APPENDIX G

Boring Logs and Well Construction Details

LOