg	33000	57000	100000	75000
Lead	DETSC 2301#	0.3	mg/kg	36	120	320	140
Magnesium	DETSC 2301*	1	mg/kg	3800	21000	23000	18000
Manganese	DETSC 2301#	20	mg/kg	440	14000	16000	7800
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	0.06	0.06	0.08
Molybdenum	DETSC 2301#	0.4	mg/kg	0.7	3.5	6.7	2.3
Nickel	DETSC 2301#	1	mg/kg	30	16	40	24
Silicon	DETSC 2301*	10	mg/kg	190000	54000	49000	63000
Vanadium	DETSC 2301#	0.8	mg/kg	40	950	1600	280
Zinc	DETSC 2301#	1	mg/kg	98	230	520	280
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%		8.1	4.8	
pH	DETSC 2008#		pH	8.6	11.7	11.9	11.3
Calorific Value	DETSC 5008	1	MJ/kg		< 1.0	< 1.0	
Cyanide, Total	DETSC 2130#	0.1	mg/kg	22	0.5	0.7	5.9
Cyanide, Free	DETSC 2130#	0.1	mg/kg	0.1	< 0.1	< 0.1	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6
Organic matter	DETSC 2002#	0.1	%	1.2	1.4	1.9	4.0
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	270	330	160	320
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	5.3	3.5	2.3



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665139	1665140	1665141	1665142
Sample ID	PRAIRIE_AUK_ TP107	PRAIRIE_AUK_ TP108	PRAIRIE_AUK_ TP108	PRAIRIE_AUK_ TP113
Depth	0.80	1.00	2.00	1.30
Other ID	11	5	8	5
Sample Type	ES	ES	ES	ES
Sampling Date	06/04/2020	06/04/2020	06/04/2020	06/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	31	13	46
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	32	14	46
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	1.6	0.8
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	5.1	7.9	7.1
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	67	36	76
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	72	46	84
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	100	60	130
EPH (C10-C40)	DETSC 3311#	10	mg/kg	< 10	420	180	230
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	0.23	0.06	0.20	0.21
Acenaphthylene	DETSC 3303#	0.03	mg/kg	0.06	0.03	0.56	0.15
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.14	0.15	0.48	0.13
Fluorene	DETSC 3303	0.03	mg/kg	0.17	0.13	0.94	0.23
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.44	1.3	4.2	1.8
Anthracene	DETSC 3303	0.03	mg/kg	0.07	0.30	1.9	0.52
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.57	4.1	9.7	5.0
Pyrene	DETSC 3303#	0.03	mg/kg	0.46	4.2	8.6	6.0
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.26	3.3	7.8	3.0
Chrysene	DETSC 3303	0.03	mg/kg	0.28	2.1	4.8	2.3
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.32	4.0	12	3.1
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.13	1.8	6.2	1.2
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.21	2.4	8.4	2.3
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.10	1.1	3.1	0.79
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.28	0.72	0.23
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.11	1.3	2.9	1.0
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	3.5	26	73	28



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1665139	1665140	1665141	1665142
Sample ID	PRAIRIE_AUK_ TP107	PRAIRIE_AUK_ TP108	PRAIRIE_AUK_ TP108	PRAIRIE_AUK_ TP113
Depth	0.80	1.00	2.00	1.30
Other ID	11	5	8	5
Sample Type	ES	ES	ES	ES
Sampling Date	06/04/2020	06/04/2020	06/04/2020	06/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665286	1665288	1665290	1665291
Sample ID	PRAIRIE_AUK_ BH103	PRAIRIE_AUK_ TP115	PRAIRIE_AUK_ TP122	PRAIRIE_AUK_ TP123
Depth	2.50	1.90	1.00	0.60
Other ID	1	6	3	3
Sample Type	ES	ES	ES	ES
Sampling Date	08/04/2020	08/04/2020	08/04/2020	08/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0.001	%			0.002	
Metals							
Aluminium	DETSC 2301*	1	mg/kg	14000	35000	10000	16000
Antimony	DETSC 2301*	1	mg/kg	1.5	1.4	6.6	5.0
Arsenic	DETSC 2301#	0.2	mg/kg	11	4.2	10	14
Barium	DETSC 2301#	1.5	mg/kg	270	370	160	240
Beryllium	DETSC 2301#	0.2	mg/kg	1.4	3.9	1.2	1.2
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	1.7	4.4	2.0	3.7
Cadmium	DETSC 2301#	0.1	mg/kg	0.3	< 0.1	2.6	0.5
Chromium	DETSC 2301#	0.15	mg/kg	30	66	85	190
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	39	10	170	68
Iron	DETSC 2301	25	mg/kg	42000	14000	180000	86000
Lead	DETSC 2301#	0.3	mg/kg	50	4.6	91	56
Magnesium	DETSC 2301*	1	mg/kg	9500	33000	6000	16000
Manganese	DETSC 2301#	20	mg/kg	1200	4100	2400	9400
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	< 0.05	< 0.05	0.29
Molybdenum	DETSC 2301#	0.4	mg/kg	0.8	0.4	12	3.2
Nickel	DETSC 2301#	1	mg/kg	34	2.9	65	19
Silicon	DETSC 2301*	10	mg/kg	160000	77000	39000	95000
Vanadium	DETSC 2301#	0.8	mg/kg	47	230	71	360
Zinc	DETSC 2301#	1	mg/kg	130	33	3000	200
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%			2.1	
pH	DETSC 2008#		pH	9.7	11.4	11.2	11.9
Calorific Value	DETSC 5008	1	MJ/kg			< 1.0	
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.5	1.6	9.5	29
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6	0.8	< 0.6	6.3
Organic matter	DETSC 2002#	0.1	%	3.7	0.8	1.5	2.1
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	470	400	230	170
Sulphur (free)	DETSC 3049#	0.75	mg/kg	3.4	4.5	< 0.75	7.9



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1665286	1665288	1665290	1665291
Sample ID	PRAIRIE_AUK_ BH103	PRAIRIE_AUK_ TP115	PRAIRIE_AUK_ TP122	PRAIRIE_AUK_ TP123
Depth	2.50	1.90	1.00	0.60
Other ID	1	6	3	3
Sample Type	ES	ES	ES	ES
Sampling Date	08/04/2020	08/04/2020	08/04/2020	08/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	40
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	290
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	24	190
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	24	520
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	16
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	99
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	< 1.4	100
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	220
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	24	730
EPH (C10-C40)	DETSC 3311#	10	mg/kg	< 10	< 10	120	1500
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	0.29	< 0.03	< 0.03	< 0.30
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.30
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.30
Fluorene	DETSC 3303	0.03	mg/kg	0.04	< 0.03	< 0.03	< 0.30
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.12	0.05	0.08	0.48
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.30
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.10	0.11	0.11	0.92
Pyrene	DETSC 3303#	0.03	mg/kg	0.07	0.09	0.09	0.72
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.03	0.05	0.04	0.56
Chrysene	DETSC 3303	0.03	mg/kg	0.04	0.05	0.06	0.50
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.05	0.06	0.53
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.03	< 0.30
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.30
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.03	0.36
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.30
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.30
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	0.62	0.39	0.44	< 3.37



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1665286	1665288	1665290	1665291
Sample ID	PRAIRIE_AUK_ BH103	PRAIRIE_AUK_ TP115	PRAIRIE_AUK_ TP122	PRAIRIE_AUK_ TP123
Depth	2.50	1.90	1.00	0.60
Other ID	1	6	3	3
Sample Type	ES	ES	ES	ES
Sampling Date	08/04/2020	08/04/2020	08/04/2020	08/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 52	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 101	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 118	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 153	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 138	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 180	DETSC 3401#	0.01	mg/kg		< 0.01		
PCB 7 Total	DETSC 3401#	0.01	mg/kg		< 0.01		
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	0.4	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665292	1665293	1665295	1665450
Sample ID	PRAIRIE_AUK_ TP185	PRAIRIE_AUK_ TP186	PRAIRIE_AUK_ TP188	PRAIRIE_AUK_ TP121
Depth	4.30	0.50	1.00	1.50
Other ID	5	3	3	4
Sample Type	ES	ES	ES	ES
Sampling Date	08/04/2020	07/04/2020	08/04/2020	09/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0.001	%				
Metals							
Aluminium	DETSC 2301*	1	mg/kg	11000	15000	11000	8100
Antimony	DETSC 2301*	1	mg/kg	1.3	4.7	3.9	11
Arsenic	DETSC 2301#	0.2	mg/kg	8.1	150	28	1.6
Barium	DETSC 2301#	1.5	mg/kg	220	340	270	210
Beryllium	DETSC 2301#	0.2	mg/kg	0.9	1.4	1.1	0.4
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	0.6	1.0	2.4	3.6
Cadmium	DETSC 2301#	0.1	mg/kg	0.3	3.7	0.2	0.2
Chromium	DETSC 2301#	0.15	mg/kg	23	55	69	750
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	32	100	53	21
Iron	DETSC 2301	25	mg/kg	42000	78000	60000	180000
Lead	DETSC 2301#	0.3	mg/kg	23	68	26	14
Magnesium	DETSC 2301*	1	mg/kg	7500	8400	7100	32000
Manganese	DETSC 2301#	20	mg/kg	490	75000	21000	37000
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	0.60	0.11	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	0.8	38	2.5	3.6
Nickel	DETSC 2301#	1	mg/kg	31	46	27	3.6
Silicon	DETSC 2301*	10	mg/kg	170000	14000	48000	38000
Vanadium	DETSC 2301#	0.8	mg/kg	28	240	150	1700
Zinc	DETSC 2301#	1	mg/kg	160	150	81	56
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%	4.4		13	
pH	DETSC 2008#		pH	8.4	10.7	10.6	12.1
Calorific Value	DETSC 5008	1	MJ/kg	< 1.0		12.0	
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.5	19	2.6	23
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	0.5	< 0.1	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	1.2
Organic matter	DETSC 2002#	0.1	%	1.9	3.0	5.0	1.5
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	120	270	220	32
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	2.7	2.1	< 0.75



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665292	1665293	1665295	1665450
Sample ID	PRAIRIE_AUK_TP185	PRAIRIE_AUK_TP186	PRAIRIE_AUK_TP188	PRAIRIE_AUK_TP121
Depth	4.30	0.50	1.00	1.50
Other ID	5	3	3	4
Sample Type	ES	ES	ES	ES
Sampling Date	08/04/2020	07/04/2020	08/04/2020	09/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	1.6	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	5.2	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	8.4	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	16	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	16	< 10	< 10
EPH (C10-C40)	DETSC 3311#	10	mg/kg	< 10	130	140	< 10
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	0.61	0.31	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.59	0.17	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.40	0.13	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	0.42	0.20	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	2.5	2.6	0.10
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	1.3	0.67	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	6.5	4.2	0.39
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	5.7	3.2	0.49
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	2.7	1.4	0.18
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	2.2	1.2	0.26
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	3.0	1.3	0.27
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	1.3	0.57	0.10
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	2.1	0.79	0.12
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.93	0.27	0.09
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.25	0.10	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	1.1	0.33	0.09
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	31	17	2.1



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1665292	1665293	1665295	1665450
Sample ID	PRAIRIE_AUK_ TP185	PRAIRIE_AUK_ TP186	PRAIRIE_AUK_ TP188	PRAIRIE_AUK_ TP121
Depth	4.30	0.50	1.00	1.50
Other ID	5	3	3	4
Sample Type	ES	ES	ES	ES
Sampling Date	08/04/2020	07/04/2020	08/04/2020	09/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665451	1665452	1665453	1665454
Sample ID	PRAIRIE_AUK_ TP138	PRAIRIE_AUK_ TP149	PRAIRIE_AUK_ TP168	PRAIRIE_AUK_ TP173
Depth	1.20	1.30	0.05	0.90
Other ID	3	3	1	3
Sample Type	ES	ES	ES	ES
Sampling Date	09/04/2020	09/04/2020	09/04/2020	09/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0.001	%	0.020	< 0.001	< 0.001	< 0.001
Metals							
Aluminium	DETSC 2301*	1	mg/kg	12000	8600	19000	21000
Antimony	DETSC 2301*	1	mg/kg	3.2	2.5	3.9	6.1
Arsenic	DETSC 2301#	0.2	mg/kg	15	37	44	78
Barium	DETSC 2301#	1.5	mg/kg	200	1100	210	210
Beryllium	DETSC 2301#	0.2	mg/kg	0.8	1.1	2.1	2.5
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	2.1	2.5	1.5	3.1
Cadmium	DETSC 2301#	0.1	mg/kg	0.5	0.7	0.6	0.5
Chromium	DETSC 2301#	0.15	mg/kg	150	33	61	93
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	26	110	78	320
Iron	DETSC 2301	25	mg/kg	47000	48000	91000	150000
Lead	DETSC 2301#	0.3	mg/kg	53	180	93	70
Magnesium	DETSC 2301*	1	mg/kg	12000	8000	10000	7700
Manganese	DETSC 2301#	20	mg/kg	5100	2000	2100	4100
Mercury	DETSC 2325#	0.05	mg/kg	2.1	1.4	0.15	0.09
Molybdenum	DETSC 2301#	0.4	mg/kg	2.0	2.6	2.1	5.6
Nickel	DETSC 2301#	1	mg/kg	13	27	38	86
Silicon	DETSC 2301*	10	mg/kg	88000	46000	62000	48000
Vanadium	DETSC 2301#	0.8	mg/kg	140	90	200	230
Zinc	DETSC 2301#	1	mg/kg	160	350	330	380
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#		pH	11.5	10.3	9.0	8.7
Calorific Value	DETSC 5008	1	MJ/kg				
Cyanide, Total	DETSC 2130#	0.1	mg/kg	9.9	11	0.6	120
Cyanide, Free	DETSC 2130#	0.1	mg/kg	0.3	< 0.1	< 0.1	0.2
Thiocyanate	DETSC 2130#	0.6	mg/kg	0.7	< 0.6	< 0.6	1.8
Organic matter	DETSC 2002#	0.1	%	1.3	2.8	12	8.6
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	150	290	77	540
Sulphur (free)	DETSC 3049#	0.75	mg/kg	2.4	1.5	< 0.75	2.4



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1665451	1665452	1665453	1665454
Sample ID	PRAIRIE_AUK_ TP138	PRAIRIE_AUK_ TP149	PRAIRIE_AUK_ TP168	PRAIRIE_AUK_ TP173
Depth	1.20	1.30	0.05	0.90
Other ID	3	3	1	3
Sample Type	ES	ES	ES	ES
Sampling Date	09/04/2020	09/04/2020	09/04/2020	09/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	11	12	7.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	13	13	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	7.9	< 0.6	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	30	< 1.4	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	38	< 10	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	51	13	< 10	< 10
EPH (C10-C40)	DETSC 3311#	10	mg/kg	280	96	< 10	< 10
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	0.04	< 0.03	0.06	2.0
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.09
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.05	< 0.03	0.05	0.57
Fluorene	DETSC 3303	0.03	mg/kg	0.04	0.03	0.03	0.20
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.44	0.35	0.28	0.37
Anthracene	DETSC 3303	0.03	mg/kg	0.08	0.06	0.04	0.05
Fluoranthene	DETSC 3303#	0.03	mg/kg	2.1	0.87	0.43	0.30
Pyrene	DETSC 3303#	0.03	mg/kg	2.1	0.70	0.37	0.23
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	1.4	0.36	0.18	0.09
Chrysene	DETSC 3303	0.03	mg/kg	1.2	0.35	0.25	0.14
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	1.8	0.32	0.24	0.11
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.78	0.14	0.10	0.05
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	1.2	0.18	0.12	0.05
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.58	0.09	0.08	0.04
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.20	0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	1.0	0.09	0.09	0.04
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	13	3.5	2.3	4.3



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1665451	1665452	1665453	1665454
PRAIRIE_AUK_	PRAIRIE_AUK_	PRAIRIE_AUK_	PRAIRIE_AUK_	PRAIRIE_AUK_
Sample ID	TP138	TP149	TP168	TP173
Depth	1.20	1.30	0.05	0.90
Other ID	3	3	1	3
Sample Type	ES	ES	ES	ES
Sampling Date	09/04/2020	09/04/2020	09/04/2020	09/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg	< 0.01			
PCB 52	DETSC 3401#	0.01	mg/kg	0.26			
PCB 101	DETSC 3401#	0.01	mg/kg	0.44			
PCB 118	DETSC 3401#	0.01	mg/kg	0.40			
PCB 153	DETSC 3401#	0.01	mg/kg	0.24			
PCB 138	DETSC 3401#	0.01	mg/kg	0.40			
PCB 180	DETSC 3401#	0.01	mg/kg	0.05			
PCB 7 Total	DETSC 3401#	0.01	mg/kg	1.8			
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	0.3	< 0.3



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665455	1665588	1665589	1665590
Sample ID	PRAIRIE_AUK_SU RFACE1	PRAIRIE_AUK_ TP114	PRAIRIE_AUK_ TP124	PRAIRIE_AUK_ TP174
Depth	0.00	0.90	1.50	0.80
Other ID	1	6	5	3
Sample Type	ES	ES	ES	ES
Sampling Date	09/04/2020	07/04/2020	08/04/2020	08/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0.001	%			0.002	
Metals							
Aluminium	DETSC 2301*	1	mg/kg	4800	12000	8300	9200
Antimony	DETSC 2301*	1	mg/kg	< 1.0	4.6	3.8	5.6
Arsenic	DETSC 2301#	0.2	mg/kg	1.8	51	40	58
Barium	DETSC 2301#	1.5	mg/kg	130	140	350	250
Beryllium	DETSC 2301#	0.2	mg/kg	0.5	1.3	0.8	0.9
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	1.9	0.8	7.2	1.4
Cadmium	DETSC 2301#	0.1	mg/kg	0.1	3.9	3.1	0.3
Chromium	DETSC 2301#	0.15	mg/kg	1.7	66	48	81
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	5.9	110	69	120
Iron	DETSC 2301	25	mg/kg	2700	69000	51000	120000
Lead	DETSC 2301#	0.3	mg/kg	10	330	90	110
Magnesium	DETSC 2301*	1	mg/kg	4700	3900	9900	8600
Manganese	DETSC 2301#	20	mg/kg	1500	2000	23000	99000
Mercury	DETSC 2325#	0.05	mg/kg	0.22	0.35	0.26	0.33
Molybdenum	DETSC 2301#	0.4	mg/kg	< 0.4	2.5	4.0	18
Nickel	DETSC 2301#	1	mg/kg	1.6	47	32	78
Silicon	DETSC 2301*	10	mg/kg	9500	U/S	100000	36000
Vanadium	DETSC 2301#	0.8	mg/kg	7.9	110	100	67
Zinc	DETSC 2301#	1	mg/kg	47	4200	340	160
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				6.5
pH	DETSC 2008#		pH	10.8	8.3	9.7	8.4
Calorific Value	DETSC 5008	1	MJ/kg				2.5
Cyanide, Total	DETSC 2130#	0.1	mg/kg	21	0.6	41	5.5
Cyanide, Free	DETSC 2130#	0.1	mg/kg	0.5	< 0.1	0.2	0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	6.6	2.2	1.7	1.3
Organic matter	DETSC 2002#	0.1	%	1.3	2.5	1.6	2.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	670	44	130	110
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	13	< 0.75	< 0.75



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665455	1665588	1665589	1665590
Sample ID	PRAIRIE_AUK_SU RFACE1	PRAIRIE_AUK_ TP114	PRAIRIE_AUK_ TP124	PRAIRIE_AUK_ TP174
Depth	0.00	0.90	1.50	0.80
Other ID	1	6	5	3
Sample Type	ES	ES	ES	ES
Sampling Date	09/04/2020	07/04/2020	08/04/2020	08/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 1.00	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 1.00	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	1.5	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 763.0	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	6.0	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	5.6	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	15	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	130	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	97	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	150	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	83	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	490	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	1300	< 10	< 10
EPH (C10-C40)	DETSC 3311#	10	mg/kg	< 10			
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	37000	0.05	0.11
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	5600	0.07	0.27
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	41	< 0.03	0.17
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	6200	< 0.03	0.23
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	22000	1.2	1.7
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	5700	0.22	0.43
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	11000	4.4	3.2
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	9700	3.8	2.6
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	4600	1.6	0.96
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	3600	1.8	0.93
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	91	1.7	0.92
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	49	0.86	0.39
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	92	0.66	0.60
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	31	0.62	0.30
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	8.4	0.21	0.09
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	29	0.72	0.35
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	110000	18	13



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1665455	1665588	1665589	1665590
Sample ID	PRAIRIE_AUK_SU RFACE1	PRAIRIE_AUK_ TP114	PRAIRIE_AUK_ TP124	PRAIRIE_AUK_ TP174
Depth	0.00	0.90	1.50	0.80
Other ID	1	6	5	3
Sample Type	ES	ES	ES	ES
Sampling Date	09/04/2020	07/04/2020	08/04/2020	08/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg		< 0.05		
PCB 52	DETSC 3401#	0.01	mg/kg		< 0.05		
PCB 101	DETSC 3401#	0.01	mg/kg		< 0.05		
PCB 118	DETSC 3401#	0.01	mg/kg		< 0.05		
PCB 153	DETSC 3401#	0.01	mg/kg		< 0.05		
PCB 138	DETSC 3401#	0.01	mg/kg		< 0.05		
PCB 180	DETSC 3401#	0.01	mg/kg		< 0.05		
PCB 7 Total	DETSC 3401#	0.01	mg/kg		< 0.01		
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	210	< 0.3	< 0.3

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665591	1665592	1665593	1665594
Sample ID	PRAIRIE_AUK_TP174	PRAIRIE_AUK_TP176	PRAIRIE_AUK_TP177	PRAIRIE_AUK_TP189
Depth	1.60	0.90	0.60	3.00
Other ID	6	3	2	7
Sample Type	ES	ES	ES	ES
Sampling Date	08/04/2020	07/04/2020	07/04/2020	07/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0.001	%				
Metals							
Aluminium	DETSC 2301*	1	mg/kg	12000	30000	31000	19000
Antimony	DETSC 2301*	1	mg/kg	< 1.0	3.0	2.8	1.3
Arsenic	DETSC 2301#	0.2	mg/kg	6.2	83	37	9.9
Barium	DETSC 2301#	1.5	mg/kg	84	260	120	260
Beryllium	DETSC 2301#	0.2	mg/kg	0.6	3.7	4.0	1.5
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	1.2	4.2	2.9	1.0
Cadmium	DETSC 2301#	0.1	mg/kg	< 0.1	0.4	0.2	0.2
Chromium	DETSC 2301#	0.15	mg/kg	20	58	110	33
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	17	80	26	30
Iron	DETSC 2301	25	mg/kg	32000	100000	80000	46000
Lead	DETSC 2301#	0.3	mg/kg	23	61	29	27
Magnesium	DETSC 2301*	1	mg/kg	2300	13000	11000	13000
Manganese	DETSC 2301#	20	mg/kg	370	1600	1600	830
Mercury	DETSC 2325#	0.05	mg/kg	0.06	0.08	< 0.05	0.08
Molybdenum	DETSC 2301#	0.4	mg/kg	0.6	3.2	1.2	0.6
Nickel	DETSC 2301#	1	mg/kg	11	65	32	42
Silicon	DETSC 2301*	10	mg/kg	190000	71000	61000	140000
Vanadium	DETSC 2301#	0.8	mg/kg	27	190	450	42
Zinc	DETSC 2301#	1	mg/kg	58	360	260	94
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%		12		
pH	DETSC 2008#		pH	7.2	8.4	8.7	7.9
Calorific Value	DETSC 5008	1	MJ/kg		5.0		
Cyanide, Total	DETSC 2130#	0.1	mg/kg	1.0	0.2	0.4	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	1.2	0.8	0.8	< 0.6
Organic matter	DETSC 2002#	0.1	%	0.7	3.2	2.9	0.8
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	190	170	83	350
Sulphur (free)	DETSC 3049#	0.75	mg/kg	6.8	< 0.75	< 0.75	< 0.75



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1665591	1665592	1665593	1665594
Sample ID	PRAIRIE_AUK_ TP174	PRAIRIE_AUK_ TP176	PRAIRIE_AUK_ TP177	PRAIRIE_AUK_ TP189
Depth	1.60	0.90	0.60	3.00
Other ID	6	3	2	7
Sample Type	ES	ES	ES	ES
Sampling Date	08/04/2020	07/04/2020	07/04/2020	07/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	7.3	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
EPH (C10-C40)	DETSC 3311#	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	0.04	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.05	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	0.04	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.17	0.06	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	0.06	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.05	0.67	0.14	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	0.04	0.62	0.16	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.03	0.10	0.05	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	0.15	0.08	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.06	0.05	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.03	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	2.0	0.53	< 0.10



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1665591	1665592	1665593	1665594
Sample ID	PRAIRIE_AUK_ TP174	PRAIRIE_AUK_ TP176	PRAIRIE_AUK_ TP177	PRAIRIE_AUK_ TP189
Depth	1.60	0.90	0.60	3.00
Other ID	6	3	2	7
Sample Type	ES	ES	ES	ES
Sampling Date	08/04/2020	07/04/2020	07/04/2020	07/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	0.8	0.9	< 0.3

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665610	1665611	1665612	1665613
Sample ID	PRAIRIE_AUK_ TP179	PRAIRIE_AUK_ TP179	PRAIRIE_AUK_ TP181	PRAIRIE_AUK_ TP182
Depth	1.40	2.00	0.60	0.90
Other ID	4	7	3	3
Sample Type	ES	ES	ES	ES
Sampling Date	09/04/2020	09/04/2020	09/04/2020	09/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0.001	%				
Metals							
Aluminium	DETSC 2301*	1	mg/kg	39000	15000	18000	21000
Antimony	DETSC 2301*	1	mg/kg	4.6	1.3	4.7	2.5
Arsenic	DETSC 2301#	0.2	mg/kg	88	9.3	45	33
Barium	DETSC 2301#	1.5	mg/kg	79	190	280	82
Beryllium	DETSC 2301#	0.2	mg/kg	4.0	1.7	2.5	3.0
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	2.3	1.5	1.5	2.4
Cadmium	DETSC 2301#	0.1	mg/kg	0.2	0.1	0.5	0.2
Chromium	DETSC 2301#	0.15	mg/kg	120	29	23	51
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	32	29	130	23
Iron	DETSC 2301	25	mg/kg	160000	39000	41000	87000
Lead	DETSC 2301#	0.3	mg/kg	27	34	380	23
Magnesium	DETSC 2301*	1	mg/kg	11000	4000	6400	7000
Manganese	DETSC 2301#	20	mg/kg	1200	320	12000	1000
Mercury	DETSC 2325#	0.05	mg/kg	0.32	0.05	0.10	0.75
Molybdenum	DETSC 2301#	0.4	mg/kg	2.1	0.5	2.6	0.8
Nickel	DETSC 2301#	1	mg/kg	98	30	23	28
Silicon	DETSC 2301*	10	mg/kg	100000	190000	56000	73000
Vanadium	DETSC 2301#	0.8	mg/kg	360	33	83	150
Zinc	DETSC 2301#	1	mg/kg	200	99	210	130
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#		pH	7.5	7.6	8.6	8.0
Calorific Value	DETSC 5008	1	MJ/kg				
Cyanide, Total	DETSC 2130#	0.1	mg/kg	120	4.8	20	3300
Cyanide, Free	DETSC 2130#	0.1	mg/kg	0.3	< 0.1	< 0.1	4.5
Thiocyanate	DETSC 2130#	0.6	mg/kg	2.1	< 0.6	0.9	69
Organic matter	DETSC 2002#	0.1	%	4.4	1.8	6.1	7.0
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	900	490	220	650
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	< 0.75	60	26



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665610	1665611	1665612	1665613
Sample ID	PRAIRIE_AUK_ TP179	PRAIRIE_AUK_ TP179	PRAIRIE_AUK_ TP181	PRAIRIE_AUK_ TP182
Depth	1.40	2.00	0.60	0.90
Other ID	4	7	3	3
Sample Type	ES	ES	ES	ES
Sampling Date	09/04/2020	09/04/2020	09/04/2020	09/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	0.25
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	6.3
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	42
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	49
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	3.6
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	100
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	0.04
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	0.03	< 0.01	< 0.01	0.31
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	0.71	< 0.01	< 0.01	13
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	27	< 0.9	< 0.9	1700
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	150	< 0.5	< 0.5	2500
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	31	< 0.6	< 0.6	370
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	9.7	< 1.4	< 1.4	82
Aromatic C5-C35	DETSC 3072*	10	mg/kg	220	< 10	< 10	4600
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	220	< 10	< 10	4700
EPH (C10-C40)	DETSC 3311#	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	190	2.5	0.27	3500
Acenaphthylene	DETSC 3303#	0.03	mg/kg	13	0.07	0.23	1300
Acenaphthene	DETSC 3303#	0.03	mg/kg	200	1.0	1.5	1300
Fluorene	DETSC 3303	0.03	mg/kg	100	0.47	1.1	730
Phenanthrene	DETSC 3303#	0.03	mg/kg	65	0.33	1.2	500
Anthracene	DETSC 3303	0.03	mg/kg	18	0.09	0.31	130
Fluoranthene	DETSC 3303#	0.03	mg/kg	12	0.08	0.56	120
Pyrene	DETSC 3303#	0.03	mg/kg	8.2	0.05	0.42	80
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	1.7	< 0.03	0.12	6.9
Chrysene	DETSC 3303	0.03	mg/kg	1.5	< 0.03	0.16	5.2
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.74	< 0.03	0.13	3.1
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.31	< 0.03	0.06	1.6
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.59	< 0.03	0.07	2.1
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.17	< 0.03	0.06	0.66
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.05	< 0.03	< 0.03	0.20
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.19	< 0.03	0.06	0.71
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	610	4.6	6.2	7700



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1665610	1665611	1665612	1665613
Sample ID	PRAIRIE_AUK_ TP179	PRAIRIE_AUK_ TP179	PRAIRIE_AUK_ TP181	PRAIRIE_AUK_ TP182
Depth	1.40	2.00	0.60	0.90
Other ID	4	7	3	3
Sample Type	ES	ES	ES	ES
Sampling Date	09/04/2020	09/04/2020	09/04/2020	09/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	1.6	0.6	1.0	9.0

Summary of Chemical Analysis Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665990	1665991	1665992	1665993	1665994
Sample ID	PRAIRIE_AUK_ TP145	PRAIRIE_AUK_ TP146C	PRAIRIE_AUK_ TP156A	PRAIRIE_AUK_ TP162	PRAIRIE_AUK_ TP180
Depth	1.60	1.30	0.30	1.70	0.30
Other ID	4	5	2	3A	3
Sample Type	ES	ES	ES	ES	ES
Sampling Date	14/04/2020	14/04/2020	14/04/2020	14/04/2020	14/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Asbestos Quantification	DETSC 1102	0.001	%			0.001		
Metals								
Aluminium	DETSC 2301*	1	mg/kg	11000	16000	26000	16000	15000
Antimony	DETSC 2301*	1	mg/kg	69	9.5	6.5	18	5.6
Arsenic	DETSC 2301#	0.2	mg/kg	64	14	31	2100	12
Barium	DETSC 2301#	1.5	mg/kg	560	250	540	320	270
Beryllium	DETSC 2301#	0.2	mg/kg	1.9	1.9	2.6	2.3	1.5
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	2.5	3.2	2.5	2.2	2.4
Cadmium	DETSC 2301#	0.1	mg/kg	0.8	1.0	0.7	1.7	0.7
Chromium	DETSC 2301#	0.15	mg/kg	120	19	170	100	310
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	20000	420	110	190	31
Iron	DETSC 2301	25	mg/kg	45000	35000	140000	360000	99000
Lead	DETSC 2301#	0.3	mg/kg	1200	210	110	870	94
Magnesium	DETSC 2301*	1	mg/kg	11000	9000	17000	3500	23000
Manganese	DETSC 2301#	20	mg/kg	4900	1700	6100	2800	28000
Mercury	DETSC 2325#	0.05	mg/kg	0.19	0.17	0.69	0.73	0.47
Molybdenum	DETSC 2301#	0.4	mg/kg	2.9	1.0	2.2	73	2.8
Nickel	DETSC 2301#	1	mg/kg	41	17	40	160	16
Silicon	DETSC 2301*	10	mg/kg	23000	69000	43000	53000	67000
Vanadium	DETSC 2301#	0.8	mg/kg	240	57	700	310	1200
Zinc	DETSC 2301#	1	mg/kg	1500	350	310	630	270
Inorganics								
Loss on Ignition at 440oC	DETSC 2003#	0.01	%					
pH	DETSC 2008#		pH	11.2	9.6	10.6	8.2	11.5
Calorific Value	DETSC 5008	1	MJ/kg					
Cyanide, Total	DETSC 2130#	0.1	mg/kg	1.3	13	12	3.6	2.3
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6	0.7	< 0.6	< 0.6	< 0.6
Organic matter	DETSC 2002#	0.1	%	2.8	5.8	3.2	3.4	3.3
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	200	590	280	110	110
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	5.2	1.2	< 0.75	1.4



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665990	1665991	1665992	1665993	1665994
Sample ID	PRAIRIE_AUK_TP145	PRAIRIE_AUK_TP146C	PRAIRIE_AUK_TP156A	PRAIRIE_AUK_TP162	PRAIRIE_AUK_TP180
Depth	1.60	1.30	0.30	1.70	0.30
Other ID	4	5	2	3A	3
Sample Type	ES	ES	ES	ES	ES
Sampling Date	14/04/2020	14/04/2020	14/04/2020	14/04/2020	14/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	6.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	16	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	45	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	99	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	170	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	1.3	< 0.9	4.2	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	1.6	< 0.5	5.1	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	13	< 0.6	0.7	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	55	< 1.4	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	71	< 10	10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	240	< 10	10	< 10
EPH (C10-C40)	DETSC 3311#	10	mg/kg					
PAHs								
Naphthalene	DETSC 3303#	0.03	mg/kg	0.06	0.03	0.05	< 0.03	0.24
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.03	< 0.03	0.06
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.04	< 0.03	< 0.03	< 0.03	0.11
Fluorene	DETSC 3303	0.03	mg/kg	0.03	< 0.03	0.03	< 0.03	0.09
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.37	0.32	0.63	< 0.03	1.8
Anthracene	DETSC 3303	0.03	mg/kg	0.09	0.07	0.17	< 0.03	0.79
Fluoranthene	DETSC 3303#	0.03	mg/kg	1.5	1.0	3.0	0.03	2.2
Pyrene	DETSC 3303#	0.03	mg/kg	1.4	0.91	3.0	0.03	2.0
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.61	0.43	1.6	0.03	0.82
Chrysene	DETSC 3303	0.03	mg/kg	0.61	0.40	1.3	< 0.03	0.90
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.92	0.44	2.0	< 0.03	0.86
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.30	0.19	0.79	< 0.03	0.37
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.47	0.30	1.2	< 0.03	0.43
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.21	0.12	0.58	< 0.03	0.19
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.06	0.03	0.15	< 0.03	0.06
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.30	0.16	0.77	< 0.03	0.27
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	7.0	4.3	15	< 0.10	11



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1665990	1665991	1665992	1665993	1665994
Sample ID	PRAIRIE_AUK_TP145	PRAIRIE_AUK_TP146C	PRAIRIE_AUK_TP156A	PRAIRIE_AUK_TP162	PRAIRIE_AUK_TP180
Depth	1.60	1.30	0.30	1.70	0.30
Other ID	4	5	2	3A	3
Sample Type	ES	ES	ES	ES	ES
Sampling Date	14/04/2020	14/04/2020	14/04/2020	14/04/2020	14/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
PCBs								
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg		< 0.01			
PCB 52	DETSC 3401#	0.01	mg/kg		< 0.01			
PCB 101	DETSC 3401#	0.01	mg/kg		< 0.01			
PCB 118	DETSC 3401#	0.01	mg/kg		< 0.01			
PCB 153	DETSC 3401#	0.01	mg/kg		< 0.01			
PCB 138	DETSC 3401#	0.01	mg/kg		< 0.01			
PCB 180	DETSC 3401#	0.01	mg/kg		< 0.01			
PCB 7 Total	DETSC 3401#	0.01	mg/kg		< 0.01			
Phenols								
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665995	1666343	1666344	1666345	1666346
Sample ID	PRAIRIE_AUK_TP163	PRAIRIE_AUK_TP135	PRAIRIE_AUK_TP136	PRAIRIE_AUK_TP136	PRAIRIE_AUK_TP165
Depth	1.20	1.30	0.80	2.90	1.00
Other ID	3	5	3	10	3
Sample Type	ES	ES	ES	ES	ES
Sampling Date	14/04/2020	15/04/2020	15/04/2020	15/04/2020	15/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Asbestos Quantification	DETSC 1102	0.001	%	< 0.001	< 0.001			
Metals								
Aluminium	DETSC 2301*	1	mg/kg	53000	25000	38000	15000	5900
Antimony	DETSC 2301*	1	mg/kg	< 1.0	4.5	< 1.0	1.2	2.5
Arsenic	DETSC 2301#	0.2	mg/kg	12	61	7.0	9.3	23
Barium	DETSC 2301#	1.5	mg/kg	170	500	160	310	150
Beryllium	DETSC 2301#	0.2	mg/kg	7.0	3.3	5.3	1.3	0.4
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	1.5	2.6	1.4	0.9	1.4
Cadmium	DETSC 2301#	0.1	mg/kg	0.1	0.8	0.2	0.2	0.4
Chromium	DETSC 2301#	0.15	mg/kg	12	52	9.1	26	120
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	40	100	15	29	28
Iron	DETSC 2301	25	mg/kg	6800	3200	8900	40000	41000
Lead	DETSC 2301#	0.3	mg/kg	15	220	5.0	35	43
Magnesium	DETSC 2301*	1	mg/kg	16000	15000	17000	6200	10000
Manganese	DETSC 2301#	20	mg/kg	1200	5300	870	700	18000
Mercury	DETSC 2325#	0.05	mg/kg	0.07	0.37	< 0.05	< 0.05	0.11
Molybdenum	DETSC 2301#	0.4	mg/kg	0.5	5.4	0.5	0.4	1.6
Nickel	DETSC 2301#	1	mg/kg	2.5	33	5.9	37	15
Silicon	DETSC 2301*	10	mg/kg	63000	64000	64000	170000	53000
Vanadium	DETSC 2301#	0.8	mg/kg	41	120	31	31	470
Zinc	DETSC 2301#	1	mg/kg	39	270	54	100	120
Inorganics								
Loss on Ignition at 440oC	DETSC 2003#	0.01	%					
pH	DETSC 2008#		pH	10.4	10.3	11.4	8.6	11.4
Calorific Value	DETSC 5008	1	MJ/kg					
Cyanide, Total	DETSC 2130#	0.1	mg/kg	1300	0.4	0.6	0.3	1.0
Cyanide, Free	DETSC 2130#	0.1	mg/kg	0.4	< 0.1	< 0.1	< 0.1	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	8.9	0.6	< 0.6	< 0.6	0.6
Organic matter	DETSC 2002#	0.1	%	1.1	3.3	0.5	2.6	13
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	480	400	840	120	170
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	0.83	2.2	< 0.75	1.4



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665995	1666343	1666344	1666345	1666346
Sample ID	PRAIRIE_AUK_TP163	PRAIRIE_AUK_TP135	PRAIRIE_AUK_TP136	PRAIRIE_AUK_TP136	PRAIRIE_AUK_TP165
Depth	1.20	1.30	0.80	2.90	1.00
Other ID	3	5	3	10	3
Sample Type	ES	ES	ES	ES	ES
Sampling Date	14/04/2020	15/04/2020	15/04/2020	15/04/2020	15/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	0.35	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	1.7	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	96	< 0.5	< 0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	40	< 0.6	< 0.6	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	7.1	< 1.4	< 1.4	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	150	< 10	< 10	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	150	< 10	< 10	< 10	< 10
EPH (C10-C40)	DETSC 3311#	10	mg/kg					
PAHs								
Naphthalene	DETSC 3303#	0.03	mg/kg	0.85	0.03	< 0.03	< 0.03	0.42
Acenaphthylene	DETSC 3303#	0.03	mg/kg	4.1	< 0.03	< 0.03	< 0.03	0.06
Acenaphthene	DETSC 3303#	0.03	mg/kg	20	0.05	< 0.03	< 0.03	0.05
Fluorene	DETSC 3303	0.03	mg/kg	11	0.03	< 0.03	< 0.03	0.07
Phenanthrene	DETSC 3303#	0.03	mg/kg	7.8	0.57	< 0.03	< 0.03	0.91
Anthracene	DETSC 3303	0.03	mg/kg	11	0.18	< 0.03	< 0.03	0.26
Fluoranthene	DETSC 3303#	0.03	mg/kg	11	2.3	< 0.03	< 0.03	1.0
Pyrene	DETSC 3303#	0.03	mg/kg	7.5	3.4	< 0.03	< 0.03	0.83
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	1.6	1.1	< 0.03	< 0.03	0.40
Chrysene	DETSC 3303	0.03	mg/kg	1.4	1.2	< 0.03	< 0.03	0.51
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.70	1.3	< 0.03	< 0.03	0.49
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.30	0.53	< 0.03	< 0.03	0.18
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.53	0.87	< 0.03	< 0.03	0.26
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.13	0.37	< 0.03	< 0.03	0.15
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.04	0.10	< 0.03	< 0.03	0.05
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.14	0.47	< 0.03	< 0.03	0.19
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	78	12	< 0.10	< 0.10	5.8



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1665995	1666343	1666344	1666345	1666346
Sample ID	PRAIRIE_AUK_ TP163	PRAIRIE_AUK_ TP135	PRAIRIE_AUK_ TP136	PRAIRIE_AUK_ TP136	PRAIRIE_AUK_ TP165
Depth	1.20	1.30	0.80	2.90	1.00
Other ID	3	5	3	10	3
Sample Type	ES	ES	ES	ES	ES
Sampling Date	14/04/2020	15/04/2020	15/04/2020	15/04/2020	15/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
PCBs								
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg					
PCB 52	DETSC 3401#	0.01	mg/kg					
PCB 101	DETSC 3401#	0.01	mg/kg					
PCB 118	DETSC 3401#	0.01	mg/kg					
PCB 153	DETSC 3401#	0.01	mg/kg					
PCB 138	DETSC 3401#	0.01	mg/kg					
PCB 180	DETSC 3401#	0.01	mg/kg					
PCB 7 Total	DETSC 3401#	0.01	mg/kg					
Phenols								
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	1.1	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1666347	1666348	1666610	1666611	1666612
Sample ID	PRAIRIE_AUK_TP167	PRAIRIE_AUK_TP169	PRAIRIE_AUK_BH108	PRAIRIE_AUK_TP139B	PRAIRIE_AUK_TP139B
Depth	2.50	1.50	2.50	0.30	3.30
Other ID	6	3	1	3	6
Sample Type	ES	ES	ES	ES	ES
Sampling Date	15/04/2020	15/04/2020	15/04/2020	16/04/2020	16/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Asbestos Quantification	DETSC 1102	0.001	%		< 0.001		< 0.001	
Metals								
Aluminium	DETSC 2301*	1	mg/kg	11000	8600	17000	26000	14000
Antimony	DETSC 2301*	1	mg/kg	2.5	1.7	2.0	5.4	1.4
Arsenic	DETSC 2301#	0.2	mg/kg	5.8	7.3	10	43	7.8
Barium	DETSC 2301#	1.5	mg/kg	220	120	240	810	330
Beryllium	DETSC 2301#	0.2	mg/kg	0.9	0.5	1.6	3.1	1.0
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	2.7	1.2	1.4	6.6	0.5
Cadmium	DETSC 2301#	0.1	mg/kg	0.2	0.7	0.3	1.9	0.2
Chromium	DETSC 2301#	0.15	mg/kg	120	46	76	77	24
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	17	39	46	94	29
Iron	DETSC 2301	25	mg/kg	42000	27000	46000	84000	40000
Lead	DETSC 2301#	0.3	mg/kg	31	68	38	410	28
Magnesium	DETSC 2301*	1	mg/kg	17000	6300	12000	21000	8700
Manganese	DETSC 2301#	20	mg/kg	8400	2000	1800	16000	700
Mercury	DETSC 2325#	0.05	mg/kg	0.13	0.10	0.27	3.6	0.06
Molybdenum	DETSC 2301#	0.4	mg/kg	1.0	1.7	1.0	3.5	0.4
Nickel	DETSC 2301#	1	mg/kg	12	24	37	31	33
Silicon	DETSC 2301*	10	mg/kg	64000	110000	160000	47000	160000
Vanadium	DETSC 2301#	0.8	mg/kg	410	75	200	140	30
Zinc	DETSC 2301#	1	mg/kg	78	150	140	1200	99
Inorganics								
Loss on Ignition at 440oC	DETSC 2003#	0.01	%					
pH	DETSC 2008#		pH	11.3	9.8	10.0	11.0	8.1
Calorific Value	DETSC 5008	1	MJ/kg					
Cyanide, Total	DETSC 2130#	0.1	mg/kg	2.2	0.6	2.0	220	2.0
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	0.4	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	0.7	0.8	< 0.6	3.1	< 0.6
Organic matter	DETSC 2002#	0.1	%	1.6	13	2.6	2.1	3.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	220	110	180	740	320
Sulphur (free)	DETSC 3049#	0.75	mg/kg	1.9	1.1	< 0.75	2.4	< 0.75



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1666347	1666348	1666610	1666611	1666612
Sample ID	PRAIRIE_AUK_TP167	PRAIRIE_AUK_TP169	PRAIRIE_AUK_BH108	PRAIRIE_AUK_TP139B	PRAIRIE_AUK_TP139B
Depth	2.50	1.50	2.50	0.30	3.30
Other ID	6	3	1	3	6
Sample Type	ES	ES	ES	ES	ES
Sampling Date	15/04/2020	15/04/2020	15/04/2020	16/04/2020	16/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	< 1.4	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10
EPH (C10-C40)	DETSC 3311#	10	mg/kg					
PAHs								
Naphthalene	DETSC 3303#	0.03	mg/kg	0.20	0.38	< 0.03	0.45	0.31
Acenaphthylene	DETSC 3303#	0.03	mg/kg	0.06	0.09	< 0.03	0.10	0.05
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.09	< 0.03	< 0.03	0.60	0.36
Fluorene	DETSC 3303	0.03	mg/kg	0.12	0.13	< 0.03	0.55	0.27
Phenanthrene	DETSC 3303#	0.03	mg/kg	1.5	1.9	0.04	1.5	0.33
Anthracene	DETSC 3303	0.03	mg/kg	0.37	0.50	< 0.03	0.34	0.06
Fluoranthene	DETSC 3303#	0.03	mg/kg	1.8	2.1	0.08	1.6	0.11
Pyrene	DETSC 3303#	0.03	mg/kg	1.4	1.7	0.07	1.3	0.08
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.55	0.65	< 0.03	0.30	0.04
Chrysene	DETSC 3303	0.03	mg/kg	0.69	0.67	< 0.03	0.52	0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.69	0.56	0.04	0.43	0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.26	0.22	< 0.03	0.17	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.32	0.31	< 0.03	0.20	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.20	0.13	< 0.03	0.12	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.06	0.04	< 0.03	0.04	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.24	0.16	< 0.03	0.16	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	8.6	9.5	0.23	8.3	1.6



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1666347	1666348	1666610	1666611	1666612
Sample ID	PRAIRIE_AUK_TP167	PRAIRIE_AUK_TP169	PRAIRIE_AUK_BH108	PRAIRIE_AUK_TP139B	PRAIRIE_AUK_TP139B
Depth	2.50	1.50	2.50	0.30	3.30
Other ID	6	3	1	3	6
Sample Type	ES	ES	ES	ES	ES
Sampling Date	15/04/2020	15/04/2020	15/04/2020	16/04/2020	16/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
PCBs								
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg					
PCB 52	DETSC 3401#	0.01	mg/kg					
PCB 101	DETSC 3401#	0.01	mg/kg					
PCB 118	DETSC 3401#	0.01	mg/kg					
PCB 153	DETSC 3401#	0.01	mg/kg					
PCB 138	DETSC 3401#	0.01	mg/kg					
PCB 180	DETSC 3401#	0.01	mg/kg					
PCB 7 Total	DETSC 3401#	0.01	mg/kg					
Phenols								
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	0.5	< 0.3	< 0.3

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1666613	1666614	1666615	1666616	1667231
Sample ID	PRAIRIE_AUK_TP148A	PRAIRIE_AUK_TP150	PRAIRIE_AUK_TP159	PRAIRIE_AUK_TP190A	PRAIRIE_AUK_BH105
Depth	1.40	1.50	0.60	1.10	3.00
Other ID	5	3	3	3	1
Sample Type	ES	ES	ES	ES	ES
Sampling Date	16/04/2020	16/04/2020	16/04/2020	16/04/2020	16/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Asbestos Quantification	DETSC 1102	0.001	%		0.009	0.002	0.003	
Metals								
Aluminium	DETSC 2301*	1	mg/kg	20000	7700	15000	15000	13000
Antimony	DETSC 2301*	1	mg/kg	2.7	7.6	< 1.0	1.6	2.0
Arsenic	DETSC 2301#	0.2	mg/kg	24	30	6.1	21	8.7
Barium	DETSC 2301#	1.5	mg/kg	330	400	340	560	170
Beryllium	DETSC 2301#	0.2	mg/kg	2.3	0.8	3.2	1.3	1.1
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	3.7	1.9	2.0	6.6	1.2
Cadmium	DETSC 2301#	0.1	mg/kg	1.0	1.3	0.1	1.5	0.2
Chromium	DETSC 2301#	0.15	mg/kg	69	75	53	24	34
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	39	130	14	54	40
Iron	DETSC 2301	25	mg/kg	53000	180000	18000	34000	41000
Lead	DETSC 2301#	0.3	mg/kg	65	420	13	160	40
Magnesium	DETSC 2301*	1	mg/kg	14000	8200	12000	8900	10000
Manganese	DETSC 2301#	20	mg/kg	16000	2400	4600	24000	730
Mercury	DETSC 2325#	0.05	mg/kg	1.3	2.6	0.13	1.8	0.07
Molybdenum	DETSC 2301#	0.4	mg/kg	2.9	5.8	0.7	3.6	1.0
Nickel	DETSC 2301#	1	mg/kg	23	54	5.8	24	37
Silicon	DETSC 2301*	10	mg/kg	51000	53000	59000	62000	160000
Vanadium	DETSC 2301#	0.8	mg/kg	110	110	160	49	41
Zinc	DETSC 2301#	1	mg/kg	200	830	65	630	140
Inorganics								
Loss on Ignition at 440oC	DETSC 2003#	0.01	%					
pH	DETSC 2008#		pH	11.3	10.1	10.7	10.8	8.5
Calorific Value	DETSC 5008	1	MJ/kg					
Cyanide, Total	DETSC 2130#	0.1	mg/kg	22	8.2	0.9	240	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg	0.1	0.1	< 0.1	0.6	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	1.2	< 0.6	1.5	4.7	< 0.6
Organic matter	DETSC 2002#	0.1	%	2.7	2.1	2.0	2.6	2.1
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	630	350	550	530	220
Sulphur (free)	DETSC 3049#	0.75	mg/kg	63	3.5	12	1.1	< 0.75



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1666613	1666614	1666615	1666616	1667231
Sample ID	PRAIRIE_AUK_TP148A	PRAIRIE_AUK_TP150	PRAIRIE_AUK_TP159	PRAIRIE_AUK_TP190A	PRAIRIE_AUK_BH105
Depth	1.40	1.50	0.60	1.10	3.00
Other ID	5	3	3	3	1
Sample Type	ES	ES	ES	ES	ES
Sampling Date	16/04/2020	16/04/2020	16/04/2020	16/04/2020	16/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	18	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	18	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	18	< 10	< 10
EPH (C10-C40)	DETSC 3311#	10	mg/kg					
PAHs								
Naphthalene	DETSC 3303#	0.03	mg/kg	0.23	0.53	0.20	0.07	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.07	0.08	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.27	0.67	0.23	0.16	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	0.21	0.49	0.16	0.09	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	1.5	1.6	0.27	1.4	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	0.18	0.34	0.10	0.14	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	2.2	2.1	1.1	3.0	0.04
Pyrene	DETSC 3303#	0.03	mg/kg	1.8	1.7	1.6	2.8	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.50	0.50	0.39	0.96	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	0.77	0.68	0.73	1.1	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.66	0.67	1.5	1.2	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.29	0.28	0.70	0.51	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.44	0.36	0.77	0.80	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.20	0.20	0.49	0.31	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.06	0.06	0.14	0.09	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.24	0.24	0.59	0.38	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	9.4	10	9.0	13	< 0.10



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1666613	1666614	1666615	1666616	1667231
Sample ID	PRAIRIE_AUK_TP148A	PRAIRIE_AUK_TP150	PRAIRIE_AUK_TP159	PRAIRIE_AUK_TP190A	PRAIRIE_AUK_BH105
Depth	1.40	1.50	0.60	1.10	3.00
Other ID	5	3	3	3	1
Sample Type	ES	ES	ES	ES	ES
Sampling Date	16/04/2020	16/04/2020	16/04/2020	16/04/2020	16/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
PCBs								
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg					
PCB 52	DETSC 3401#	0.01	mg/kg					
PCB 101	DETSC 3401#	0.01	mg/kg					
PCB 118	DETSC 3401#	0.01	mg/kg					
PCB 153	DETSC 3401#	0.01	mg/kg					
PCB 138	DETSC 3401#	0.01	mg/kg					
PCB 180	DETSC 3401#	0.01	mg/kg					
PCB 7 Total	DETSC 3401#	0.01	mg/kg					
Phenols								
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	0.3	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1667232	1667233	1667234	1667235	1667236
Sample ID	PRAIRIE_AUK_TP126	PRAIRIE_AUK_TP128	PRAIRIE_AUK_TP129	PRAIRIE_AUK_TP130	PRAIRIE_AUK_TP147
Depth	2.60	0.90	2.10	1.00	1.50
Other ID	5	3	4A	4A	4
Sample Type	ES	ES	ES	ES	ES
Sampling Date	17/04/2020	17/04/2020	17/04/2020	17/04/2020	17/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Asbestos Quantification	DETSC 1102	0.001	%		< 0.001			< 0.001
Metals								
Aluminium	DETSC 2301*	1	mg/kg	9800	3300	11000	9200	19000
Antimony	DETSC 2301*	1	mg/kg	4.1	< 1.0	1.4	2.9	3.6
Arsenic	DETSC 2301#	0.2	mg/kg	13	5.4	8.2	34	14
Barium	DETSC 2301#	1.5	mg/kg	160	89	430	130	390
Beryllium	DETSC 2301#	0.2	mg/kg	1.1	0.8	1.0	1.6	1.9
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	5.2	1.3	1.8	1.6	3.2
Cadmium	DETSC 2301#	0.1	mg/kg	0.5	< 0.1	0.4	0.4	0.8
Chromium	DETSC 2301#	0.15	mg/kg	50	8.8	25	69	99
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	86	35	29	56	58
Iron	DETSC 2301	25	mg/kg	110000	4800	35000	60000	56000
Lead	DETSC 2301#	0.3	mg/kg	82	27	40	100	220
Magnesium	DETSC 2301*	1	mg/kg	7500	1500	4100	4400	14000
Manganese	DETSC 2301#	20	mg/kg	2200	61	1300	2200	4100
Mercury	DETSC 2325#	0.05	mg/kg	0.22	< 0.05	< 0.05	0.18	0.83
Molybdenum	DETSC 2301#	0.4	mg/kg	2.2	< 0.4	0.6	1.7	1.8
Nickel	DETSC 2301#	1	mg/kg	28	12	39	38	20
Silicon	DETSC 2301*	10	mg/kg	23000	140000	180000	93000	87000
Vanadium	DETSC 2301#	0.8	mg/kg	160	10	33	170	190
Zinc	DETSC 2301#	1	mg/kg	440	39	140	280	340
Inorganics								
Loss on Ignition at 440oC	DETSC 2003#	0.01	%					
pH	DETSC 2008#		pH	10.3	8.6	8.8	9.3	10.9
Calorific Value	DETSC 5008	1	MJ/kg					
Cyanide, Total	DETSC 2130#	0.1	mg/kg	7.9	0.6	0.5	3.0	29
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	0.5
Thiocyanate	DETSC 2130#	0.6	mg/kg	1.2	< 0.6	< 0.6	< 0.6	2.5
Organic matter	DETSC 2002#	0.1	%	12	3.6	2.1	5.3	2.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	1200	25	270	100	480
Sulphur (free)	DETSC 3049#	0.75	mg/kg	24	< 0.75	< 0.75	< 0.75	< 0.75



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1667232	1667233	1667234	1667235	1667236
Sample ID	PRAIRIE_AUK_TP126	PRAIRIE_AUK_TP128	PRAIRIE_AUK_TP129	PRAIRIE_AUK_TP130	PRAIRIE_AUK_TP147
Depth	2.60	0.90	2.10	1.00	1.50
Other ID	5	3	4A	4A	4
Sample Type	ES	ES	ES	ES	ES
Sampling Date	17/04/2020	17/04/2020	17/04/2020	17/04/2020	17/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	0.20	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	25	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	2.1	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	28	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	2.2	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	320	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	1400	< 0.5	< 0.5	1.3
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	6.4	< 0.6	< 0.6	4.8
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	< 1.4	< 1.4	23
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	1700	< 10	< 10	29
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	1700	< 10	< 10	29
EPH (C10-C40)	DETSC 3311#	10	mg/kg					
PAHs								
Naphthalene	DETSC 3303#	0.03	mg/kg	0.14	520	3.2	0.05	0.07
Acenaphthylene	DETSC 3303#	0.03	mg/kg	0.05	5.5	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.30	520	3.6	0.16	0.09
Fluorene	DETSC 3303	0.03	mg/kg	0.29	100	0.66	0.04	0.05
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.73	5.1	0.09	0.18	0.73
Anthracene	DETSC 3303	0.03	mg/kg	0.77	1.1	0.09	0.04	0.77
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.56	0.34	< 0.03	0.24	2.0
Pyrene	DETSC 3303#	0.03	mg/kg	0.45	0.24	< 0.03	0.20	2.0
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.19	0.15	< 0.03	0.11	1.1
Chrysene	DETSC 3303	0.03	mg/kg	0.19	0.16	< 0.03	0.13	1.1
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.20	0.17	< 0.03	0.11	1.4
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.09	0.08	< 0.03	0.06	0.61
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.12	0.10	< 0.03	0.05	0.88
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.07	0.09	< 0.03	0.05	0.55
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	0.17
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.07	0.08	< 0.03	0.04	0.65
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	4.2	1200	7.7	1.4	12



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1667232	1667233	1667234	1667235	1667236
Sample ID	PRAIRIE_AUK_TP126	PRAIRIE_AUK_TP128	PRAIRIE_AUK_TP129	PRAIRIE_AUK_TP130	PRAIRIE_AUK_TP147
Depth	2.60	0.90	2.10	1.00	1.50
Other ID	5	3	4A	4A	4
Sample Type	ES	ES	ES	ES	ES
Sampling Date	17/04/2020	17/04/2020	17/04/2020	17/04/2020	17/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
PCBs								
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg					
PCB 52	DETSC 3401#	0.01	mg/kg					
PCB 101	DETSC 3401#	0.01	mg/kg					
PCB 118	DETSC 3401#	0.01	mg/kg					
PCB 153	DETSC 3401#	0.01	mg/kg					
PCB 138	DETSC 3401#	0.01	mg/kg					
PCB 180	DETSC 3401#	0.01	mg/kg					
PCB 7 Total	DETSC 3401#	0.01	mg/kg					
Phenols								
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1667237	1667238	1667501	1667502	1667503
Sample ID	PRAIRIE_AUK_TP158	PRAIRIE_AUK_TP157	PRAIRIE_AUK_TP120A	PRAIRIE_AUK_TP134	PRAIRIE_AUK_TP134
Depth	1.30	0.80	1.00	1.00	2.00
Other ID	3	2	3	3	6
Sample Type	ES	ES	ES	ES	ES
Sampling Date	17/04/2020	17/04/2020	20/04/2020	20/04/2020	20/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Asbestos Quantification	DETSC 1102	0.001	%		< 0.001	0.001		
Metals								
Aluminium	DETSC 2301*	1	mg/kg	10000	9600	21000	8700	13000
Antimony	DETSC 2301*	1	mg/kg	1.8	4.3	4.0	18	1.5
Arsenic	DETSC 2301#	0.2	mg/kg	9.1	10	12	61	9.0
Barium	DETSC 2301#	1.5	mg/kg	390	200	330	200	300
Beryllium	DETSC 2301#	0.2	mg/kg	1.7	1.0	3.1	0.9	1.2
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	7.4	3.5	4.9	2.6	0.8
Cadmium	DETSC 2301#	0.1	mg/kg	0.6	0.8	0.8	0.6	0.3
Chromium	DETSC 2301#	0.15	mg/kg	24	200	190	240	29
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	94	40	56	100	29
Iron	DETSC 2301	25	mg/kg	32000	61000	58000	140000	43000
Lead	DETSC 2301#	0.3	mg/kg	130	140	89	160	30
Magnesium	DETSC 2301*	1	mg/kg	7700	14000	18000	15000	7300
Manganese	DETSC 2301#	20	mg/kg	1000	12000	8200	26000	850
Mercury	DETSC 2325#	0.05	mg/kg	0.56	2.2	0.19	0.09	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	1.2	2.6	5.8	4.6	0.5
Nickel	DETSC 2301#	1	mg/kg	13	11	19	29	38
Silicon	DETSC 2301*	10	mg/kg	95000	70000	72000	59000	170000
Vanadium	DETSC 2301#	0.8	mg/kg	37	410	360	680	36
Zinc	DETSC 2301#	1	mg/kg	710	470	190	180	99
Inorganics								
Loss on Ignition at 440oC	DETSC 2003#	0.01	%					
pH	DETSC 2008#		pH	9.9	12.0	11.3	11.3	8.7
Calorific Value	DETSC 5008	1	MJ/kg					
Cyanide, Total	DETSC 2130#	0.1	mg/kg	57	25	2.2	1.4	0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg	0.2	< 0.1	< 0.1	< 0.1	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	3.3	1.5	0.7	< 0.6	< 0.6
Organic matter	DETSC 2002#	0.1	%	2.7	2.4	2.9	2.5	2.3
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	620	65	250	130	78
Sulphur (free)	DETSC 3049#	0.75	mg/kg	14	1.9	33	6.0	< 0.75



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1667237	1667238	1667501	1667502	1667503
Sample ID	PRAIRIE_AUK_TP158	PRAIRIE_AUK_TP157	PRAIRIE_AUK_TP120A	PRAIRIE_AUK_TP134	PRAIRIE_AUK_TP134
Depth	1.30	0.80	1.00	1.00	2.00
Other ID	3	2	3	3	6
Sample Type	ES	ES	ES	ES	ES
Sampling Date	17/04/2020	17/04/2020	20/04/2020	20/04/2020	20/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	3.4	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	27	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	270	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	300	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	0.6	6.8	1.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	1.3	6.3	100	15	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	7.2	22	510	69	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	29	610	86	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	29	910	86	< 10
EPH (C10-C40)	DETSC 3311#	10	mg/kg					
PAHs								
Naphthalene	DETSC 3303#	0.03	mg/kg	0.47	0.16	0.04	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.55	0.27	0.13	0.09	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	0.11	0.05	0.05	0.12	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.44	0.49	1.4	0.93	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	0.08	0.04	0.39	0.48	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	1.2	0.72	8.2	1.5	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	1.1	0.63	12	1.2	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.55	0.54	6.6	0.62	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	0.57	0.72	4.8	0.47	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.66	0.64	7.3	0.66	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.31	0.26	2.9	0.29	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.39	0.29	5.8	0.52	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.28	0.14	1.9	0.21	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.05	0.03	0.53	0.06	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.34	0.15	2.4	0.25	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	7.1	5.1	54	7.4	< 0.10



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1667237	1667238	1667501	1667502	1667503
Sample ID	PRAIRIE_AUK_ TP158	PRAIRIE_AUK_ TP157	PRAIRIE_AUK_ TP120A	PRAIRIE_AUK_ TP134	PRAIRIE_AUK_ TP134
Depth	1.30	0.80	1.00	1.00	2.00
Other ID	3	2	3	3	6
Sample Type	ES	ES	ES	ES	ES
Sampling Date	17/04/2020	17/04/2020	20/04/2020	20/04/2020	20/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
PCBs								
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg		< 0.01			
PCB 52	DETSC 3401#	0.01	mg/kg		< 0.01			
PCB 101	DETSC 3401#	0.01	mg/kg		< 0.01			
PCB 118	DETSC 3401#	0.01	mg/kg		< 0.01			
PCB 153	DETSC 3401#	0.01	mg/kg		< 0.01			
PCB 138	DETSC 3401#	0.01	mg/kg		< 0.01			
PCB 180	DETSC 3401#	0.01	mg/kg		< 0.01			
PCB 7 Total	DETSC 3401#	0.01	mg/kg		< 0.01			
Phenols								
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1667504	1667505	1667506	1667507
Sample ID	PRAIRIE_AUK_ TP161	PRAIRIE_AUK_ TP166	PRAIRIE_AUK_ TP166	PRAIRIE_AUK_ TP171
Depth	1.00	0.45	1.20	0.75
Other ID	3	3	8	3
Sample Type	ES	ES	ES	ES
Sampling Date	20/04/2020	20/04/2020	20/04/2020	20/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0.001	%		0.001		
Metals							
Aluminium	DETSC 2301*	1	mg/kg	12000	28000	10000	18000
Antimony	DETSC 2301*	1	mg/kg	5.5	5.1	1.2	3.4
Arsenic	DETSC 2301#	0.2	mg/kg	8.1	22	7.6	30
Barium	DETSC 2301#	1.5	mg/kg	260	700	200	610
Beryllium	DETSC 2301#	0.2	mg/kg	1.9	3.4	1.0	3.2
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	1.8	2.2	0.5	1.9
Cadmium	DETSC 2301#	0.1	mg/kg	0.2	0.9	0.2	3.6
Chromium	DETSC 2301#	0.15	mg/kg	150	140	23	27
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	150	160	26	110
Iron	DETSC 2301	25	mg/kg	53000	91000	33000	63000
Lead	DETSC 2301#	0.3	mg/kg	59	190	23	310
Magnesium	DETSC 2301*	1	mg/kg	11000	21000	3500	5700
Manganese	DETSC 2301#	20	mg/kg	3400	6600	840	1600
Mercury	DETSC 2325#	0.05	mg/kg	0.08	0.28	< 0.05	0.06
Molybdenum	DETSC 2301#	0.4	mg/kg	1.8	5.7	< 0.4	4.2
Nickel	DETSC 2301#	1	mg/kg	15	53	40	46
Silicon	DETSC 2301*	10	mg/kg	80000	59000	180000	90000
Vanadium	DETSC 2301#	0.8	mg/kg	160	340	28	120
Zinc	DETSC 2301#	1	mg/kg	110	210	66	1500
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#		pH	11.4	10.0	7.9	8.5
Calorific Value	DETSC 5008	1	MJ/kg				
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.5	0.5	< 0.1	0.5
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6
Organic matter	DETSC 2002#	0.1	%	1.6	2.5	1.8	5.8
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	100	260	84	120
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	3.9	< 0.75	< 0.75

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1667504	1667505	1667506	1667507
Sample ID	PRAIRIE_AUK_ TP161	PRAIRIE_AUK_ TP166	PRAIRIE_AUK_ TP166	PRAIRIE_AUK_ TP171
Depth	1.00	0.45	1.20	0.75
Other ID	3	3	8	3
Sample Type	ES	ES	ES	ES
Sampling Date	20/04/2020	20/04/2020	20/04/2020	20/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	30	9.9	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	31	11	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	0.7	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	4.4	19	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	29	65	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	33	84	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	64	95	< 10	< 10
EPH (C10-C40)	DETSC 3311#	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.15	0.25	< 0.03	0.09
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	0.08	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.32	1.2	< 0.03	0.20
Pyrene	DETSC 3303#	0.03	mg/kg	0.33	1.1	< 0.03	0.17
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.19	0.67	< 0.03	0.11
Chrysene	DETSC 3303	0.03	mg/kg	0.19	0.60	< 0.03	0.12
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.89	< 0.03	0.17
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.11	0.37	< 0.03	0.08
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.13	0.71	< 0.03	0.12
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.09	0.29	< 0.03	0.06
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.08	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.11	0.38	< 0.03	0.07
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	1.6	6.6	< 0.10	1.2



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1667504	1667505	1667506	1667507
Sample ID	PRAIRIE_AUK_ TP161	PRAIRIE_AUK_ TP166	PRAIRIE_AUK_ TP166	PRAIRIE_AUK_ TP171
Depth	1.00	0.45	1.20	0.75
Other ID	3	3	8	3
Sample Type	ES	ES	ES	ES
Sampling Date	20/04/2020	20/04/2020	20/04/2020	20/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1667508	1668118	1668119	1668120	1668121
Sample ID	PRAIRIE_AUK_TP187	PRAIRIE_AUK_BH110	PRAIRIE_AUK_TP102	PRAIRIE_AUK_TP102	PRAIRIE_AUK_TP103
Depth	0.70	3.00	1.00	3.00	1.00
Other ID	3	1	4	11	3
Sample Type	ES	ES	ES	ES	ES
Sampling Date	20/04/2020	20/04/2020	21/04/2020	21/04/2020	21/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Asbestos Quantification	DETSC 1102	0.001	%				< 0.001	
Metals								
Aluminium	DETSC 2301*	1	mg/kg	14000	12000	49000	19000	45000
Antimony	DETSC 2301*	1	mg/kg	22	1.4	1.3	1.8	1.5
Arsenic	DETSC 2301#	0.2	mg/kg	46	7.5	11	21	8.1
Barium	DETSC 2301#	1.5	mg/kg	340	210	460	630	440
Beryllium	DETSC 2301#	0.2	mg/kg	3.2	1.1	8.9	2.0	5.7
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	1.1	0.6	1.8	2.4	2.4
Cadmium	DETSC 2301#	0.1	mg/kg	24	0.1	0.1	0.5	< 0.1
Chromium	DETSC 2301#	0.15	mg/kg	19	28	30	29	82
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	530	27	22	36	17
Iron	DETSC 2301	25	mg/kg	110000	31000	19000	36000	26000
Lead	DETSC 2301#	0.3	mg/kg	1800	24	20	98	14
Magnesium	DETSC 2301*	1	mg/kg	5200	9400	28000	7400	25000
Manganese	DETSC 2301#	20	mg/kg	4200	570	6700	1100	6200
Mercury	DETSC 2325#	0.05	mg/kg	0.13	< 0.05	0.06	0.08	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	6.4	0.7	0.6	0.7	0.6
Nickel	DETSC 2301#	1	mg/kg	55	37	7.2	25	11
Silicon	DETSC 2301*	10	mg/kg	96000	170000	72000	160000	68000
Vanadium	DETSC 2301#	0.8	mg/kg	81	31	100	65	110
Zinc	DETSC 2301#	1	mg/kg	3800	91	84	300	43
Inorganics								
Loss on Ignition at 440oC	DETSC 2003#	0.01	%					
pH	DETSC 2008#		pH	8.8	7.7	10.1	8.5	9.2
Calorific Value	DETSC 5008	1	MJ/kg					
Cyanide, Total	DETSC 2130#	0.1	mg/kg	11	< 0.1	0.2	0.2	0.2
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	0.7	< 0.6
Organic matter	DETSC 2002#	0.1	%	14	3.3	1.4	3.3	3.1
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	74	350	580	220	680
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	< 0.75	< 0.75	2.2	110



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1667508	1668118	1668119	1668120	1668121
Sample ID	PRAIRIE_AUK_ TP187	PRAIRIE_AUK_ BH110	PRAIRIE_AUK_ TP102	PRAIRIE_AUK_ TP102	PRAIRIE_AUK_ TP103
Depth	0.70	3.00	1.00	3.00	1.00
Other ID	3	1	4	11	3
Sample Type	ES	ES	ES	ES	ES
Sampling Date	20/04/2020	20/04/2020	21/04/2020	21/04/2020	21/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units	1667508	1668118	1668119	1668120	1668121
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	11	3.1
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	29	13
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	33	14
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	29	17
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	100	47
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	1.8	0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	13	8.2
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	16	30
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	< 1.4	5.9	97
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	36	140
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	140	180
EPH (C10-C40)	DETSC 3311#	10	mg/kg					
PAHs								
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	0.10
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	0.12
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	0.13
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.06	< 0.03	< 0.03	0.11	2.6
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	0.05	< 0.03	< 0.03	0.81
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.29	< 0.03	0.06	0.16	36
Pyrene	DETSC 3303#	0.03	mg/kg	0.28	< 0.03	0.06	0.13	29
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.15	0.06	0.04	0.05	15
Chrysene	DETSC 3303	0.03	mg/kg	0.16	< 0.03	0.05	0.05	11
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.24	< 0.03	0.07	< 0.03	14
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.10	< 0.03	< 0.03	< 0.03	7.1
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.18	< 0.03	< 0.03	< 0.03	11
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.09	< 0.03	0.04	< 0.03	4.1
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	< 0.03	1.2
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.11	< 0.03	0.04	< 0.03	5.0
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	1.7	0.11	0.36	0.49	140



Summary of Chemical Analysis Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1667508	1668118	1668119	1668120	1668121
Sample ID	PRAIRIE_AUK_ TP187	PRAIRIE_AUK_ BH110	PRAIRIE_AUK_ TP102	PRAIRIE_AUK_ TP102	PRAIRIE_AUK_ TP103
Depth	0.70	3.00	1.00	3.00	1.00
Other ID	3	1	4	11	3
Sample Type	ES	ES	ES	ES	ES
Sampling Date	20/04/2020	20/04/2020	21/04/2020	21/04/2020	21/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
PCBs								
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg			< 0.01		
PCB 52	DETSC 3401#	0.01	mg/kg			< 0.01		
PCB 101	DETSC 3401#	0.01	mg/kg			< 0.01		
PCB 118	DETSC 3401#	0.01	mg/kg			< 0.01		
PCB 153	DETSC 3401#	0.01	mg/kg			< 0.01		
PCB 138	DETSC 3401#	0.01	mg/kg			< 0.01		
PCB 180	DETSC 3401#	0.01	mg/kg			< 0.01		
PCB 7 Total	DETSC 3401#	0.01	mg/kg			< 0.01		
Phenols								
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	0.3	< 0.3	0.5

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668122	1668123	1668124	1668125	1668126
Sample ID	PRAIRIE_AUK_TP109	PRAIRIE_AUK_TP110	PRAIRIE_AUK_TP110	PRAIRIE_AUK_TP111	PRAIRIE_AUK_TP112
Depth	1.00	1.00	2.00	1.50	1.50
Other ID	3	3	7	4	4
Sample Type	ES	ES	ES	ES	ES
Sampling Date	21/04/2020	21/04/2020	21/04/2020	22/04/2020	22/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Asbestos Quantification	DETSC 1102	0.001	%				0.002	
Metals								
Aluminium	DETSC 2301*	1	mg/kg	33000	31000	18000	18000	14000
Antimony	DETSC 2301*	1	mg/kg	2.1	1.8	2.9	8.9	4.5
Arsenic	DETSC 2301#	0.2	mg/kg	11	6.8	21	48	19
Barium	DETSC 2301#	1.5	mg/kg	350	490	380	600	540
Beryllium	DETSC 2301#	0.2	mg/kg	4.4	3.6	1.8	1.8	1.8
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	6.7	3.3	1.6	1.4	1.0
Cadmium	DETSC 2301#	0.1	mg/kg	0.2	0.2	0.4	0.9	0.9
Chromium	DETSC 2301#	0.15	mg/kg	110	72	78	390	210
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	71	110	60	76	68
Iron	DETSC 2301	25	mg/kg	35000	31000	60000	99000	65000
Lead	DETSC 2301#	0.3	mg/kg	33	31	94	120	60
Magnesium	DETSC 2301*	1	mg/kg	21000	24000	9500	29000	12000
Manganese	DETSC 2301#	20	mg/kg	8200	5100	1900	9100	4900
Mercury	DETSC 2325#	0.05	mg/kg	< 0.05	0.06	0.23	0.36	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	0.7	1.2	1.8	3.1	5.4
Nickel	DETSC 2301#	1	mg/kg	9.3	9.8	40	32	31
Silicon	DETSC 2301*	10	mg/kg	72000	68000	16000	67000	79000
Vanadium	DETSC 2301#	0.8	mg/kg	300	180	210	1100	690
Zinc	DETSC 2301#	1	mg/kg	68	140	260	290	580
Inorganics								
Loss on Ignition at 440oC	DETSC 2003#	0.01	%					
pH	DETSC 2008#		pH	10.2	11.2	10.4	11.6	11.3
Calorific Value	DETSC 5008	1	MJ/kg					
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.2	0.1	< 0.1	0.5	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6
Organic matter	DETSC 2002#	0.1	%	1.1	2.3	2.7	2.7	2.0
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	400	260	230	87	140
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	57	< 0.75	< 0.75	< 0.75



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1668122	1668123	1668124	1668125	1668126
Sample ID	PRAIRIE_AUK_TP109	PRAIRIE_AUK_TP110	PRAIRIE_AUK_TP110	PRAIRIE_AUK_TP111	PRAIRIE_AUK_TP112
Depth	1.00	1.00	2.00	1.50	1.50
Other ID	3	3	7	4	4
Sample Type	ES	ES	ES	ES	ES
Sampling Date	21/04/2020	21/04/2020	21/04/2020	22/04/2020	22/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	2.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	4.4	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	35	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	43	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	1.5	< 0.5	0.8	0.6
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	8.8	< 0.6	5.2	4.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	73	< 1.4	18	11
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	84	< 10	24	16
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	130	< 10	24	16
EPH (C10-C40)	DETSC 3311#	10	mg/kg					
PAHs								
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	0.07	< 0.03	0.15	0.07
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.06	< 0.03	0.31	0.10
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	1.4	< 0.03	0.13	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	0.78	< 0.03	0.49	0.09
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.14	3.2	0.12	3.9	1.7
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	3.1	< 0.03	1.3	0.35
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.29	36	0.52	8.6	3.5
Pyrene	DETSC 3303#	0.03	mg/kg	0.25	37	0.41	6.9	2.6
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.17	20	0.22	4.2	1.3
Chrysene	DETSC 3303	0.03	mg/kg	0.15	12	0.15	2.6	0.99
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.23	18	0.17	3.6	1.4
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.08	5.6	0.09	1.7	0.61
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.11	9.4	0.12	2.7	0.86
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.08	3.1	0.06	1.2	0.43
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	1.1	< 0.03	0.25	0.11
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.10	3.2	0.06	1.2	0.51
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	1.6	150	1.9	39	14



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1668122	1668123	1668124	1668125	1668126
Sample ID	PRAIRIE_AUK_TP109	PRAIRIE_AUK_TP110	PRAIRIE_AUK_TP110	PRAIRIE_AUK_TP111	PRAIRIE_AUK_TP112
Depth	1.00	1.00	2.00	1.50	1.50
Other ID	3	3	7	4	4
Sample Type	ES	ES	ES	ES	ES
Sampling Date	21/04/2020	21/04/2020	21/04/2020	22/04/2020	22/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
PCBs								
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg					< 0.01
PCB 52	DETSC 3401#	0.01	mg/kg					< 0.01
PCB 101	DETSC 3401#	0.01	mg/kg					0.01
PCB 118	DETSC 3401#	0.01	mg/kg					< 0.01
PCB 153	DETSC 3401#	0.01	mg/kg					< 0.01
PCB 138	DETSC 3401#	0.01	mg/kg					0.01
PCB 180	DETSC 3401#	0.01	mg/kg					< 0.01
PCB 7 Total	DETSC 3401#	0.01	mg/kg					0.03
Phenols								
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	0.5	0.6	0.4	0.4	< 0.3

Summary of Chemical Analysis Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668127	1668128	1668129	1668130
Sample ID	PRAIRIE_AUK_ TP119	PRAIRIE_AUK_ TP119	PRAIRIE_AUK_ TP133	PRAIRIE_AUK_ TP152
Depth	1.50	2.50	0.50	2.00
Other ID	3	7	2	6
Sample Type	ES	ES	ES	ES
Sampling Date	22/04/2020	22/04/2020	22/04/2020	22/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0.001	%				0.002
Metals							
Aluminium	DETSC 2301*	1	mg/kg	37000	14000	21000	15000
Antimony	DETSC 2301*	1	mg/kg	2.5	1.5	6.5	5.0
Arsenic	DETSC 2301#	0.2	mg/kg	11	8.5	35	19
Barium	DETSC 2301#	1.5	mg/kg	380	180	390	230
Beryllium	DETSC 2301#	0.2	mg/kg	4.0	1.1	2.4	1.3
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	1.8	0.5	1.2	1.8
Cadmium	DETSC 2301#	0.1	mg/kg	0.3	0.2	0.8	1.7
Chromium	DETSC 2301#	0.15	mg/kg	140	33	150	160
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	35	31	330	64
Iron	DETSC 2301	25	mg/kg	38000	38000	120000	67000
Lead	DETSC 2301#	0.3	mg/kg	29	28	110	200
Magnesium	DETSC 2301*	1	mg/kg	26000	7300	15000	18000
Manganese	DETSC 2301#	20	mg/kg	6400	660	4800	3300
Mercury	DETSC 2325#	0.05	mg/kg	0.08	< 0.05	0.12	0.30
Molybdenum	DETSC 2301#	0.4	mg/kg	0.8	0.4	3.2	1.9
Nickel	DETSC 2301#	1	mg/kg	11	39	56	34
Silicon	DETSC 2301*	10	mg/kg	58000	160000	94000	120000
Vanadium	DETSC 2301#	0.8	mg/kg	430	40	350	320
Zinc	DETSC 2301#	1	mg/kg	82	96	380	360
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#		pH	11.1	8.9	11.3	11.0
Calorific Value	DETSC 5008	1	MJ/kg				
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.1	< 0.1	0.4	0.5
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6
Organic matter	DETSC 2002#	0.1	%	4.4	2.1	2.2	1.9
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	1100	72	170	1700
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	< 0.75	8.9	< 0.75



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668127	1668128	1668129	1668130
Sample ID	PRAIRIE_AUK_ TP119	PRAIRIE_AUK_ TP119	PRAIRIE_AUK_ TP133	PRAIRIE_AUK_ TP152
Depth	1.50	2.50	0.50	2.00
Other ID	3	7	2	6
Sample Type	ES	ES	ES	ES
Sampling Date	22/04/2020	22/04/2020	22/04/2020	22/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	1.7	< 0.5	< 0.5	1.2
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	25	< 0.6	< 0.6	8.1
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	98	< 1.4	< 1.4	17
Aromatic C5-C35	DETSC 3072*	10	mg/kg	130	< 10	< 10	26
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	130	< 10	< 10	26
EPH (C10-C40)	DETSC 3311#	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	0.13	< 0.03	< 0.03	0.19
Acenaphthylene	DETSC 3303#	0.03	mg/kg	0.15	< 0.03	0.03	0.08
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.30	< 0.03	< 0.03	0.11
Fluorene	DETSC 3303	0.03	mg/kg	0.23	< 0.03	0.04	0.10
Phenanthrene	DETSC 3303#	0.03	mg/kg	5.4	0.05	0.79	3.5
Anthracene	DETSC 3303	0.03	mg/kg	1.2	< 0.03	0.11	0.54
Fluoranthene	DETSC 3303#	0.03	mg/kg	30	0.17	1.6	4.6
Pyrene	DETSC 3303#	0.03	mg/kg	30	0.14	1.3	4.9
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	18	0.09	0.66	2.6
Chrysene	DETSC 3303	0.03	mg/kg	16	0.07	0.62	1.9
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	21	0.12	0.79	2.4
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	9.1	0.04	0.32	0.94
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	15	0.06	0.54	1.2
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	5.4	0.05	0.26	0.72
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	1.7	< 0.03	0.07	0.20
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	6.6	0.06	0.33	0.83
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	160	0.85	7.5	25



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
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 Contract Title Prairie Site Ground Investigation Works

Lab No	1668127	1668128	1668129	1668130
Sample ID	PRAIRIE_AUK_ TP119	PRAIRIE_AUK_ TP119	PRAIRIE_AUK_ TP133	PRAIRIE_AUK_ TP152
Depth	1.50	2.50	0.50	2.00
Other ID	3	7	2	6
Sample Type	ES	ES	ES	ES
Sampling Date	22/04/2020	22/04/2020	22/04/2020	22/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg			< 0.01	
PCB 52	DETSC 3401#	0.01	mg/kg			< 0.01	
PCB 101	DETSC 3401#	0.01	mg/kg			< 0.01	
PCB 118	DETSC 3401#	0.01	mg/kg			< 0.01	
PCB 153	DETSC 3401#	0.01	mg/kg			< 0.01	
PCB 138	DETSC 3401#	0.01	mg/kg			< 0.01	
PCB 180	DETSC 3401#	0.01	mg/kg			< 0.01	
PCB 7 Total	DETSC 3401#	0.01	mg/kg			< 0.01	
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668131	1668132	1668133	1668134
Sample ID	PRAIRIE_AUK_ TP153	PRAIRIE_AUK_ TP154	PRAIRIE_AUK_ TP155	PRAIRIE_AUK_ TP160
Depth	1.10	0.85	0.70	0.75
Other ID	4	3	3	4
Sample Type	ES	ES	ES	ES
Sampling Date	22/04/2020	20/04/2020	21/04/2020	21/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0.001	%				
Metals							
Aluminium	DETSC 2301*	1	mg/kg	23000	21000	11000	12000
Antimony	DETSC 2301*	1	mg/kg	4.4	4.1	2.3	3.7
Arsenic	DETSC 2301#	0.2	mg/kg	11	9.2	9.4	17
Barium	DETSC 2301#	1.5	mg/kg	330	270	220	270
Beryllium	DETSC 2301#	0.2	mg/kg	2.2	2.0	2.4	1.9
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	3.0	1.6	1.0	1.0
Cadmium	DETSC 2301#	0.1	mg/kg	0.3	0.5	< 0.1	0.4
Chromium	DETSC 2301#	0.15	mg/kg	110	200	120	110
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	94	40	80	72
Iron	DETSC 2301	25	mg/kg	47000	100000	42000	58000
Lead	DETSC 2301#	0.3	mg/kg	330	33	18	100
Magnesium	DETSC 2301*	1	mg/kg	17000	17000	6300	8700
Manganese	DETSC 2301#	20	mg/kg	7300	25000	3000	2800
Mercury	DETSC 2325#	0.05	mg/kg	0.10	0.07	< 0.05	0.22
Molybdenum	DETSC 2301#	0.4	mg/kg	2.1	2.3	3.8	2.8
Nickel	DETSC 2301#	1	mg/kg	15	16	40	29
Silicon	DETSC 2301*	10	mg/kg	85000	68000	100000	83000
Vanadium	DETSC 2301#	0.8	mg/kg	240	1500	480	210
Zinc	DETSC 2301#	1	mg/kg	85	100	37	220
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#		pH	11.2	11.3	10.7	11.4
Calorific Value	DETSC 5008	1	MJ/kg				
Cyanide, Total	DETSC 2130#	0.1	mg/kg	1.7	0.8	0.4	0.3
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6
Organic matter	DETSC 2002#	0.1	%	4.2	1.6	1.4	4.2
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	400	300	86	290
Sulphur (free)	DETSC 3049#	0.75	mg/kg	8.1	10	< 0.75	7.7

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668131	1668132	1668133	1668134
Sample ID	PRAIRIE_AUK_ TP153	PRAIRIE_AUK_ TP154	PRAIRIE_AUK_ TP155	PRAIRIE_AUK_ TP160
Depth	1.10	0.85	0.70	0.75
Other ID	4	3	3	4
Sample Type	ES	ES	ES	ES
Sampling Date	22/04/2020	20/04/2020	21/04/2020	21/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	1.4	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	12	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	29	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	42	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	42	< 10	< 10
EPH (C10-C40)	DETSC 3311#	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	0.07	0.04	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	0.03	< 0.03	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.04	0.37	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	0.04	0.29	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	1.1	4.0	0.09	0.44
Anthracene	DETSC 3303	0.03	mg/kg	0.24	0.80	< 0.03	0.04
Fluoranthene	DETSC 3303#	0.03	mg/kg	4.2	9.7	0.30	0.81
Pyrene	DETSC 3303#	0.03	mg/kg	4.0	9.1	0.24	0.62
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	1.7	4.9	0.14	0.24
Chrysene	DETSC 3303	0.03	mg/kg	1.4	3.6	0.12	0.33
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	2.3	4.4	0.18	0.57
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.94	1.7	0.07	0.41
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	1.9	3.2	0.09	0.20
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	1.1	1.2	0.07	0.12
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.18	0.36	< 0.03	0.04
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	1.4	1.3	0.07	0.15
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	21	45	1.4	3.9



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1668131	1668132	1668133	1668134
Sample ID	PRAIRIE_AUK_ TP153	PRAIRIE_AUK_ TP154	PRAIRIE_AUK_ TP155	PRAIRIE_AUK_ TP160
Depth	1.10	0.85	0.70	0.75
Other ID	4	3	3	4
Sample Type	ES	ES	ES	ES
Sampling Date	22/04/2020	20/04/2020	21/04/2020	21/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				< 0.01
PCB 52	DETSC 3401#	0.01	mg/kg				0.01
PCB 101	DETSC 3401#	0.01	mg/kg				0.02
PCB 118	DETSC 3401#	0.01	mg/kg				0.01
PCB 153	DETSC 3401#	0.01	mg/kg				< 0.01
PCB 138	DETSC 3401#	0.01	mg/kg				0.02
PCB 180	DETSC 3401#	0.01	mg/kg				< 0.01
PCB 7 Total	DETSC 3401#	0.01	mg/kg				0.04
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668135	1668557	1668558	1668559	1668560
Sample ID	PRAIRIE_AUK_TP170	PRAIRIE_AUK_TP164	PRAIRIE_AUK_TP164	PRAIRIE_AUK_TP184	PRAIRIE_AUK_TP106
Depth	1.00	0.70	1.30	0.30	1.00
Other ID	4	3	5	2	3
Sample Type	ES	ES	ES	ES	ES
Sampling Date	20/04/2020	16/04/2020	16/04/2020	16/04/2020	23/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Asbestos Quantification	DETSC 1102	0.001	%				< 0.001	
Metals								
Aluminium	DETSC 2301*	1	mg/kg	14000	6100	6300	10000	12000
Antimony	DETSC 2301*	1	mg/kg	2.8	1.2	1.3	6.5	9.5
Arsenic	DETSC 2301#	0.2	mg/kg	9.8	9.6	11	8.6	33
Barium	DETSC 2301#	1.5	mg/kg	160	40	51	250	330
Beryllium	DETSC 2301#	0.2	mg/kg	1.2	0.4	0.6	0.8	1.1
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	1.7	0.5	0.7	3.8	2.1
Cadmium	DETSC 2301#	0.1	mg/kg	< 0.1	< 0.1	0.1	0.6	2.1
Chromium	DETSC 2301#	0.15	mg/kg	41	27	32	390	82
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	52	11	22	71	150
Iron	DETSC 2301	25	mg/kg	39000	26000	30000	100000	95000
Lead	DETSC 2301#	0.3	mg/kg	38	9.3	14	44	220
Magnesium	DETSC 2301*	1	mg/kg	4300	1700	2000	25000	5400
Manganese	DETSC 2301#	20	mg/kg	680	210	390	22000	1700
Mercury	DETSC 2325#	0.05	mg/kg	0.09	< 0.05	< 0.05	1.0	0.51
Molybdenum	DETSC 2301#	0.4	mg/kg	1.1	< 0.4	0.5	8.2	10
Nickel	DETSC 2301#	1	mg/kg	22	14	17	62	54
Silicon	DETSC 2301*	10	mg/kg	170000	230000	220000	47000	14000
Vanadium	DETSC 2301#	0.8	mg/kg	96	51	76	1700	130
Zinc	DETSC 2301#	1	mg/kg	81	41	59	130	930
Inorganics								
Loss on Ignition at 440oC	DETSC 2003#	0.01	%					
pH	DETSC 2008#		pH	9.1	8.6	8.2	11.5	9.3
Calorific Value	DETSC 5008	1	MJ/kg					
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.2	12	0.1	0.5	20
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	0.4
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6	0.9	< 0.6	< 0.6	1.1
Organic matter	DETSC 2002#	0.1	%	2.1	0.4	1.5	2.6	2.3
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	130	19	30	95	290
Sulphur (free)	DETSC 3049#	0.75	mg/kg	11	< 0.75	< 0.75	3.6	< 0.75



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668135	1668557	1668558	1668559	1668560
Sample ID	PRAIRIE_AUK_TP170	PRAIRIE_AUK_TP164	PRAIRIE_AUK_TP164	PRAIRIE_AUK_TP184	PRAIRIE_AUK_TP106
Depth	1.00	0.70	1.30	0.30	1.00
Other ID	4	3	5	2	3
Sample Type	ES	ES	ES	ES	ES
Sampling Date	20/04/2020	16/04/2020	16/04/2020	16/04/2020	23/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	2.7	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	18	2.9
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	< 3.4	24	25
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	46	28
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5	0.7
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6	9.5
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	< 1.4	< 1.4	46
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10	56
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	46	84
EPH (C10-C40)	DETSC 3311#	10	mg/kg					
PAHs								
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.32	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.07	0.05
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.06	0.11
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.12	0.07
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.53	1.8
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.36	0.49
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.67	5.7
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.46	4.8
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.25	2.3
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.29	2.0
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.37	2.6
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.15	1.2
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.25	2.4
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.14	0.84
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.04	0.21
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	< 0.03	0.16	1.1
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	< 0.10	< 0.10	4.3	26



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1668135	1668557	1668558	1668559	1668560
Sample ID	PRAIRIE_AUK_ TP170	PRAIRIE_AUK_ TP164	PRAIRIE_AUK_ TP164	PRAIRIE_AUK_ TP184	PRAIRIE_AUK_ TP106
Depth	1.00	0.70	1.30	0.30	1.00
Other ID	4	3	5	2	3
Sample Type	ES	ES	ES	ES	ES
Sampling Date	20/04/2020	16/04/2020	16/04/2020	16/04/2020	23/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
PCBs								
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg					
PCB 52	DETSC 3401#	0.01	mg/kg					
PCB 101	DETSC 3401#	0.01	mg/kg					
PCB 118	DETSC 3401#	0.01	mg/kg					
PCB 153	DETSC 3401#	0.01	mg/kg					
PCB 138	DETSC 3401#	0.01	mg/kg					
PCB 180	DETSC 3401#	0.01	mg/kg					
PCB 7 Total	DETSC 3401#	0.01	mg/kg					
Phenols								
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668561	1668562	1668563	1668564
Sample ID	PRAIRIE_AUK_ TP116	PRAIRIE_AUK_ TP117	PRAIRIE_AUK_ TP118	PRAIRIE_AUK_ TP127
Depth	1.30	3.00	1.20	0.30
Other ID	3	8	3	3
Sample Type	ES	ES	ES	ES
Sampling Date	23/04/2020	23/04/2020	23/04/2020	23/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0.001	%	< 0.001	< 0.001		
Metals							
Aluminium	DETSC 2301*	1	mg/kg	49000	45000	25000	10000
Antimony	DETSC 2301*	1	mg/kg	3.4	1.4	11	11
Arsenic	DETSC 2301#	0.2	mg/kg	12	11	24	2.2
Barium	DETSC 2301#	1.5	mg/kg	590	420	570	130
Beryllium	DETSC 2301#	0.2	mg/kg	5.4	6.1	2.3	0.3
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	1.9	3.1	2.3	3.2
Cadmium	DETSC 2301#	0.1	mg/kg	0.8	0.4	0.7	0.4
Chromium	DETSC 2301#	0.15	mg/kg	150	50	610	740
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	44	24	140	25
Iron	DETSC 2301	25	mg/kg	55000	24000	120000	170000
Lead	DETSC 2301#	0.3	mg/kg	60	38	87	15
Magnesium	DETSC 2301*	1	mg/kg	32000	25000	33000	40000
Manganese	DETSC 2301#	20	mg/kg	9200	3800	25000	19000
Mercury	DETSC 2325#	0.05	mg/kg	0.15	0.12	0.09	0.24
Molybdenum	DETSC 2301#	0.4	mg/kg	4.2	0.9	6.1	5.1
Nickel	DETSC 2301#	1	mg/kg	20	10	26	25
Silicon	DETSC 2301*	10	mg/kg	64000	100000	60000	37000
Vanadium	DETSC 2301#	0.8	mg/kg	150	160	1300	500
Zinc	DETSC 2301#	1	mg/kg	150	120	270	60
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#		pH	11.5	10.4	11.9	12.2
Calorific Value	DETSC 5008	1	MJ/kg				
Cyanide, Total	DETSC 2130#	0.1	mg/kg	9.4	0.9	0.7	1.3
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	1.0	0.7	< 0.6	0.6
Organic matter	DETSC 2002#	0.1	%	1.2	1.8	1.0	0.6
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	780	1100	110	10
Sulphur (free)	DETSC 3049#	0.75	mg/kg	29	5.6	< 0.75	< 0.75

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668561	1668562	1668563	1668564
Sample ID	PRAIRIE_AUK_ TP116	PRAIRIE_AUK_ TP117	PRAIRIE_AUK_ TP118	PRAIRIE_AUK_ TP127
Depth	1.30	3.00	1.20	0.30
Other ID	3	8	3	3
Sample Type	ES	ES	ES	ES
Sampling Date	23/04/2020	23/04/2020	23/04/2020	23/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	< 1.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	7.1	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	29	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	36	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	36	< 10
EPH (C10-C40)	DETSC 3311#	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	0.16	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.17	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.38	< 0.03	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	1.0	< 0.03	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.16	7.2	0.26	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	0.03	1.6	< 0.03	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.48	18	0.64	0.05
Pyrene	DETSC 3303#	0.03	mg/kg	0.34	15	0.42	0.04
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.19	8.1	0.25	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	0.23	5.8	0.29	0.04
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.38	6.1	0.40	0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.13	2.5	0.16	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.26	5.5	0.29	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.13	1.4	0.12	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.03	0.46	0.04	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.15	1.7	0.17	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	2.5	75	3.0	0.16

Summary of Chemical Analysis Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668561	1668562	1668563	1668564
Sample ID	PRAIRIE_AUK_ TP116	PRAIRIE_AUK_ TP117	PRAIRIE_AUK_ TP118	PRAIRIE_AUK_ TP127
Depth	1.30	3.00	1.20	0.30
Other ID	3	8	3	3
Sample Type	ES	ES	ES	ES
Sampling Date	23/04/2020	23/04/2020	23/04/2020	23/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668565	1668566	1668567	1668568
Sample ID	PRAIRIE_AUK_ TP127A	PRAIRIE_AUK_ TP140	PRAIRIE_AUK_ TP141	PRAIRIE_AUK_ TP142
Depth	2.80	1.00	2.00	0.90
Other ID	3	3	4	3
Sample Type	ES	ES	ES	ES
Sampling Date	23/04/2020	23/04/2020	23/04/2020	23/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0.001	%				
Metals							
Aluminium	DETSC 2301*	1	mg/kg	9000	52000	8900	4300
Antimony	DETSC 2301*	1	mg/kg	1.1	1.6	34	16
Arsenic	DETSC 2301#	0.2	mg/kg	6.2	10	130	32
Barium	DETSC 2301#	1.5	mg/kg	230	520	350	50
Beryllium	DETSC 2301#	0.2	mg/kg	1.2	6.5	0.7	< 0.2
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	1.0	2.2	2.9	0.4
Cadmium	DETSC 2301#	0.1	mg/kg	0.1	0.3	15	1.5
Chromium	DETSC 2301#	0.15	mg/kg	30	38	450	220
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	23	36	1700	220
Iron	DETSC 2301	25	mg/kg	23000	19000	260000	450000
Lead	DETSC 2301#	0.3	mg/kg	27	33	1200	170
Magnesium	DETSC 2301*	1	mg/kg	2500	33000	14000	7400
Manganese	DETSC 2301#	20	mg/kg	560	4100	10000	10000
Mercury	DETSC 2325#	0.05	mg/kg	0.05	0.06	0.37	0.11
Molybdenum	DETSC 2301#	0.4	mg/kg	0.6	0.8	21	17
Nickel	DETSC 2301#	1	mg/kg	20	7.1	200	82
Silicon	DETSC 2301*	10	mg/kg	150000	73000	37000	15000
Vanadium	DETSC 2301#	0.8	mg/kg	41	96	740	170
Zinc	DETSC 2301#	1	mg/kg	89	75	3100	170
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#		pH	9.6	10.4	11.1	11.9
Calorific Value	DETSC 5008	1	MJ/kg				
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.3	0.2	2.1	< 0.1
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6	0.6	0.9	< 0.6
Organic matter	DETSC 2002#	0.1	%	0.4	1.5	10	10
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	150	290	770	31
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	2.9	220	30

Summary of Chemical Analysis Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668565	1668566	1668567	1668568
Sample ID	PRAIRIE_AUK_ TP127A	PRAIRIE_AUK_ TP140	PRAIRIE_AUK_ TP141	PRAIRIE_AUK_ TP142
Depth	2.80	1.00	2.00	0.90
Other ID	3	3	4	3
Sample Type	ES	ES	ES	ES
Sampling Date	23/04/2020	23/04/2020	23/04/2020	23/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	10	3.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	< 1.2	130	37
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	< 1.5	1300	300
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	< 3.4	5600	6100
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	7000	6400
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	3.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	97	19
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	1400	160
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	6600	2100
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	8100	2200
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	15000	8700
EPH (C10-C40)	DETSC 3311#	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.35	0.12
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.11	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.61	0.23
Fluorene	DETSC 3303	0.03	mg/kg	< 0.03	< 0.03	0.97	0.18
Phenanthrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.47	3.0	0.90
Anthracene	DETSC 3303	0.03	mg/kg	< 0.03	0.06	0.57	0.25
Fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.85	4.9	1.6
Pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.55	3.8	1.1
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.16	1.8	0.45
Chrysene	DETSC 3303	0.03	mg/kg	< 0.03	0.30	2.7	0.68
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.28	2.3	0.76
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	0.09	0.95	0.39
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.15	1.7	0.54
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	0.08	0.64	0.25
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03	0.18	0.08
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.10	0.78	0.33
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	< 0.10	3.1	25	7.9



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1668565	1668566	1668567	1668568
Sample ID	PRAIRIE_AUK_ TP127A	PRAIRIE_AUK_ TP140	PRAIRIE_AUK_ TP141	PRAIRIE_AUK_ TP142
Depth	2.80	1.00	2.00	0.90
Other ID	3	3	4	3
Sample Type	ES	ES	ES	ES
Sampling Date	23/04/2020	23/04/2020	23/04/2020	23/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	0.4	0.5	< 0.3

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668569	1668570	1668571	1668572
Sample ID	PRAIRIE_AUK_ TP142	PRAIRIE_AUK_ TP143	PRAIRIE_AUK_ TP143	PRAIRIE_AUK_ TP151
Depth	1.50	0.80	1.60	1.20
Other ID	4	3	6	5
Sample Type	ES	ES	ES	ES
Sampling Date	23/04/2020	23/04/2020	23/04/2020	23/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0.001	%				
Metals							
Aluminium	DETSC 2301*	1	mg/kg	2700	39000	12000	47000
Antimony	DETSC 2301*	1	mg/kg	36	4.3	17	3.4
Arsenic	DETSC 2301#	0.2	mg/kg	130	20	68	18
Barium	DETSC 2301#	1.5	mg/kg	92	570	210	590
Beryllium	DETSC 2301#	0.2	mg/kg	< 0.2	4.0	0.9	5.5
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	1.0	1.6	1.7	2.7
Cadmium	DETSC 2301#	0.1	mg/kg	5.7	0.6	2.7	0.9
Chromium	DETSC 2301#	0.15	mg/kg	310	120	180	120
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	1400	82	650	84
Iron	DETSC 2301	25	mg/kg	650000	81000	320000	78000
Lead	DETSC 2301#	0.3	mg/kg	550	190	310	90
Magnesium	DETSC 2301*	1	mg/kg	2600	25000	3600	29000
Manganese	DETSC 2301#	20	mg/kg	4000	4100	2500	5400
Mercury	DETSC 2325#	0.05	mg/kg	0.14	0.45	0.09	0.25
Molybdenum	DETSC 2301#	0.4	mg/kg	61	3.4	29	3.0
Nickel	DETSC 2301#	1	mg/kg	320	23	200	26
Silicon	DETSC 2301*	10	mg/kg	22000	73000	110000	48000
Vanadium	DETSC 2301#	0.8	mg/kg	140	150	97	250
Zinc	DETSC 2301#	1	mg/kg	890	230	510	490
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#		pH	10.7	11.4	10.4	10.0
Calorific Value	DETSC 5008	1	MJ/kg				
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.7	4.6	< 0.1	0.7
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	0.7	0.7	< 0.6	0.7
Organic matter	DETSC 2002#	0.1	%	6.4	1.8	7.6	3.4
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	210	170	200	490
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	< 0.75	1.7	49

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668569	1668570	1668571	1668572
Sample ID	PRAIRIE_AUK_ TP142	PRAIRIE_AUK_ TP143	PRAIRIE_AUK_ TP143	PRAIRIE_AUK_ TP151
Depth	1.50	0.80	1.60	1.20
Other ID	4	3	6	5
Sample Type	ES	ES	ES	ES
Sampling Date	23/04/2020	23/04/2020	23/04/2020	23/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	0.10	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	8.6	< 1.5	< 1.5	2.8
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	41	< 1.2	< 1.2	4.8
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	260	< 1.5	< 1.5	39
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	2300	4.5	3.6	180
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	2600	< 10	< 10	220
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	0.11	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	0.06	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	21	< 0.5	< 0.5	1.0
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	160	8.2	< 0.6	18
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	1000	24	< 1.4	95
Aromatic C5-C35	DETSC 3072*	10	mg/kg	1200	32	< 10	110
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	3800	37	< 10	340
EPH (C10-C40)	DETSC 3311#	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	0.03	< 0.03	< 0.03	0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.03	< 0.03	0.04
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.04	0.06	< 0.03	0.24
Fluorene	DETSC 3303	0.03	mg/kg	0.10	0.05	< 0.03	0.18
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.33	2.2	< 0.03	2.8
Anthracene	DETSC 3303	0.03	mg/kg	0.18	0.50	< 0.03	0.64
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.13	9.9	< 0.03	7.2
Pyrene	DETSC 3303#	0.03	mg/kg	0.17	9.2	< 0.03	5.9
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.05	5.8	< 0.03	3.0
Chrysene	DETSC 3303	0.03	mg/kg	0.21	4.3	< 0.03	2.3
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.07	6.1	< 0.03	3.1
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	2.3	< 0.03	1.3
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.04	3.9	< 0.03	2.7
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	1.7	< 0.03	0.84
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	0.52	< 0.03	0.23
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.04	2.2	< 0.03	1.2
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	1.4	49	< 0.10	32



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1668569	1668570	1668571	1668572
Sample ID	PRAIRIE_AUK_ TP142	PRAIRIE_AUK_ TP143	PRAIRIE_AUK_ TP143	PRAIRIE_AUK_ TP151
Depth	1.50	0.80	1.60	1.20
Other ID	4	3	6	5
Sample Type	ES	ES	ES	ES
Sampling Date	23/04/2020	23/04/2020	23/04/2020	23/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	0.8	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668657	1668869	1669251	1670142
Sample ID	PRAIRIE_AUK_TP139	PRAIRIE_AUK_TP144	PRAIRIE_AUK_TP112	PRAIRIE_AUK_TP194A
Depth	1.10	0.80	2.10	1.40
Other ID	4	3	7	1
Sample Type	ES	ES	ES	ES
Sampling Date	16/04/2020	24/04/2020	22/04/2020	29/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0.001	%		0.001		
Metals							
Aluminium	DETSC 2301*	1	mg/kg	15000	47000	12000	73000
Antimony	DETSC 2301*	1	mg/kg	12	4.4	6.6	< 1.0
Arsenic	DETSC 2301#	0.2	mg/kg	75	24	26	8.4
Barium	DETSC 2301#	1.5	mg/kg	820	470	280	210
Beryllium	DETSC 2301#	0.2	mg/kg	1.4	6.0	1.5	9.7
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	39	2.7	1.6	16
Cadmium	DETSC 2301#	0.1	mg/kg	17	0.8	0.7	0.1
Chromium	DETSC 2301#	0.15	mg/kg	47	66	340	14
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	90	220	67	18
Iron	DETSC 2301	25	mg/kg	110000	76000	90000	9400
Lead	DETSC 2301#	0.3	mg/kg	1100	130	90	11
Magnesium	DETSC 2301*	1	mg/kg	25000	24000	19000	28000
Manganese	DETSC 2301#	20	mg/kg	64000	3600	9900	1300
Mercury	DETSC 2325#	0.05	mg/kg	3.6	0.68	< 0.05	0.37
Molybdenum	DETSC 2301#	0.4	mg/kg	7.9	4.9	2.1	< 0.4
Nickel	DETSC 2301#	1	mg/kg	42	35	28	4.9
Silicon	DETSC 2301*	10	mg/kg	37000	56000	58000	140000
Vanadium	DETSC 2301#	0.8	mg/kg	46	81	1500	53
Zinc	DETSC 2301#	1	mg/kg	1200	550	470	57
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#		pH	9.4	9.7	11.7	10.8
Calorific Value	DETSC 5008	1	MJ/kg				
Cyanide, Total	DETSC 2130#	0.1	mg/kg	470	6.8	0.1	24
Cyanide, Free	DETSC 2130#	0.1	mg/kg	1.0	0.1	< 0.1	0.2
Thiocyanate	DETSC 2130#	0.6	mg/kg	21	1.0	< 0.6	2.2
Organic matter	DETSC 2002#	0.1	%	2.6	2.3	1.9	1.9
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	520	370	110	530
Sulphur (free)	DETSC 3049#	0.75	mg/kg	95	57	2.5	93

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668657	1668869	1669251	1670142
Sample ID	PRAIRIE_AUK_TP139	PRAIRIE_AUK_TP144	PRAIRIE_AUK_TP112	PRAIRIE_AUK_TP194A
Depth	1.10	0.80	2.10	1.40
Other ID	4	3	7	1
Sample Type	ES	ES	ES	ES
Sampling Date	16/04/2020	24/04/2020	22/04/2020	29/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	4.2	< 1.5	1.8
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	3.8	< 1.2	45
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	7.9	< 1.5	190
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	39	< 3.4	40
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	55	< 10	280
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9	< 0.9	6800
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5	< 0.5	3500
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6	< 0.6	620
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4	< 1.4	170
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10	< 10	11000
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	55	< 10	11000
EPH (C10-C40)	DETSC 3311#	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	3.8	0.10	0.05	1100
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	0.07	< 0.03	46
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.29	0.11	< 0.03	780
Fluorene	DETSC 3303	0.03	mg/kg	0.13	0.16	< 0.03	330
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.74	1.7	2.8	230
Anthracene	DETSC 3303	0.03	mg/kg	0.31	0.34	0.47	49
Fluoranthene	DETSC 3303#	0.03	mg/kg	1.3	2.6	4.0	41
Pyrene	DETSC 3303#	0.03	mg/kg	0.72	2.3	2.7	25
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.39	1.2	0.79	6.5
Chrysene	DETSC 3303	0.03	mg/kg	0.61	1.6	0.75	5.0
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.54	2.0	0.64	2.9
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.14	0.78	0.30	1.2
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.33	1.3	0.28	1.8
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.07	0.87	0.24	0.56
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.04	0.29	< 0.03	0.19
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.14	1.2	0.20	0.80
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	9.5	17	13	2600

Summary of Chemical Analysis Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668657	1668869	1669251	1670142
Sample ID	PRAIRIE_AUK_ TP139	PRAIRIE_AUK_ TP144	PRAIRIE_AUK_ TP112	PRAIRIE_AUK_ TP194A
Depth	1.10	0.80	2.10	1.40
Other ID	4	3	7	1
Sample Type	ES	ES	ES	ES
Sampling Date	16/04/2020	24/04/2020	22/04/2020	29/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3	< 0.3	0.4

Summary of Chemical Analysis Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1670143	1670144	1670502	1675450
Sample ID	PRAIRIE_AUK_ TP196A	PRAIRIE_AUK_ TP201	PRAIRIE_AUK_ TP193	PRAIRIE_AUK_ BH101
Depth	1.40	3.60	0.80	3.00
Other ID	1	1	1	1
Sample Type	ES	ES	ES	ES
Sampling Date	29/04/2020	28/04/2020	30/04/2020	27/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Asbestos Quantification	DETSC 1102	0.001	%				
Metals							
Aluminium	DETSC 2301*	1	mg/kg	77000	23000	890	12000
Antimony	DETSC 2301*	1	mg/kg	1.3	6.5	< 1.0	1.6
Arsenic	DETSC 2301#	0.2	mg/kg	7.6	100	4.0	8.3
Barium	DETSC 2301#	1.5	mg/kg	200	190	85	290
Beryllium	DETSC 2301#	0.2	mg/kg	8.9	3.0	< 0.2	1.1
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	2.2	4.2	0.9	1.1
Cadmium	DETSC 2301#	0.1	mg/kg	0.1	2.1	0.6	0.3
Chromium	DETSC 2301#	0.15	mg/kg	66	84	3.9	26
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	15	170	9.7	27
Iron	DETSC 2301	25	mg/kg	14000	150000	4400	32000
Lead	DETSC 2301#	0.3	mg/kg	9.2	320	20	33
Magnesium	DETSC 2301*	1	mg/kg	31000	7900	3700	7700
Manganese	DETSC 2301#	20	mg/kg	2700	3100	330	730
Mercury	DETSC 2325#	0.05	mg/kg	0.22	0.27	0.71	0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	< 0.4	4.1	0.4	0.6
Nickel	DETSC 2301#	1	mg/kg	4.1	110	3.8	32
Silicon	DETSC 2301*	10	mg/kg	160000	54000	9400	160000
Vanadium	DETSC 2301#	0.8	mg/kg	270	270	11	27
Zinc	DETSC 2301#	1	mg/kg	37	2000	140	110
Inorganics							
Loss on Ignition at 440oC	DETSC 2003#	0.01	%				
pH	DETSC 2008#		pH	10.3	8.2	10.3	7.8
Calorific Value	DETSC 5008	1	MJ/kg				
Cyanide, Total	DETSC 2130#	0.1	mg/kg	50	14	130	0.9
Cyanide, Free	DETSC 2130#	0.1	mg/kg	0.5	0.1	0.5	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	3.7	0.7	< 0.6	< 0.6
Organic matter	DETSC 2002#	0.1	%	1.8	2.6	1.3	2.8
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	470	1800	270	230
Sulphur (free)	DETSC 3049#	0.75	mg/kg	69	0.75	43	< 0.75



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1670143	1670144	1670502	1675450
Sample ID	PRAIRIE_AUK_ TP196A	PRAIRIE_AUK_ TP201	PRAIRIE_AUK_ TP193	PRAIRIE_AUK_ BH101
Depth	1.40	3.60	0.80	3.00
Other ID	1	1	1	1
Sample Type	ES	ES	ES	ES
Sampling Date	29/04/2020	28/04/2020	30/04/2020	27/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	0.12	< 0.01	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	7.1	< 1.5	< 1.5	< 1.5
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	3.8	< 1.2	6.2	< 1.2
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	7.6	< 1.5	14	< 1.5
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	16	< 3.4	< 3.4
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	19	17	22	< 10
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	0.16	< 0.01	0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	0.08	< 0.01	0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	4.4	< 0.01	0.95	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	390	17	41	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	290	7.9	300	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	64	4.7	67	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	23	16	28	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	770	45	440	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	790	62	460	< 10
EPH (C10-C40)	DETSC 3311#	10	mg/kg				
PAHs							
Naphthalene	DETSC 3303#	0.03	mg/kg	220	0.20	140	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	9.9	0.27	22	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	230	0.13	310	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	120	0.10	120	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	74	0.52	68	< 0.03
Anthracene	DETSC 3303	0.03	mg/kg	17	0.13	26	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	14	1.0	24	< 0.03
Pyrene	DETSC 3303#	0.03	mg/kg	8.9	0.78	15	< 0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	1.5	0.52	2.4	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	1.2	0.85	2.0	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.75	2.4	0.95	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	0.28	0.85	0.47	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	0.53	0.72	0.63	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	0.19	1.1	0.20	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	0.05	0.32	0.06	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	0.21	1.4	0.21	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	690	11	730	< 0.10



Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1670143	1670144	1670502	1675450
Sample ID	PRAIRIE_AUK_ TP196A	PRAIRIE_AUK_ TP201	PRAIRIE_AUK_ TP193	PRAIRIE_AUK_ BH101
Depth	1.40	3.60	0.80	3.00
Other ID	1	1	1	1
Sample Type	ES	ES	ES	ES
Sampling Date	29/04/2020	28/04/2020	30/04/2020	27/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
PCBs							
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg				
PCB 52	DETSC 3401#	0.01	mg/kg				
PCB 101	DETSC 3401#	0.01	mg/kg				
PCB 118	DETSC 3401#	0.01	mg/kg				
PCB 153	DETSC 3401#	0.01	mg/kg				
PCB 138	DETSC 3401#	0.01	mg/kg				
PCB 180	DETSC 3401#	0.01	mg/kg				
PCB 7 Total	DETSC 3401#	0.01	mg/kg				
Phenols							
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	0.5	< 0.3	< 0.3	< 0.3

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1675451	1700277
Sample ID	PRAIRIE_AUK_BH107	PRAIRIE_AUK_SW4
Depth	3.00	0.00
Other ID	1	1
Sample Type	ES	ES
Sampling Date	24/04/2020	15/07/2020
Sampling Time	n/s	n/s

Test	Method	LOD	Units		
Asbestos Quantification	DETSC 1102	0.001	%		
Metals					
Aluminium	DETSC 2301*	1	mg/kg	18000	61000
Antimony	DETSC 2301*	1	mg/kg	3.4	< 1.0
Arsenic	DETSC 2301#	0.2	mg/kg	12	4.1
Barium	DETSC 2301#	1.5	mg/kg	440	210
Beryllium	DETSC 2301#	0.2	mg/kg	2.3	5.2
Boron, Water Soluble	DETSC 2311#	0.2	mg/kg	0.9	2.3
Cadmium	DETSC 2301#	0.1	mg/kg	1.1	< 0.1
Chromium	DETSC 2301#	0.15	mg/kg	68	9.3
Chromium, Hexavalent	DETSC 2204*	1	mg/kg	< 1.0	< 1.0
Copper	DETSC 2301#	0.2	mg/kg	73	8.8
Iron	DETSC 2301	25	mg/kg	41000	3600
Lead	DETSC 2301#	0.3	mg/kg	71	4.2
Magnesium	DETSC 2301*	1	mg/kg	6500	23000
Manganese	DETSC 2301#	20	mg/kg	960	1100
Mercury	DETSC 2325#	0.05	mg/kg	0.05	< 0.05
Molybdenum	DETSC 2301#	0.4	mg/kg	2.3	< 0.4
Nickel	DETSC 2301#	1	mg/kg	63	1.8
Silicon	DETSC 2301*	10	mg/kg	170000	69000
Vanadium	DETSC 2301#	0.8	mg/kg	39	35
Zinc	DETSC 2301#	1	mg/kg	130	16
Inorganics					
Loss on Ignition at 440oC	DETSC 2003#	0.01	%		
pH	DETSC 2008#		pH	7.8	12.5
Calorific Value	DETSC 5008	1	MJ/kg		
Cyanide, Total	DETSC 2130#	0.1	mg/kg	0.3	0.2
Cyanide, Free	DETSC 2130#	0.1	mg/kg	< 0.1	< 0.1
Thiocyanate	DETSC 2130#	0.6	mg/kg	< 0.6	1.0
Organic matter	DETSC 2002#	0.1	%	2.3	6.6
Sulphate Aqueous Extract as SO4	DETSC 2076#	10	mg/l	130	880
Sulphur (free)	DETSC 3049#	0.75	mg/kg	< 0.75	3.9

Summary of Chemical Analysis

Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1675451	1700277
Sample ID	PRAIRIE_AUK_ BH107	PRAIRIE_AUK_ _SW4
Depth	3.00	0.00
Other ID	1	1
Sample Type	ES	ES
Sampling Date	24/04/2020	15/07/2020
Sampling Time	n/s	n/s

Test	Method	LOD	Units		
Petroleum Hydrocarbons					
Aliphatic C5-C6	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01
Aliphatic C6-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01
Aliphatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01
Aliphatic C10-C12	DETSC 3072#	1.5	mg/kg	< 1.5	9.1
Aliphatic C12-C16	DETSC 3072#	1.2	mg/kg	< 1.2	20
Aliphatic C16-C21	DETSC 3072#	1.5	mg/kg	< 1.5	29
Aliphatic C21-C35	DETSC 3072#	3.4	mg/kg	< 3.4	60
Aliphatic C5-C35	DETSC 3072*	10	mg/kg	< 10	120
Aromatic C5-C7	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01
Aromatic C7-C8	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01
Aromatic C8-C10	DETSC 3321*	0.01	mg/kg	< 0.01	< 0.01
Aromatic C10-C12	DETSC 3072#	0.9	mg/kg	< 0.9	< 0.9
Aromatic C12-C16	DETSC 3072#	0.5	mg/kg	< 0.5	< 0.5
Aromatic C16-C21	DETSC 3072#	0.6	mg/kg	< 0.6	< 0.6
Aromatic C21-C35	DETSC 3072#	1.4	mg/kg	< 1.4	< 1.4
Aromatic C5-C35	DETSC 3072*	10	mg/kg	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	mg/kg	< 10	120
EPH (C10-C40)	DETSC 3311#	10	mg/kg		
PAHs					
Naphthalene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Acenaphthylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Acenaphthene	DETSC 3303#	0.03	mg/kg	0.11	< 0.03
Fluorene	DETSC 3303	0.03	mg/kg	0.10	< 0.03
Phenanthrene	DETSC 3303#	0.03	mg/kg	0.37	0.06
Anthracene	DETSC 3303	0.03	mg/kg	0.04	< 0.03
Fluoranthene	DETSC 3303#	0.03	mg/kg	0.27	0.04
Pyrene	DETSC 3303#	0.03	mg/kg	0.19	0.03
Benzo(a)anthracene	DETSC 3303#	0.03	mg/kg	0.06	< 0.03
Chrysene	DETSC 3303	0.03	mg/kg	0.09	< 0.03
Benzo(b)fluoranthene	DETSC 3303#	0.03	mg/kg	0.05	< 0.03
Benzo(k)fluoranthene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Benzo(a)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Indeno(1,2,3-c,d)pyrene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Dibenzo(a,h)anthracene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
Benzo(g,h,i)perylene	DETSC 3303#	0.03	mg/kg	< 0.03	< 0.03
PAH - USEPA 16, Total	DETSC 3303	0.1	mg/kg	1.3	0.14

Summary of Chemical Analysis Soil Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1675451	1700277
Sample ID	PRAIRIE_AUK_	PRAIRIE_AUK_
Depth	BH107	_SW4
Other ID	3.00	0.00
Sample Type	1	1
Sampling Date	ES	ES
Sampling Time	24/04/2020	15/07/2020
	n/s	n/s

Test	Method	LOD	Units		
PCBs					
PCB 28 + PCB 31	DETSC 3401#	0.01	mg/kg		
PCB 52	DETSC 3401#	0.01	mg/kg		
PCB 101	DETSC 3401#	0.01	mg/kg		
PCB 118	DETSC 3401#	0.01	mg/kg		
PCB 153	DETSC 3401#	0.01	mg/kg		
PCB 138	DETSC 3401#	0.01	mg/kg		
PCB 180	DETSC 3401#	0.01	mg/kg		
PCB 7 Total	DETSC 3401#	0.01	mg/kg		
Phenols					
Phenol - Monohydric	DETSC 2130#	0.3	mg/kg	< 0.3	< 0.3



Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665134	1665141	1665588	1665610
Sample ID	PRAIRIE_AUK_TP175	PRAIRIE_AUK_TP108	PRAIRIE_AUK_TP114	PRAIRIE_AUK_TP179
Depth	0.80	2.00	0.90	1.40
Other ID	3	8	6	4
Sample Type	ES	ES	ES	ES
Sampling Date	06/04/2020	06/04/2020	07/04/2020	09/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
VOCs							
Vinyl Chloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	0.02	< 0.01	13	0.03
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	0.64	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	0.03	< 0.01	12	0.19
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	0.03	< 0.01	0.74	0.11
m+p-Xylene	DETSC 3431	0.01	mg/kg	0.15	< 0.01	11	4.5
o-Xylene	DETSC 3431	0.01	mg/kg	0.08	< 0.01	4.5	0.62
Styrene	DETSC 3431*	0.01	mg/kg	0.05	< 0.01	5.6	0.28
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	0.05	< 0.01	3.5	0.53



Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665134	1665141	1665588	1665610
Sample ID	PRAIRIE_AUK_ TP175	PRAIRIE_AUK_ TP108	PRAIRIE_AUK_ TP114	PRAIRIE_AUK_ TP179
Depth	0.80	2.00	0.90	1.40
Other ID	3	8	6	4
Sample Type	ES	ES	ES	ES
Sampling Date	06/04/2020	06/04/2020	07/04/2020	09/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	1.2	0.21
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	0.10	< 0.01	5.3	0.83
sec-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Hexachlorobutadiene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
SVOCs							
Phenol	DETSC 3433	0.1	mg/kg	3.8	0.3	180	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	0.5	< 0.1	< 100.0	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	2.7	< 0.1	< 100.0	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	5.3	0.4	150	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	4.7	0.2	< 100.0	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	80	0.6	3000	64
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	500	1.0	3300	49
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1



Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665134	1665141	1665588	1665610
Sample ID	PRAIRIE_AUK_ TP175	PRAIRIE_AUK_ TP108	PRAIRIE_AUK_ TP114	PRAIRIE_AUK_ TP179
Depth	0.80	2.00	0.90	1.40
Other ID	3	8	6	4
Sample Type	ES	ES	ES	ES
Sampling Date	06/04/2020	06/04/2020	07/04/2020	09/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	0.3	< 0.1	< 100.0	< 0.1
Di-n-octylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 100.0	2.6
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 100.0	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	32	1.0	2200	0.7



Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665611	1665612	1665613	1665990
Sample ID	PRAIRIE_AUK_ TP179	PRAIRIE_AUK_ TP181	PRAIRIE_AUK_ TP182	PRAIRIE_AUK_ TP145
Depth	2.00	0.60	0.90	1.60
Other ID	7	3	3	4
Sample Type	ES	ES	ES	ES
Sampling Date	09/04/2020	09/04/2020	09/04/2020	14/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
VOCs							
Vinyl Chloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	2.9	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	0.14	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	5.0	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	0.01	< 0.01	< 0.10	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	2.3	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	17	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	0.01	< 0.01	8.1	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	5.1	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	7.0	< 0.01



Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665611	1665612	1665613	1665990
Sample ID	PRAIRIE_AUK_ TP179	PRAIRIE_AUK_ TP181	PRAIRIE_AUK_ TP182	PRAIRIE_AUK_ TP145
Depth	2.00	0.60	0.90	1.60
Other ID	7	3	3	4
Sample Type	ES	ES	ES	ES
Sampling Date	09/04/2020	09/04/2020	09/04/2020	14/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	2.9	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	0.01	0.01	10	< 0.01
sec-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
Hexachlorobutadiene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01
SVOCs							
Phenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	0.3	0.5	1300	< 0.1
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	0.2	0.5	820	< 0.1
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1



Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665611	1665612	1665613	1665990
Sample ID	PRAIRIE_AUK_ TP179	PRAIRIE_AUK_ TP181	PRAIRIE_AUK_ TP182	PRAIRIE_AUK_ TP145
Depth	2.00	0.60	0.90	1.60
Other ID	7	3	3	4
Sample Type	ES	ES	ES	ES
Sampling Date	09/04/2020	09/04/2020	09/04/2020	14/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
Di-n-octylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	72	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 1.0	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	38	< 0.1

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665995	1666344	1667233	1668123	1668135
Sample ID	PRAIRIE_AUK_TP163	PRAIRIE_AUK_TP136	PRAIRIE_AUK_TP128	PRAIRIE_AUK_TP110	PRAIRIE_AUK_TP170
Depth	1.20	0.80	0.90	1.00	1.00
Other ID	3	3	3	3	4
Sample Type	ES	ES	ES	ES	ES
Sampling Date	14/04/2020	15/04/2020	17/04/2020	21/04/2020	20/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
VOCs								
Vinyl Chloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	0.27	< 0.01	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	0.13	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	0.18	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	0.49	< 0.01	< 0.01

Summary of Chemical Analysis Soil VOC/SVOC Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665995	1666344	1667233	1668123	1668135
Sample ID	PRAIRIE_AUK_TP163	PRAIRIE_AUK_TP136	PRAIRIE_AUK_TP128	PRAIRIE_AUK_TP110	PRAIRIE_AUK_TP170
Depth	1.20	0.80	0.90	1.00	1.00
Other ID	3	3	3	3	4
Sample Type	ES	ES	ES	ES	ES
Sampling Date	14/04/2020	15/04/2020	17/04/2020	21/04/2020	20/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	0.53	< 0.01	< 0.01
sec-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01
SVOCs								
Phenol	DETSC 3433	0.1	mg/kg	0.2	< 0.1	< 0.1	< 0.1	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	0.2	< 0.1	830	0.2	< 0.1
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	140	< 0.1	210	0.9	< 0.1
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665995	1666344	1667233	1668123	1668135
Sample ID	PRAIRIE_AUK_TP163	PRAIRIE_AUK_TP136	PRAIRIE_AUK_TP128	PRAIRIE_AUK_TP110	PRAIRIE_AUK_TP170
Depth	1.20	0.80	0.90	1.00	1.00
Other ID	3	3	3	3	4
Sample Type	ES	ES	ES	ES	ES
Sampling Date	14/04/2020	15/04/2020	17/04/2020	21/04/2020	20/04/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units	1665995	1666344	1667233	1668123	1668135
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	1.0	< 0.1	< 0.1
Di-n-octylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	0.9	< 0.1	< 0.1	0.5	< 0.1

Summary of Chemical Analysis Soil VOC/SVOC Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668566	1668567	1668569	1668869
Sample ID	PRAIRIE_AUK_ TP140	PRAIRIE_AUK_ TP141	PRAIRIE_AUK_ TP142	PRAIRIE_AUK_ TP144
Depth	1.00	2.00	1.50	0.80
Other ID	3	4	4	3
Sample Type	ES	ES	ES	ES
Sampling Date	23/04/2020	23/04/2020	23/04/2020	24/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
VOCs							
Vinyl Chloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	0.02	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668566	1668567	1668569	1668869
Sample ID	PRAIRIE_AUK_ TP140	PRAIRIE_AUK_ TP141	PRAIRIE_AUK_ TP142	PRAIRIE_AUK_ TP144
Depth	1.00	2.00	1.50	0.80
Other ID	3	4	4	3
Sample Type	ES	ES	ES	ES
Sampling Date	23/04/2020	23/04/2020	23/04/2020	24/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
sec-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
Hexachlorobutadiene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.01	< 0.01	< 0.01
SVOCs							
Phenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	1.1	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	0.6	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	0.1	0.1	< 0.1	0.3
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	0.2	0.3	< 0.1	0.3
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1668566	1668567	1668569	1668869
PRAIRIE_AUK_	PRAIRIE_AUK_	PRAIRIE_AUK_	PRAIRIE_AUK_	PRAIRIE_AUK_
Sample ID	TP140	TP141	TP142	TP144
Depth	1.00	2.00	1.50	0.80
Other ID	3	4	4	3
Sample Type	ES	ES	ES	ES
Sampling Date	23/04/2020	23/04/2020	23/04/2020	24/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	0.3	< 0.1	< 0.1	< 0.1

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1669251	1670142	1670143	1670144
Sample ID	PRAIRIE_AUK_ TP112	PRAIRIE_AUK_ TP194A	PRAIRIE_AUK_ TP196A	PRAIRIE_AUK_ TP201
Depth	2.10	1.40	1.40	3.60
Other ID	7	1	1	1
Sample Type	ES	ES	ES	ES
Sampling Date	22/04/2020	29/04/2020	29/04/2020	28/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
VOCs							
Vinyl Chloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	< 0.01	0.53	< 0.10	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	< 0.01	0.43	< 0.10	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	0.73	< 0.10	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	1.1	0.37	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	< 0.01	0.76	0.33	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	0.01	0.52	0.32	0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	0.20	< 0.10	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	2.0	0.49	< 0.01

Summary of Chemical Analysis Soil VOC/SVOC Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1669251	1670142	1670143	1670144
Sample ID	PRAIRIE_AUK_ TP112	PRAIRIE_AUK_ TP194A	PRAIRIE_AUK_ TP196A	PRAIRIE_AUK_ TP201
Depth	2.10	1.40	1.40	3.60
Other ID	7	1	1	1
Sample Type	ES	ES	ES	ES
Sampling Date	22/04/2020	29/04/2020	29/04/2020	28/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	1.1	0.27	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	2.9	0.62	< 0.01
sec-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.01	0.27	< 0.10	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
Hexachlorobutadiene	DETSC 3431	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.01	0.53	< 0.10	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.01	< 0.10	< 0.10	< 0.01
SVOCs							
Phenol	DETSC 3433	0.1	mg/kg	< 0.1	1.1	1.1	0.3
Aniline	DETSC 3433*	0.1	mg/kg	< 0.1	0.5	< 0.1	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	0.5	0.3	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	0.7	0.5	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	< 0.1	0.6	< 0.1	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	660	75	0.6
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	< 0.1	590	82	1.4
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Summary of Chemical Analysis Soil VOC/SVOC Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1669251	1670142	1670143	1670144
Sample ID	PRAIRIE_AUK_ TP112	PRAIRIE_AUK_ TP194A	PRAIRIE_AUK_ TP196A	PRAIRIE_AUK_ TP201
Depth	2.10	1.40	1.40	3.60
Other ID	7	1	1	1
Sample Type	ES	ES	ES	ES
Sampling Date	22/04/2020	29/04/2020	29/04/2020	28/04/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Di-n-octylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	< 0.1	5.1	3.6	0.3

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1670502	1700277
Sample ID	PRAIRIE_AUK_ TP193	PRAIRIE_AUK_ _SW4
Depth	0.80	0.00
Other ID	1	1
Sample Type	ES	ES
Sampling Date	30/04/2020	15/07/2020
Sampling Time	n/s	n/s

Test	Method	LOD	Units		
VOCs					
Vinyl Chloride	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
1,1 Dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
Trans-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
1,1-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
Cis-1,2-dichloroethylene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
2,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
Bromochloromethane	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
Chloroform	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
1,1,1-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
1,1-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
Carbon tetrachloride	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
Benzene	DETSC 3431	0.01	mg/kg	0.13	< 0.01
1,2-dichloroethane	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
Trichloroethylene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
1,2-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
Dibromomethane	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
Bromodichloromethane	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
cis-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
Toluene	DETSC 3431	0.01	mg/kg	0.15	< 0.01
trans-1,3-dichloropropene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
1,1,2-trichloroethane	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
Tetrachloroethylene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
1,3-dichloropropane	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
Dibromochloromethane	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
1,2-dibromoethane	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
Chlorobenzene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
1,1,1,2-tetrachloroethane	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
Ethylbenzene	DETSC 3431	0.01	mg/kg	0.13	< 0.01
m+p-Xylene	DETSC 3431	0.01	mg/kg	0.33	< 0.01
o-Xylene	DETSC 3431	0.01	mg/kg	0.21	< 0.01
Styrene	DETSC 3431*	0.01	mg/kg	0.20	< 0.01
Bromoform	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
Isopropylbenzene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
Bromobenzene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
1,2,3-trichloropropane	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
n-propylbenzene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
2-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
1,3,5-trimethylbenzene	DETSC 3431	0.01	mg/kg	0.37	< 0.01

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1670502	1700277
Sample ID	PRAIRIE_AUK_TP193	PRAIRIE_AUK_SW4
Depth	0.80	0.00
Other ID	1	1
Sample Type	ES	ES
Sampling Date	30/04/2020	15/07/2020
Sampling Time	n/s	n/s

Test	Method	LOD	Units		
4-chlorotoluene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
Tert-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
1,2,4-trimethylbenzene	DETSC 3431	0.01	mg/kg	0.42	< 0.01
sec-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
p-isopropyltoluene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
1,3-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
1,4-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
n-butylbenzene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
1,2-dichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
1,2-dibromo-3-chloropropane	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
1,2,4-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
Hexachlorobutadiene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
1,2,3-trichlorobenzene	DETSC 3431	0.01	mg/kg	< 0.10	< 0.01
MTBE	DETSC 3431*	0.01	mg/kg	< 0.10	< 0.01
SVOCs					
Phenol	DETSC 3433	0.1	mg/kg	1.4	< 0.1
Aniline	DETSC 3433*	0.1	mg/kg	0.2	< 0.1
2-Chlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Benzyl Alcohol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2-Methylphenol	DETSC 3433	0.1	mg/kg	0.8	< 0.1
Bis(2-chloroisopropyl)ether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
3&4-Methylphenol	DETSC 3433	0.1	mg/kg	1.2	< 0.1
2,4-Dimethylphenol	DETSC 3433	0.1	mg/kg	0.5	< 0.1
Bis-(dichloroethoxy)methane	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2,4-Dichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
1,2,4-Trichlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
4-Chloro-3-methylphenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2-Methylnaphthalene	DETSC 3433	0.1	mg/kg	120	< 0.1
Hexachlorocyclopentadiene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2,4,6-Trichlorophenol	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2,4,5-Trichlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2-Chloronaphthalene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2,4-Dinitrotoluene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
3-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
4-Nitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Dibenzofuran	DETSC 3433	0.1	mg/kg	230	< 0.1
2,6-Dinitrotoluene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
2,3,4,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1

Summary of Chemical Analysis

Soil VOC/SVOC Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1670502	1700277
Sample ID	PRAIRIE_AUK_TP193	PRAIRIE_AUK_SW4
Depth	0.80	0.00
Other ID	1	1
Sample Type	ES	ES
Sampling Date	30/04/2020	15/07/2020
Sampling Time	n/s	n/s

Test	Method	LOD	Units		
Diethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
4-Chlorophenylphenylether	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
4-Nitroaniline	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2-Methyl-4,6-Dinitrophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Diphenylamine	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
4-Bromophenylphenylether	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Hexachlorobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Pentachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Di-n-butylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Butylbenzylphthalate	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Bis(2-ethylhexyl)phthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Di-n-octylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
1,4-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Dimethylphthalate	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
1,3-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
1,2-Dinitrobenzene	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
2,3,5,6-Tetrachlorophenol	DETSC 3433*	0.1	mg/kg	< 0.1	< 0.1
Azobenzene	DETSC 3433	0.1	mg/kg	< 0.1	< 0.1
Carbazole	DETSC 3433*	0.1	mg/kg	3.9	< 0.1



Summary of Chemical Analysis

Water Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665287	1665289	1665294	1671485	1671486
Sample ID	PRAIRIE_AUK_S W1	PRAIRIE_AUK_ TP115	PRAIRIE_AUK_ TP186	PRAIRIE_AUK_ BH102	PRAIRIE_AUK_ BH103
Depth	0.00	0.50	1.00	1.10-7.20	2.25-8.50
Other ID	1	9	4	100	100
Sample Type	EW	EW	EW	EW	EW
Sampling Date	09/04/2020	08/04/2020	07/04/2020	05/05/2020	05/05/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units						
Metals									
Aluminium, Dissolved	DETSC 2306	10	ug/l				80	37	
Antimony, Dissolved	DETSC 2306	0.17	ug/l				1.3	2.4	
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	2.6	4.3	6.7	0.70	5.3	
Barium, Dissolved	DETSC 2306	0.26	ug/l				1000	45	
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l				< 0.1	< 0.1	
Boron, Dissolved	DETSC 2306*	12	ug/l	370	170	370	13	240	
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	0.14	< 0.03	< 0.03	0.07	
Calcium, Dissolved	DETSC 2306	0.09	mg/l				980	170	
Chromium, Dissolved	DETSC 2306	0.25	ug/l						
Chromium, Total	DETSC 2306*	0.25	ug/l	7.9	110	6.4	< 0.25	0.34	
Chromium, Hexavalent	DETSC 2203	7	ug/l				< 7.0	< 7.0	
Copper, Dissolved	DETSC 2306	0.4	ug/l	4.4	11	3.6	1.8	4.6	
Iron, Dissolved	DETSC 2306	5.5	ug/l				17	170	
Lead, Dissolved	DETSC 2306	0.09	ug/l	0.52	20	2.2	0.49	0.48	
Magnesium, Dissolved	DETSC 2306	0.02	mg/l				0.14	15	
Manganese, Dissolved	DETSC 2306	0.22	ug/l	19	990	400	6.5	390	
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01	0.06	< 0.01	0.02	0.11	
Molybdenum, Dissolved	DETSC 2306	1.1	ug/l				11	51	
Nickel, Dissolved	DETSC 2306	0.5	ug/l	1.1	4.7	2.9	7.1	3.6	
Sodium, Dissolved	DETSC 2306	0.07	mg/l				31	51	
Vanadium, Dissolved	DETSC 2306	0.6	ug/l				2.1	17	
Zinc, Dissolved	DETSC 2306	1.3	ug/l	2.2	86	10	8.6	< 1.3	
Inorganics									
pH	DETSC 2008		pH	6.8	10.9	7.2	12.5	9.2	
Cyanide, Total	DETSC 2130	40	ug/l	< 40	71	410	< 40	100	
Cyanide, Free	DETSC 2130	20	ug/l				< 20	86	
Thiocyanate	DETSC 2130	20	ug/l				150	91	
Dissolved Organic Carbon	DETSC 2085	2	mg/l	9.9	10	23	15	7.9	
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	< 0.015	0.54	5.6	1.0	0.46	
Chloride	DETSC 2055	0.1	mg/l				29	36	
Nitrate as N	*	0.1	mg/l				0.29	0.29	
Nitrite as N	DETSC 2201	0.035	mg/l				< 0.035	0.049	
Salinity (Calculated)	DETSC 2017*	0.01	%				3.3	0.5	
Silicate as SiO2	DETSC 2211*	0.1	mg/l				2.0	12	
Sulphate as SO4	DETSC 2055	0.1	mg/l	210	230	510	35	330	
Sulphur (free)	DETSC 3049	84	ug/l				< 84	< 84	



Summary of Chemical Analysis

Water Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1665287	1665289	1665294	1671485	1671486
Sample ID	PRAIRIE_AUK_S W1	PRAIRIE_AUK_ TP115	PRAIRIE_AUK_ TP186	PRAIRIE_AUK_ BH102	PRAIRIE_AUK_ BH103
Depth	0.00	0.50	1.00	1.10-7.20	2.25-8.50
Other ID	1	9	4	100	100
Sample Type	EW	EW	EW	EW	EW
Sampling Date	09/04/2020	08/04/2020	07/04/2020	05/05/2020	05/05/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units	1665287	1665289	1665294	1671485	1671486
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C6-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	310	< 0.1	< 0.1
Aliphatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	54	< 0.1	< 0.1
Aliphatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0	1.1	< 1.0	< 1.0
Aliphatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	< 1.0	180	< 1.0	< 1.0
Aliphatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	< 1.0	1200	< 1.0	< 1.0
Aliphatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	< 1.0	1000	< 1.0	< 1.0
Aliphatic C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	2800	< 10	< 10
Aromatic C5-C7	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	280	< 0.1	< 0.1
Aromatic C7-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	44	< 0.1	< 0.1
Aromatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0	110	< 1.0	< 1.0
Aromatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	1.6	3100	< 1.0	< 1.0
Aromatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	29	1200	< 1.0	< 1.0
Aromatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	150	240	< 1.0	< 1.0
Aromatic C5-C35	DETSC 3072*	10	ug/l	< 10	180	5000	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	ug/l	< 10	180	7800	< 10	< 10
EPH (C10-C40)	DETSC 3311	10	ug/l	220	1900	20000		
PAHs								
Naphthalene	DETSC 3304	0.05	ug/l	0.06	0.18	690	3.7	0.06
Acenaphthylene	DETSC 3304	0.01	ug/l	0.02	0.05	69	0.10	0.23
Acenaphthene	DETSC 3304	0.01	ug/l	0.03	1.3	690	4.4	0.87
Fluorene	DETSC 3304	0.01	ug/l	0.02	0.80	310	1.5	0.22
Phenanthrene	DETSC 3304	0.01	ug/l	0.18	2.8	210	1.8	0.07
Anthracene	DETSC 3304	0.01	ug/l	0.07	0.54	35	0.14	0.09
Fluoranthene	DETSC 3304	0.01	ug/l	0.50	2.3	28	0.24	0.27
Pyrene	DETSC 3304	0.01	ug/l	0.41	1.7	18	0.18	0.25
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	0.19	0.55	3.4	0.03	0.11
Chrysene	DETSC 3304	0.01	ug/l	0.28	0.59	3.7	0.03	0.11
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	0.44	0.83	4.5	0.03	0.24
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	0.15	0.30	1.5	0.01	0.06
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	0.22	0.56	2.4	0.02	0.12
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	0.14	0.38	1.2	0.02	0.21
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	0.05	0.11	< 1.00	< 0.01	0.04
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	0.20	0.52	1.6	0.02	0.20
PAH Total	DETSC 3304	0.2	ug/l	3.0	14	2100	12	3.1
Phenols								
Phenol - Monohydric	DETSC 2130	100	ug/l	< 100	< 100	3400	< 100	< 100

Summary of Chemical Analysis

Water Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1671487	1671488	1671489	1671490	1671899
Sample ID	PRAIRIE_AUK_BH104	PRAIRIE_AUK_BH105	PRAIRIE_AUK_BH107	PRAIRIE_AUK_BH109	PRAIRIE_AUK_BH101
Depth	6.40-18.50	4.60-11.00	3.16-8.00	5.44-11.80	2.00-10.00
Other ID	100	100	100	100	100
Sample Type	EW	EW	EW	EW	EW
Sampling Date	05/05/2020	05/05/2020	05/05/2020	05/05/2020	06/05/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Metals								
Aluminium, Dissolved	DETSC 2306	10	ug/l	39	68	33	260	710
Antimony, Dissolved	DETSC 2306	0.17	ug/l	0.59	0.46	0.53	1.2	0.76
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	1.7	1.9	0.65	5.1	2.4
Barium, Dissolved	DETSC 2306	0.26	ug/l	87	42	66	180	68
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Boron, Dissolved	DETSC 2306*	12	ug/l	410	310	150	86	440
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	< 0.03	0.08	< 0.03	< 0.03
Calcium, Dissolved	DETSC 2306	0.09	mg/l	99	220	340	38	270
Chromium, Dissolved	DETSC 2306	0.25	ug/l					
Chromium, Total	DETSC 2306*	0.25	ug/l	2.9	2.6	41	110	9.4
Chromium, Hexavalent	DETSC 2203	7	ug/l	< 7.0	< 7.0	< 7.0	< 7.0	< 7.0
Copper, Dissolved	DETSC 2306	0.4	ug/l	0.7	< 0.4	1.7	< 0.4	2.8
Iron, Dissolved	DETSC 2306	5.5	ug/l	30	600	60	160	780
Lead, Dissolved	DETSC 2306	0.09	ug/l	0.18	0.11	0.20	0.15	1.1
Magnesium, Dissolved	DETSC 2306	0.02	mg/l	58	45	88	17	53
Manganese, Dissolved	DETSC 2306	0.22	ug/l	440	810	290	85	720
Mercury, Dissolved	DETSC 2306	0.01	ug/l	0.09	< 0.01	< 0.01	0.33	0.02
Molybdenum, Dissolved	DETSC 2306	1.1	ug/l	13	8.2	2.8	23	30
Nickel, Dissolved	DETSC 2306	0.5	ug/l	3.7	1.9	4.5	1.2	4.1
Sodium, Dissolved	DETSC 2306	0.07	mg/l	110	130	290	99	320
Vanadium, Dissolved	DETSC 2306	0.6	ug/l	0.9	< 0.6	< 0.6	1.2	2.4
Zinc, Dissolved	DETSC 2306	1.3	ug/l	16	< 1.3	3.7	< 1.3	6.7
Inorganics								
pH	DETSC 2008		pH	8.2	7.9	7.6	7.9	7.4
Cyanide, Total	DETSC 2130	40	ug/l	< 40	< 40	< 40	< 40	54
Cyanide, Free	DETSC 2130	20	ug/l	< 20	< 20	< 20	< 20	23
Thiocyanate	DETSC 2130	20	ug/l	< 40	< 40	< 40	130	120
Dissolved Organic Carbon	DETSC 2085	2	mg/l	2.2	12	4.0	12	6.6
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	0.17	0.030	< 0.015	0.45	0.80
Chloride	DETSC 2055	0.1	mg/l	85	51	130	83	240
Nitrate as N	*	0.1	mg/l	0.32	0.31	0.32	0.26	1.1
Nitrite as N	DETSC 2201	0.035	mg/l	< 0.035	< 0.035	< 0.035	< 0.035	< 0.035
Salinity (Calculated)	DETSC 2017*	0.01	%	0.6	0.8	1.4	0.4	1.4
Silicate as SiO2	DETSC 2211*	0.1	mg/l	7.1	16	10	8.1	10
Sulphate as SO4	DETSC 2055	0.1	mg/l	310	640	840	54	920
Sulphur (free)	DETSC 3049	84	ug/l	< 84	< 84	< 84	460	< 84



Summary of Chemical Analysis

Water Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1671487	1671488	1671489	1671490	1671899
Sample ID	PRAIRIE_AUK_BH104	PRAIRIE_AUK_BH105	PRAIRIE_AUK_BH107	PRAIRIE_AUK_BH109	PRAIRIE_AUK_BH101
Depth	6.40-18.50	4.60-11.00	3.16-8.00	5.44-11.80	2.00-10.00
Other ID	100	100	100	100	100
Sample Type	EW	EW	EW	EW	EW
Sampling Date	05/05/2020	05/05/2020	05/05/2020	05/05/2020	06/05/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETS 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	20	< 0.1
Aliphatic C6-C8	DETS 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	160	< 0.1
Aliphatic C8-C10	DETS 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	210	< 0.1
Aliphatic C10-C12	DETS 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	13	< 1.0
Aliphatic C12-C16	DETS 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	330	< 1.0
Aliphatic C16-C21	DETS 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	1200	< 1.0
Aliphatic C21-C35	DETS 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	230	< 1.0
Aliphatic C5-C35	DETS 3072*	10	ug/l	< 10	< 10	< 10	2200	< 10
Aromatic C5-C7	DETS 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	130	< 0.1
Aromatic C7-C8	DETS 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	41	< 0.1
Aromatic C8-C10	DETS 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C10-C12	DETS 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	1200	6.4
Aromatic C12-C16	DETS 3072*	1	ug/l	14	< 1.0	< 1.0	4600	24
Aromatic C16-C21	DETS 3072*	1	ug/l	16	< 1.0	< 1.0	1100	8.5
Aromatic C21-C35	DETS 3072*	1	ug/l	1.3	< 1.0	< 1.0	140	1.1
Aromatic C5-C35	DETS 3072*	10	ug/l	31	< 10	< 10	7200	40
TPH Ali/Aro Total C5-C35	DETS 3072*	10	ug/l	31	< 10	< 10	9400	40
EPH (C10-C40)	DETS 3311	10	ug/l					
PAHs								
Naphthalene	DETS 3304	0.05	ug/l	4.3	0.08	< 0.05	4900	1.4
Acenaphthylene	DETS 3304	0.01	ug/l	1.1	< 0.01	0.02	19	0.08
Acenaphthene	DETS 3304	0.01	ug/l	22	0.10	0.48	1600	3.5
Fluorene	DETS 3304	0.01	ug/l	23	0.10	0.01	540	2.0
Phenanthrene	DETS 3304	0.01	ug/l	44	0.21	0.02	630	2.7
Anthracene	DETS 3304	0.01	ug/l	6.2	0.03	0.01	55	0.40
Fluoranthene	DETS 3304	0.01	ug/l	4.5	0.04	0.01	35	0.46
Pyrene	DETS 3304	0.01	ug/l	2.6	0.03	0.02	21	0.30
Benzo(a)anthracene	DETS 3304	0.01	ug/l	0.35	< 0.01	< 0.01	6.4	0.07
Chrysene	DETS 3304	0.01	ug/l	0.61	< 0.01	< 0.01	5.9	0.09
Benzo(b)fluoranthene	DETS 3304	0.01	ug/l	0.40	< 0.01	< 0.01	5.8	0.09
Benzo(k)fluoranthene	DETS 3304	0.01	ug/l	0.10	< 0.01	< 0.01	2.6	0.02
Benzo(a)pyrene	DETS 3304	0.01	ug/l	0.22	< 0.01	< 0.01	2.8	0.05
Indeno(1,2,3-c,d)pyrene	DETS 3304	0.01	ug/l	0.32	< 0.01	< 0.01	2.6	0.06
Dibenzo(a,h)anthracene	DETS 3304	0.01	ug/l	0.05	< 0.01	< 0.01	< 1.00	0.01
Benzo(g,h,i)perylene	DETS 3304	0.01	ug/l	0.30	< 0.01	< 0.01	2.6	0.06
PAH Total	DETS 3304	0.2	ug/l	110	0.65	0.62	7800	11
Phenols								
Phenol - Monohydric	DETS 2130	100	ug/l	< 100	< 100	< 100	< 100	< 100

Summary of Chemical Analysis

Water Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1671900	1671901	1671902	1671903
Sample ID	PRAIRIE_AUK_BH101	PRAIRIE_AUK_BH106	PRAIRIE_AUK_BH108	PRAIRIE_AUK_BH108
Depth	3.00-16.50	3.94-10.00	2.20-6.00	5.00-14.00
Other ID	100	100	100	100
Sample Type	EW	EW	EW	EW
Sampling Date	06/05/2020	06/05/2020	06/05/2020	06/05/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Metals							
Aluminium, Dissolved	DETSC 2306	10	ug/l	110	470	140	170
Antimony, Dissolved	DETSC 2306	0.17	ug/l	0.76	1.3	0.28	0.29
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	2.3	3.7	0.40	0.40
Barium, Dissolved	DETSC 2306	0.26	ug/l	69	110	46	46
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Boron, Dissolved	DETSC 2306*	12	ug/l	390	140	230	230
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	< 0.03	0.03	< 0.03
Calcium, Dissolved	DETSC 2306	0.09	mg/l	260	140	940	930
Chromium, Dissolved	DETSC 2306	0.25	ug/l				
Chromium, Total	DETSC 2306*	0.25	ug/l	11	57	26	30
Chromium, Hexavalent	DETSC 2203	7	ug/l	< 7.0	< 7.0	< 7.0	< 7.0
Copper, Dissolved	DETSC 2306	0.4	ug/l	2.2	2.2	0.9	0.8
Iron, Dissolved	DETSC 2306	5.5	ug/l	380	310	74	73
Lead, Dissolved	DETSC 2306	0.09	ug/l	0.26	1.0	0.18	0.09
Magnesium, Dissolved	DETSC 2306	0.02	mg/l	50	19	93	90
Manganese, Dissolved	DETSC 2306	0.22	ug/l	590	160	620	590
Mercury, Dissolved	DETSC 2306	0.01	ug/l	0.02	0.13	< 0.01	< 0.01
Molybdenum, Dissolved	DETSC 2306	1.1	ug/l	33	16	3.9	3.8
Nickel, Dissolved	DETSC 2306	0.5	ug/l	3.7	2.8	2.3	2.2
Sodium, Dissolved	DETSC 2306	0.07	mg/l	310	61	71	70
Vanadium, Dissolved	DETSC 2306	0.6	ug/l	1.3	11	< 0.6	< 0.6
Zinc, Dissolved	DETSC 2306	1.3	ug/l	3.9	5.5	4.9	5.8
Inorganics							
pH	DETSC 2008		pH	7.5	8.5	7.6	7.5
Cyanide, Total	DETSC 2130	40	ug/l	64	< 40	< 40	< 40
Cyanide, Free	DETSC 2130	20	ug/l	27	< 20	< 20	< 20
Thiocyanate	DETSC 2130	20	ug/l	130	46	< 40	< 40
Dissolved Organic Carbon	DETSC 2085	2	mg/l	6.8	24	< 2.0	< 2.0
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	0.82	0.98	0.17	0.18
Chloride	DETSC 2055	0.1	mg/l	230	28	41	35
Nitrate as N	*	0.1	mg/l	< 0.10	< 0.10	< 0.10	< 0.10
Nitrite as N	DETSC 2201	0.035	mg/l	< 0.035	< 0.035	< 0.035	< 0.035
Salinity (Calculated)	DETSC 2017*	0.01	%	1.3	0.5	1.3	1.3
Silicate as SiO2	DETSC 2211*	0.1	mg/l	9.6	11	9.1	9.0
Sulphate as SO4	DETSC 2055	0.1	mg/l	820	270	1300	1100
Sulphur (free)	DETSC 3049	84	ug/l	< 84	< 84	< 84	< 84



Summary of Chemical Analysis

Water Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1671900	1671901	1671902	1671903
Sample ID	PRAIRIE_AUK_BH101	PRAIRIE_AUK_BH106	PRAIRIE_AUK_BH108	PRAIRIE_AUK_BH108
Depth	3.00-16.50	3.94-10.00	2.20-6.00	5.00-14.00
Other ID	100	100	100	100
Sample Type	EW	EW	EW	EW
Sampling Date	06/05/2020	06/05/2020	06/05/2020	06/05/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C6-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C7-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	< 10	< 10
EPH (C10-C40)	DETSC 3311	10	ug/l				
PAHs							
Naphthalene	DETSC 3304	0.05	ug/l	0.53	0.57	0.10	0.10
Acenaphthylene	DETSC 3304	0.01	ug/l	0.03	0.07	< 0.01	< 0.01
Acenaphthene	DETSC 3304	0.01	ug/l	1.3	1.0	0.28	0.19
Fluorene	DETSC 3304	0.01	ug/l	0.80	0.85	0.21	0.14
Phenanthrene	DETSC 3304	0.01	ug/l	1.0	1.0	0.32	0.20
Anthracene	DETSC 3304	0.01	ug/l	0.14	0.09	0.04	0.03
Fluoranthene	DETSC 3304	0.01	ug/l	0.17	0.13	0.05	0.04
Pyrene	DETSC 3304	0.01	ug/l	0.12	0.09	0.03	0.03
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	0.03	0.02	< 0.01	< 0.01
Chrysene	DETSC 3304	0.01	ug/l	0.02	0.04	< 0.01	0.01
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	0.03	0.04	< 0.01	0.02
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	0.01	0.02	< 0.01	< 0.01
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	0.02	0.02	< 0.01	< 0.01
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	0.03	0.04	< 0.01	0.02
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	0.03	0.05	< 0.01	0.03
PAH Total	DETSC 3304	0.2	ug/l	4.3	4.1	1.1	0.85
Phenols							
Phenol - Monohydric	DETSC 2130	100	ug/l	< 100	< 100	< 100	< 100

Summary of Chemical Analysis

Water Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1671904	1685108	1685109	1688245	1688246
Sample ID	PRAIRIE_AUK_BH110	PRAIRIE_AUK_SW1	PRAIRIE_AUK_SW2	PRAIRIE_AUK_BH101	PRAIRIE_AUK_BH101
Depth	4.00-20.80	0.00	0.00	1.77-10.00	1.78-16.50
Other ID	100	1	1	200	200
Sample Type	EW	EW	EW	EW	EW
Sampling Date	06/05/2020	15/06/2020	15/06/2020	17/06/2020	17/06/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Metals								
Aluminium, Dissolved	DETSC 2306	10	ug/l	52	15	35	23	39
Antimony, Dissolved	DETSC 2306	0.17	ug/l	0.69	0.33	0.42	1.3	1.1
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	1.2	4.4	4.6	5.7	2.9
Barium, Dissolved	DETSC 2306	0.26	ug/l	58	42	41	18	49
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Boron, Dissolved	DETSC 2306*	12	ug/l	520	260	270	380	370
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	< 0.03	< 0.03	< 0.03	< 0.03
Calcium, Dissolved	DETSC 2306	0.09	mg/l	790			49	160
Chromium, Dissolved	DETSC 2306	0.25	ug/l					
Chromium, Total	DETSC 2306*	0.25	ug/l	4.5	5.2	2.4	6.1	1.1
Chromium, Hexavalent	DETSC 2203	7	ug/l	< 7.0	< 7.0	< 7.0	< 7.0	< 7.0
Copper, Dissolved	DETSC 2306	0.4	ug/l	3.1	2.0	2.0	0.6	0.8
Iron, Dissolved	DETSC 2306	5.5	ug/l	40	10	25	1500	630
Lead, Dissolved	DETSC 2306	0.09	ug/l	0.44	0.13	< 0.09	0.11	0.20
Magnesium, Dissolved	DETSC 2306	0.02	mg/l	84	63	65	7.7	28
Manganese, Dissolved	DETSC 2306	0.22	ug/l	180	70	52	380	470
Mercury, Dissolved	DETSC 2306	0.01	ug/l	0.04	< 0.01	< 0.01	0.02	0.01
Molybdenum, Dissolved	DETSC 2306	1.1	ug/l	17	1.9	2.0	140	67
Nickel, Dissolved	DETSC 2306	0.5	ug/l	2.6	1.9	3.6	12	4.6
Sodium, Dissolved	DETSC 2306	0.07	mg/l	220			190	320
Vanadium, Dissolved	DETSC 2306	0.6	ug/l	0.9	1.5	2.5	1.6	< 0.6
Zinc, Dissolved	DETSC 2306	1.3	ug/l	8.7	4.1	3.6	2.4	4.3
Inorganics								
pH	DETSC 2008		pH	7.6	7.8	8.0	7.6	7.5
Cyanide, Total	DETSC 2130	40	ug/l	< 40	< 40	< 40	3000	1200
Cyanide, Free	DETSC 2130	20	ug/l	< 20	< 20	< 20	73	38
Thiocyanate	DETSC 2130	20	ug/l	94	< 20	< 20	470	270
Dissolved Organic Carbon	DETSC 2085	2	mg/l	< 2.0			15	8.7
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	0.32	0.11	< 0.015	1.8	1.2
Chloride	DETSC 2055	0.1	mg/l	81			210	260
Nitrate as N	*	0.1	mg/l	< 0.10			0.14	0.11
Nitrite as N	DETSC 2201	0.035	mg/l	< 0.035			< 0.035	< 0.035
Salinity (Calculated)	DETSC 2017*	0.01	%	1.5			1.0	1.4
Silicate as SiO2	DETSC 2211*	0.1	mg/l	9.4	12	12	5.5	7.0
Sulphate as SO4	DETSC 2055	0.1	mg/l	1500	680	760	540	800
Sulphur (free)	DETSC 3049	84	ug/l	< 84	< 84	< 84	< 84	< 84



Summary of Chemical Analysis

Water Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1671904	1685108	1685109	1688245	1688246
Sample ID	PRAIRIE_AUK_BH110	PRAIRIE_AUK_SW1	PRAIRIE_AUK_SW2	PRAIRIE_AUK_BH101	PRAIRIE_AUK_BH101
Depth	4.00-20.80	0.00	0.00	1.77-10.00	1.78-16.50
Other ID	100	1	1	200	200
Sample Type	EW	EW	EW	EW	EW
Sampling Date	06/05/2020	15/06/2020	15/06/2020	17/06/2020	17/06/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C6-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C7-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	< 10	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	< 10	< 10	< 10
EPH (C10-C40)	DETSC 3311	10	ug/l					
PAHs								
Naphthalene	DETSC 3304	0.05	ug/l	0.06	< 0.05	< 0.05	0.09	0.09
Acenaphthylene	DETSC 3304	0.01	ug/l	0.03	< 0.01	0.02	< 0.01	< 0.01
Acenaphthene	DETSC 3304	0.01	ug/l	0.46	0.02	0.03	0.14	0.03
Fluorene	DETSC 3304	0.01	ug/l	0.27	0.01	< 0.01	0.04	0.01
Phenanthrene	DETSC 3304	0.01	ug/l	0.31	0.04	< 0.01	0.08	0.04
Anthracene	DETSC 3304	0.01	ug/l	0.04	< 0.01	< 0.01	0.04	0.03
Fluoranthene	DETSC 3304	0.01	ug/l	0.06	0.05	0.02	0.06	0.03
Pyrene	DETSC 3304	0.01	ug/l	0.04	0.04	0.02	0.06	0.03
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	0.01	0.01	< 0.01	< 0.01	< 0.01
Chrysene	DETSC 3304	0.01	ug/l	< 0.01	0.01	< 0.01	0.01	< 0.01
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	0.01	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	< 0.01	0.01	< 0.01	< 0.01	< 0.01
PAH Total	DETSC 3304	0.2	ug/l	1.3	0.26	< 0.20	0.55	0.27
Phenols								
Phenol - Monohydric	DETSC 2130	100	ug/l	< 100	< 100	< 100	< 100	< 100

Summary of Chemical Analysis

Water Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1688247	1688248	1688249	1688250	1688251
Sample ID	PRAIRIE_AUK_BH102	PRAIRIE_AUK_BH103	PRAIRIE_AUK_BH104	PRAIRIE_AUK_BH105	PRAIRIE_AUK_BH106
Depth	0.83-7.20	1.71-8.50	4.06-18.50	4.49-11.00	2.73-10.00
Other ID	200	200	200	200	200
Sample Type	EW	EW	EW	EW	EW
Sampling Date	18/06/2020	17/06/2020	17/06/2020	18/06/2020	17/06/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Metals								
Aluminium, Dissolved	DETSC 2306	10	ug/l	23	47	61	360	29
Antimony, Dissolved	DETSC 2306	0.17	ug/l	< 0.17	1.2	0.93	0.22	0.87
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	0.72	4.7	2.4	2.0	2.9
Barium, Dissolved	DETSC 2306	0.26	ug/l	930	57	35	46	120
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Boron, Dissolved	DETSC 2306*	12	ug/l	18	240	240	210	120
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	< 0.03	0.04	< 0.03	< 0.03
Calcium, Dissolved	DETSC 2306	0.09	mg/l	630	220	330	200	200
Chromium, Dissolved	DETSC 2306	0.25	ug/l					
Chromium, Total	DETSC 2306*	0.25	ug/l	14	15	2.0	1.1	11
Chromium, Hexavalent	DETSC 2203	7	ug/l	< 7.0	< 7.0	< 7.0	< 7.0	< 7.0
Copper, Dissolved	DETSC 2306	0.4	ug/l	0.5	1.2	4.7	< 0.4	1.3
Iron, Dissolved	DETSC 2306	5.5	ug/l	19	210	48	650	45
Lead, Dissolved	DETSC 2306	0.09	ug/l	1.0	0.52	0.27	0.45	< 0.09
Magnesium, Dissolved	DETSC 2306	0.02	mg/l	0.28	23	44	33	49
Manganese, Dissolved	DETSC 2306	0.22	ug/l	13	520	1200	650	320
Mercury, Dissolved	DETSC 2306	0.01	ug/l	0.01	0.05	< 0.01	< 0.01	0.05
Molybdenum, Dissolved	DETSC 2306	1.1	ug/l	16	29	11	6.0	19
Nickel, Dissolved	DETSC 2306	0.5	ug/l	4.4	2.8	1.8	0.9	1.5
Sodium, Dissolved	DETSC 2306	0.07	mg/l	33	60	48	130	35
Vanadium, Dissolved	DETSC 2306	0.6	ug/l	2.3	21	5.2	0.9	8.0
Zinc, Dissolved	DETSC 2306	1.3	ug/l	2.1	2.1	4.7	1.6	1.5
Inorganics								
pH	DETSC 2008		pH	12.3	8.0	7.6	7.4	7.7
Cyanide, Total	DETSC 2130	40	ug/l	< 40	220	43	< 40	< 40
Cyanide, Free	DETSC 2130	20	ug/l	< 20	24	< 20	< 20	< 20
Thiocyanate	DETSC 2130	20	ug/l	170	< 20	< 20	< 20	< 20
Dissolved Organic Carbon	DETSC 2085	2	mg/l	10	6.9	6.9	4.2	14
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	0.55	0.37	0.11	0.15	1.2
Chloride	DETSC 2055	0.1	mg/l	84	120	38	100	57
Nitrate as N	*	0.1	mg/l	< 0.10	0.12	3.8	0.14	0.44
Nitrite as N	DETSC 2201	0.035	mg/l	< 0.035	< 0.035	0.24	< 0.035	3.4
Salinity (Calculated)	DETSC 2017*	0.01	%	4.1	0.9	1.1	1.1	0.8
Silicate as SiO2	DETSC 2211*	0.1	mg/l	1.4	9.4	9.2	14	6.1
Sulphate as SO4	DETSC 2055	0.1	mg/l	190	580	1000	640	740
Sulphur (free)	DETSC 3049	84	ug/l	< 84	< 84	< 84	< 84	< 84



Summary of Chemical Analysis

Water Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1688247	1688248	1688249	1688250	1688251
Sample ID	PRAIRIE_AUK_BH102	PRAIRIE_AUK_BH103	PRAIRIE_AUK_BH104	PRAIRIE_AUK_BH105	PRAIRIE_AUK_BH106
Depth	0.83-7.20	1.71-8.50	4.06-18.50	4.49-11.00	2.73-10.00
Other ID	200	200	200	200	200
Sample Type	EW	EW	EW	EW	EW
Sampling Date	18/06/2020	17/06/2020	17/06/2020	18/06/2020	17/06/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C6-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C7-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C10-C12	DETSC 3072*	1	ug/l	2.8	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C12-C16	DETSC 3072*	1	ug/l	4.9	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	< 10	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	< 10	< 10	< 10
EPH (C10-C40)	DETSC 3311	10	ug/l					
PAHs								
Naphthalene	DETSC 3304	0.05	ug/l	22	< 0.05	< 0.05	0.05	0.06
Acenaphthylene	DETSC 3304	0.01	ug/l	0.31	0.16	< 0.01	< 0.01	< 0.01
Acenaphthene	DETSC 3304	0.01	ug/l	17	0.48	< 0.01	0.02	0.03
Fluorene	DETSC 3304	0.01	ug/l	7.5	0.13	< 0.01	< 0.01	0.01
Phenanthrene	DETSC 3304	0.01	ug/l	9.4	0.02	0.01	0.02	0.02
Anthracene	DETSC 3304	0.01	ug/l	0.43	0.05	0.02	0.01	0.02
Fluoranthene	DETSC 3304	0.01	ug/l	0.48	0.11	< 0.01	0.01	0.02
Pyrene	DETSC 3304	0.01	ug/l	0.35	0.10	< 0.01	0.01	0.02
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	0.02	0.03	< 0.01	< 0.01	< 0.01
Chrysene	DETSC 3304	0.01	ug/l	0.03	0.03	< 0.01	< 0.01	< 0.01
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	0.01	0.02	< 0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	< 0.01	0.01	< 0.01	< 0.01	< 0.01
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	< 0.01	0.01	< 0.01	< 0.01	< 0.01
PAH Total	DETSC 3304	0.2	ug/l	57	1.2	< 0.20	< 0.20	< 0.20
Phenols								
Phenol - Monohydric	DETSC 2130	100	ug/l	< 100	< 100	< 100	< 100	< 100

Summary of Chemical Analysis

Water Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1688252	1688253	1688254	1688255	1688256
Sample ID	PRAIRIE_AUK_BH107	PRAIRIE_AUK_BH108	PRAIRIE_AUK_BH108	PRAIRIE_AUK_BH109	PRAIRIE_AUK_BH110
Depth	3.21-8.00	1.14-6.00	4.95-14.00	5.97-11.80	3.84-20.80
Other ID	200	200	200	200	200
Sample Type	EW	EW	EW	EW	EW
Sampling Date	19/06/2020	18/06/2020	18/06/2020	19/06/2020	19/06/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Metals								
Aluminium, Dissolved	DETSC 2306	10	ug/l	18	12	< 10	< 10	11
Antimony, Dissolved	DETSC 2306	0.17	ug/l	0.61	0.19	< 0.17	0.19	1.5
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	0.53	0.66	0.55	0.33	3.7
Barium, Dissolved	DETSC 2306	0.26	ug/l	0.98	46	32	23	49
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Boron, Dissolved	DETSC 2306*	12	ug/l	150	320	420	30	740
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	< 0.03	< 0.03	< 0.03	0.31
Calcium, Dissolved	DETSC 2306	0.09	mg/l	0.46	620	650	9.4	480
Chromium, Dissolved	DETSC 2306	0.25	ug/l					
Chromium, Total	DETSC 2306*	0.25	ug/l	0.51	8.7	0.75	2.5	2.5
Chromium, Hexavalent	DETSC 2203	7	ug/l	< 7.0	< 7.0	< 7.0	< 7.0	< 7.0
Copper, Dissolved	DETSC 2306	0.4	ug/l	< 0.4	< 0.4	< 0.4	< 0.4	5.4
Iron, Dissolved	DETSC 2306	5.5	ug/l	69	290	240	11	910
Lead, Dissolved	DETSC 2306	0.09	ug/l	< 0.09	0.09	< 0.09	< 0.09	0.18
Magnesium, Dissolved	DETSC 2306	0.02	mg/l	0.23	110	120	45	88
Manganese, Dissolved	DETSC 2306	0.22	ug/l	1.7	1300	910	6.7	770
Mercury, Dissolved	DETSC 2306	0.01	ug/l	0.04	< 0.01	< 0.01	< 0.01	0.02
Molybdenum, Dissolved	DETSC 2306	1.1	ug/l	25	3.5	1.9	1.5	20
Nickel, Dissolved	DETSC 2306	0.5	ug/l	< 0.5	3.2	2.3	< 0.5	2.5
Sodium, Dissolved	DETSC 2306	0.07	mg/l	980	110	140	1100	420
Vanadium, Dissolved	DETSC 2306	0.6	ug/l	0.7	< 0.6	< 0.6	< 0.6	1.7
Zinc, Dissolved	DETSC 2306	1.3	ug/l	< 1.3	3.0	3.9	< 1.3	12
Inorganics								
pH	DETSC 2008		pH	7.0	7.3	7.1	7.0	7.6
Cyanide, Total	DETSC 2130	40	ug/l	95	< 40	< 40	< 40	1700
Cyanide, Free	DETSC 2130	20	ug/l	< 20	< 20	< 20	< 20	240
Thiocyanate	DETSC 2130	20	ug/l	< 20	< 20	< 20	57	< 20
Dissolved Organic Carbon	DETSC 2085	2	mg/l	3.8	3.6	< 2.0	6.0	11
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	0.029	0.046	0.19	0.55	0.26
Chloride	DETSC 2055	0.1	mg/l	130	86	200	2400	780
Nitrate as N	*	0.1	mg/l	0.12	0.11	0.11	0.14	3.5
Nitrite as N	DETSC 2201	0.035	mg/l	< 0.035	< 0.035	< 0.035	< 0.035	0.70
Salinity (Calculated)	DETSC 2017*	0.01	%	1.5	1.6	2.0	3.7	2.6
Silicate as SiO2	DETSC 2211*	0.1	mg/l	11	8.2	9.5	17	12
Sulphate as SO4	DETSC 2055	0.1	mg/l	1000	1800	1800	230	1500
Sulphur (free)	DETSC 3049	84	ug/l	< 84	< 84	< 84	< 84	< 84



Summary of Chemical Analysis

Water Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1688252	1688253	1688254	1688255	1688256
Sample ID	PRAIRIE_AUK_BH107	PRAIRIE_AUK_BH108	PRAIRIE_AUK_BH108	PRAIRIE_AUK_BH109	PRAIRIE_AUK_BH110
Depth	3.21-8.00	1.14-6.00	4.95-14.00	5.97-11.80	3.84-20.80
Other ID	200	200	200	200	200
Sample Type	EW	EW	EW	EW	EW
Sampling Date	19/06/2020	18/06/2020	18/06/2020	19/06/2020	19/06/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C6-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	1.1	< 1.0
Aliphatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	1.1	< 1.0
Aliphatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	4.9	< 1.0
Aliphatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C7-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	190	< 1.0
Aromatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	230	< 1.0
Aromatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	6.9	< 1.0
Aromatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	1.2	10
Aromatic C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	< 10	430	10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	< 10	440	10
EPH (C10-C40)	DETSC 3311	10	ug/l					
PAHs								
Naphthalene	DETSC 3304	0.05	ug/l	< 0.05	< 0.05	< 0.05	190	< 0.05
Acenaphthylene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	6.4	< 0.01
Acenaphthene	DETSC 3304	0.01	ug/l	< 0.01	0.01	< 0.01	290	0.01
Fluorene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	56	< 0.01
Phenanthrene	DETSC 3304	0.01	ug/l	0.02	0.02	0.01	0.83	0.01
Anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	3.9	0.03
Fluoranthene	DETSC 3304	0.01	ug/l	0.01	0.05	< 0.01	3.0	< 0.01
Pyrene	DETSC 3304	0.01	ug/l	0.02	0.05	< 0.01	1.9	< 0.01
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	< 0.01	0.03	< 0.01	0.36	< 0.01
Chrysene	DETSC 3304	0.01	ug/l	< 0.01	0.03	< 0.01	0.35	< 0.01
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	0.04	< 0.01	0.32	< 0.01
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	0.02	< 0.01	0.14	< 0.01
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	< 0.01	0.03	< 0.01	0.25	< 0.01
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	< 0.01	0.02	< 0.01	0.14	< 0.01
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	0.05	< 0.01
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	< 0.01	0.02	< 0.01	0.15	< 0.01
PAH Total	DETSC 3304	0.2	ug/l	< 0.20	0.37	< 0.20	550	< 0.20
Phenols								
Phenol - Monohydric	DETSC 2130	100	ug/l	< 100	< 100	< 100	< 100	< 100



Summary of Chemical Analysis

Water Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1694889	1694890	1694891	1694892	1694893
Sample ID	PRAIRIE_AUK_BH101	PRAIRIE_AUK_BH101	PRAIRIE_AUK_BH102	PRAIRIE_AUK_BH103	PRAIRIE_AUK_BH104
Depth	1.69-10.00	1.64-16.50	0.90-7.20	1.92-8.50	6.21-18.50
Other ID	300	300	300	300	300
Sample Type	EW	EW	EW	EW	EW
Sampling Date	01/07/2020	01/07/2020	02/07/2020	01/07/2020	02/07/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Metals								
Aluminium, Dissolved	DETSC 2306	10	ug/l					
Antimony, Dissolved	DETSC 2306	0.17	ug/l					
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	6.9	3.1	0.74	1.2	0.81
Barium, Dissolved	DETSC 2306	0.26	ug/l					
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l					
Boron, Dissolved	DETSC 2306*	12	ug/l	570	430	62	310	240
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	< 0.03	0.12	0.04	< 0.03
Calcium, Dissolved	DETSC 2306	0.09	mg/l	80	110	210	< 0.09	29
Chromium, Dissolved	DETSC 2306	0.25	ug/l					
Chromium, Total	DETSC 2306*	0.25	ug/l	0.51	0.31	0.97	1.9	0.88
Chromium, Hexavalent	DETSC 2203	7	ug/l					
Copper, Dissolved	DETSC 2306	0.4	ug/l	< 0.4	0.4	1.6	1.8	2.0
Iron, Dissolved	DETSC 2306	5.5	ug/l					
Lead, Dissolved	DETSC 2306	0.09	ug/l	0.21	< 0.09	< 0.09	< 0.09	< 0.09
Magnesium, Dissolved	DETSC 2306	0.02	mg/l					
Manganese, Dissolved	DETSC 2306	0.22	ug/l					
Mercury, Dissolved	DETSC 2306	0.01	ug/l	0.03	0.02	0.17	0.13	0.06
Molybdenum, Dissolved	DETSC 2306	1.1	ug/l					
Nickel, Dissolved	DETSC 2306	0.5	ug/l	4.6	3.3	8.3	0.6	5.2
Sodium, Dissolved	DETSC 2306	0.07	mg/l	210	270	550	530	230
Vanadium, Dissolved	DETSC 2306	0.6	ug/l					
Zinc, Dissolved	DETSC 2306	1.3	ug/l	31	270	2.8	4.9	11
Inorganics								
pH	DETSC 2008		pH	8.4	7.9	12.4	9.2	8.0
Cyanide, Total	DETSC 2130	40	ug/l	1400	1300	< 40	250	< 40
Cyanide, Free	DETSC 2130	20	ug/l	53	50	< 20	< 20	< 20
Thiocyanate	DETSC 2130	20	ug/l	280	340	160	< 20	< 20
Dissolved Organic Carbon	DETSC 2085	2	mg/l	8.9	9.0	13	7.3	5.1
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	0.95	1.1	0.86	0.35	0.13
Chloride	DETSC 2055	0.1	mg/l	200	210	45	59	67
Nitrate as N	*	0.1	mg/l	< 0.10	< 0.10	< 0.10	< 0.10	1.2
Nitrite as N	DETSC 2201	0.035	mg/l	< 0.035	< 0.035	< 0.035	< 0.035	0.14
Salinity (Calculated)	DETSC 2017*	0.01	%	0.9	1.2	2.9	0.5	1.0
Silicate as SiO2	DETSC 2211*	0.1	mg/l					
Sulphate as SO4	DETSC 2055	0.1	mg/l	430	590	130	310	750
Sulphur (free)	DETSC 3049	84	ug/l	< 84	< 84	< 84	< 84	< 84



Summary of Chemical Analysis

Water Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1694889	1694890	1694891	1694892	1694893
Sample ID	PRAIRIE_AUK_BH101	PRAIRIE_AUK_BH101	PRAIRIE_AUK_BH102	PRAIRIE_AUK_BH103	PRAIRIE_AUK_BH104
Depth	1.69-10.00	1.64-16.50	0.90-7.20	1.92-8.50	6.21-18.50
Other ID	300	300	300	300	300
Sample Type	EW	EW	EW	EW	EW
Sampling Date	01/07/2020	01/07/2020	02/07/2020	01/07/2020	02/07/2020
Sampling Time	n/s	n/s	n/s	n/s	n/s

Test	Method	LOD	Units					
Petroleum Hydrocarbons								
Aliphatic C5-C6	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C6-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C10-C12	DETSC 3072*	1	ug/l	1.2	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C12-C16	DETSC 3072*	1	ug/l	1.7	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C16-C21	DETSC 3072*	1	ug/l	6.8	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C21-C35	DETSC 3072*	1	ug/l	9.6	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C5-C35	DETSC 3072*	10	ug/l	19	< 10	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C7-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	< 10	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	ug/l	19	< 10	< 10	< 10	< 10
EPH (C10-C40)	DETSC 3311	10	ug/l					
PAHs								
Naphthalene	DETSC 3304	0.05	ug/l	2.2	0.16	2.3	0.06	< 0.05
Acenaphthylene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	0.14	0.14	< 0.01
Acenaphthene	DETSC 3304	0.01	ug/l	1.4	0.11	8.0	0.35	0.01
Fluorene	DETSC 3304	0.01	ug/l	0.05	0.05	3.6	0.12	< 0.01
Phenanthrene	DETSC 3304	0.01	ug/l	0.09	0.07	4.8	0.08	0.02
Anthracene	DETSC 3304	0.01	ug/l	0.04	0.03	0.39	0.04	< 0.01
Fluoranthene	DETSC 3304	0.01	ug/l	0.05	0.05	0.42	0.21	0.01
Pyrene	DETSC 3304	0.01	ug/l	0.06	0.05	0.31	0.24	0.02
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	< 0.01	0.02	0.02	0.11	< 0.01
Chrysene	DETSC 3304	0.01	ug/l	< 0.01	0.02	0.02	0.12	< 0.01
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	0.03	< 0.01	0.15	0.01
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	0.01	< 0.01	0.06	< 0.01
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	< 0.01	0.02	< 0.01	0.10	< 0.01
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	< 0.01	0.02	< 0.01	0.08	< 0.01
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	0.02	< 0.01
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	< 0.01	0.02	< 0.01	0.09	< 0.01
PAH Total	DETSC 3304	0.2	ug/l	3.9	0.66	20	2.0	< 0.20
Phenols								
Phenol - Monohydric	DETSC 2130	100	ug/l	< 100	< 100	< 100	< 100	< 100

Summary of Chemical Analysis Water Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1694894	1694895	1694896	1694897
Sample ID	PRAIRIE_AUK_BH105	PRAIRIE_AUK_BH106	PRAIRIE_AUK_BH107	PRAIRIE_AUK_BH108
Depth	4.51-11.00	3.28-10.00	3.12-8.00	0.35-6.00
Other ID	300	300	300	300
Sample Type	EW	EW	EW	EW
Sampling Date	02/07/2020	02/07/2020	02/07/2020	02/07/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Metals							
Aluminium, Dissolved	DETSC 2306	10	ug/l				
Antimony, Dissolved	DETSC 2306	0.17	ug/l				
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	2.1	3.7	0.50	0.71
Barium, Dissolved	DETSC 2306	0.26	ug/l				
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l				
Boron, Dissolved	DETSC 2306*	12	ug/l	290	95	100	270
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	< 0.03	0.06	< 0.03
Calcium, Dissolved	DETSC 2306	0.09	mg/l	190	230	260	610
Chromium, Dissolved	DETSC 2306	0.25	ug/l				
Chromium, Total	DETSC 2306*	0.25	ug/l	0.56	1.1	0.43	2.6
Chromium, Hexavalent	DETSC 2203	7	ug/l				
Copper, Dissolved	DETSC 2306	0.4	ug/l	< 0.4	1.3	0.6	0.7
Iron, Dissolved	DETSC 2306	5.5	ug/l				
Lead, Dissolved	DETSC 2306	0.09	ug/l	0.11	0.17	0.10	0.21
Magnesium, Dissolved	DETSC 2306	0.02	mg/l				
Manganese, Dissolved	DETSC 2306	0.22	ug/l				
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01	0.13	< 0.01	< 0.01
Molybdenum, Dissolved	DETSC 2306	1.1	ug/l				
Nickel, Dissolved	DETSC 2306	0.5	ug/l	1.5	1.8	3.4	5.3
Sodium, Dissolved	DETSC 2306	0.07	mg/l	170	52	220	160
Vanadium, Dissolved	DETSC 2306	0.6	ug/l				
Zinc, Dissolved	DETSC 2306	1.3	ug/l	31	5.8	24	33
Inorganics							
pH	DETSC 2008		pH	7.7	8.7	7.5	7.6
Cyanide, Total	DETSC 2130	40	ug/l	< 40	< 40	110	< 40
Cyanide, Free	DETSC 2130	20	ug/l	< 20	< 20	< 20	< 20
Thiocyanate	DETSC 2130	20	ug/l	< 20	25	< 20	< 20
Dissolved Organic Carbon	DETSC 2085	2	mg/l	4.1	15	3.4	5.2
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	0.21	1.4	0.14	0.19
Chloride	DETSC 2055	0.1	mg/l	97	59	89	90
Nitrate as N	*	0.1	mg/l	< 0.10	< 0.10	< 0.10	< 0.10
Nitrite as N	DETSC 2201	0.035	mg/l	< 0.035	< 0.035	< 0.035	< 0.035
Salinity (Calculated)	DETSC 2017*	0.01	%	1.0	0.8	1.3	1.5
Silicate as SiO2	DETSC 2211*	0.1	mg/l				
Sulphate as SO4	DETSC 2055	0.1	mg/l	620	680	770	1300
Sulphur (free)	DETSC 3049	84	ug/l	< 84	< 84	< 84	< 84



Summary of Chemical Analysis

Water Samples

Our Ref Combined 4251 Prairie
 Client Ref 4251
 Contract Title Prairie Site Ground Investigation Works

Lab No	1694894	1694895	1694896	1694897
Sample ID	PRAIRIE_AUK_BH105	PRAIRIE_AUK_BH106	PRAIRIE_AUK_BH107	PRAIRIE_AUK_BH108
Depth	4.51-11.00	3.28-10.00	3.12-8.00	0.35-6.00
Other ID	300	300	300	300
Sample Type	EW	EW	EW	EW
Sampling Date	02/07/2020	02/07/2020	02/07/2020	02/07/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C6-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	2.9
Aliphatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	< 1.0	13	27
Aliphatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	< 1.0	45	31
Aliphatic C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	60	62
Aromatic C5-C7	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C7-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	ug/l	< 10	< 10	60	62
EPH (C10-C40)	DETSC 3311	10	ug/l				
PAHs							
Naphthalene	DETSC 3304	0.05	ug/l	0.06	0.25	< 0.05	0.08
Acenaphthylene	DETSC 3304	0.01	ug/l	< 0.01	0.05	0.01	< 0.01
Acenaphthene	DETSC 3304	0.01	ug/l	0.03	0.09	0.02	0.01
Fluorene	DETSC 3304	0.01	ug/l	0.01	0.16	0.02	< 0.01
Phenanthrene	DETSC 3304	0.01	ug/l	0.03	0.16	0.03	0.01
Anthracene	DETSC 3304	0.01	ug/l	0.01	0.04	< 0.01	< 0.01
Fluoranthene	DETSC 3304	0.01	ug/l	0.01	0.06	0.02	0.01
Pyrene	DETSC 3304	0.01	ug/l	0.02	0.05	0.03	0.01
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	< 0.01	0.02	0.01	< 0.01
Chrysene	DETSC 3304	0.01	ug/l	< 0.01	0.02	0.01	< 0.01
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	0.01	< 0.01	< 0.01
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	< 0.01	0.01	< 0.01	< 0.01
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	< 0.01	0.01	0.01	< 0.01
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	< 0.01
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	< 0.01	0.01	< 0.01	< 0.01
PAH Total	DETSC 3304	0.2	ug/l	0.21	0.95	0.24	< 0.20
Phenols							
Phenol - Monohydric	DETSC 2130	100	ug/l	< 100	< 100	< 100	< 100

Summary of Chemical Analysis

Water Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1694898	1694899	1694900	1700278
Sample ID	PRAIRIE_AUK_BH108	PRAIRIE_AUK_BH109	PRAIRIE_AUK_BH110	PRAIRIE_AUK_SW4
Depth	4.81-14.00	6.72-11.80	3.87-20.80	0.00
Other ID	300	300	300	2
Sample Type	EW	EW	EW	EW
Sampling Date	02/07/2020	02/07/2020	02/07/2020	15/07/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Metals							
Aluminium, Dissolved	DETSC 2306	10	ug/l				5400
Antimony, Dissolved	DETSC 2306	0.17	ug/l				4.4
Arsenic, Dissolved	DETSC 2306	0.16	ug/l	0.60	6.4	2.7	11
Barium, Dissolved	DETSC 2306	0.26	ug/l				57
Beryllium, Dissolved	DETSC 2306*	0.1	ug/l				< 0.1
Boron, Dissolved	DETSC 2306*	12	ug/l	480	70	800	47
Cadmium, Dissolved	DETSC 2306	0.03	ug/l	< 0.03	0.03	< 0.03	0.23
Calcium, Dissolved	DETSC 2306	0.09	mg/l	640	540	61	
Chromium, Dissolved	DETSC 2306	0.25	ug/l				4.1
Chromium, Total	DETSC 2306*	0.25	ug/l	0.51	1.3	1.4	
Chromium, Hexavalent	DETSC 2203	7	ug/l				460
Copper, Dissolved	DETSC 2306	0.4	ug/l	< 0.4	1.7	0.7	1.1
Iron, Dissolved	DETSC 2306	5.5	ug/l				82
Lead, Dissolved	DETSC 2306	0.09	ug/l	< 0.09	0.33	< 0.09	1.9
Magnesium, Dissolved	DETSC 2306	0.02	mg/l				0.03
Manganese, Dissolved	DETSC 2306	0.22	ug/l				18
Mercury, Dissolved	DETSC 2306	0.01	ug/l	< 0.01	< 0.01	0.03	5.5
Molybdenum, Dissolved	DETSC 2306	1.1	ug/l				36
Nickel, Dissolved	DETSC 2306	0.5	ug/l	2.5	28	< 0.5	11
Sodium, Dissolved	DETSC 2306	0.07	mg/l	190	350	950	
Vanadium, Dissolved	DETSC 2306	0.6	ug/l				15
Zinc, Dissolved	DETSC 2306	1.3	ug/l	2.7	19	< 1.3	4.8
Inorganics							
pH	DETSC 2008		pH	7.3	7.0	7.5	11.7
Cyanide, Total	DETSC 2130	40	ug/l	< 40	< 40	1400	59
Cyanide, Free	DETSC 2130	20	ug/l	< 20	< 20	56	< 20
Thiocyanate	DETSC 2130	20	ug/l	< 20	43	< 20	8000
Dissolved Organic Carbon	DETSC 2085	2	mg/l	< 2.0	6.1	11	
Ammoniacal Nitrogen as N	DETSC 2207	0.015	mg/l	0.21	0.45	0.13	< 0.015
Chloride	DETSC 2055	0.1	mg/l	220	860	750	56
Nitrate as N	*	0.1	mg/l	< 0.10	< 0.10	0.89	
Nitrite as N	DETSC 2201	0.035	mg/l	< 0.035	< 0.035	0.17	
Salinity (Calculated)	DETSC 2017*	0.01	%	2.0	2.7	2.7	
Silicate as SiO2	DETSC 2211*	0.1	mg/l				7.6
Sulphate as SO4	DETSC 2055	0.1	mg/l	1800	120	1300	26
Sulphur (free)	DETSC 3049	84	ug/l	< 84	< 84	< 84	< 84



Summary of Chemical Analysis

Water Samples

Our Ref Combined 4251 Prairie

Client Ref 4251

Contract Title Prairie Site Ground Investigation Works

Lab No	1694898	1694899	1694900	1700278
Sample ID	PRAIRIE_AUK_BH108	PRAIRIE_AUK_BH109	PRAIRIE_AUK_BH110	PRAIRIE_AUK_SW4
Depth	4.81-14.00	6.72-11.80	3.87-20.80	0.00
Other ID	300	300	300	2
Sample Type	EW	EW	EW	EW
Sampling Date	02/07/2020	02/07/2020	02/07/2020	15/07/2020
Sampling Time	n/s	n/s	n/s	n/s

Test	Method	LOD	Units				
Petroleum Hydrocarbons							
Aliphatic C5-C6	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C6-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aliphatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aliphatic C16-C21	DETSC 3072*	1	ug/l	13	< 1.0	< 1.0	< 1.0
Aliphatic C21-C35	DETSC 3072*	1	ug/l	8.2	< 1.0	< 1.0	< 1.0
Aliphatic C5-C35	DETSC 3072*	10	ug/l	23	< 10	< 10	< 10
Aromatic C5-C7	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C7-C8	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C8-C10	DETSC 3322	0.1	ug/l	< 0.1	< 0.1	< 0.1	< 0.1
Aromatic C10-C12	DETSC 3072*	1	ug/l	< 1.0	62	< 1.0	< 1.0
Aromatic C12-C16	DETSC 3072*	1	ug/l	< 1.0	220	< 1.0	< 1.0
Aromatic C16-C21	DETSC 3072*	1	ug/l	< 1.0	3.5	< 1.0	< 1.0
Aromatic C21-C35	DETSC 3072*	1	ug/l	< 1.0	< 1.0	< 1.0	< 1.0
Aromatic C5-C35	DETSC 3072*	10	ug/l	< 10	280	< 10	< 10
TPH Ali/Aro Total C5-C35	DETSC 3072*	10	ug/l	23	280	< 10	< 10
EPH (C10-C40)	DETSC 3311	10	ug/l				
PAHs							
Naphthalene	DETSC 3304	0.05	ug/l	0.08	0.08	< 0.05	42
Acenaphthylene	DETSC 3304	0.01	ug/l	< 0.01	13	0.17	0.33
Acenaphthene	DETSC 3304	0.01	ug/l	0.02	170	8.4	1.1
Fluorene	DETSC 3304	0.01	ug/l	0.01	29	0.76	0.84
Phenanthrene	DETSC 3304	0.01	ug/l	0.02	0.06	0.04	4.8
Anthracene	DETSC 3304	0.01	ug/l	< 0.01	1.4	0.04	0.98
Fluoranthene	DETSC 3304	0.01	ug/l	0.01	0.54	0.02	4.6
Pyrene	DETSC 3304	0.01	ug/l	0.02	0.32	0.02	3.7
Benzo(a)anthracene	DETSC 3304	0.01	ug/l	< 0.01	0.05	< 0.01	1.7
Chrysene	DETSC 3304	0.01	ug/l	< 0.01	0.05	< 0.01	2.5
Benzo(b)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	0.03	< 0.01	2.2
Benzo(k)fluoranthene	DETSC 3304	0.01	ug/l	< 0.01	0.01	< 0.01	0.80
Benzo(a)pyrene	DETSC 3304	0.01	ug/l	< 0.01	0.03	< 0.01	1.6
Indeno(1,2,3-c,d)pyrene	DETSC 3304	0.01	ug/l	< 0.01	0.01	< 0.01	1.1
Dibenzo(a,h)anthracene	DETSC 3304	0.01	ug/l	< 0.01	< 0.01	< 0.01	0.42
Benzo(g,h,i)perylene	DETSC 3304	0.01	ug/l	< 0.01	0.02	< 0.01	1.4
PAH Total	DETSC 3304	0.2	ug/l	< 0.20	210	9.5	70
Phenols							
Phenol - Monohydric	DETSC 2130	100	ug/l	< 100	< 100	< 100	170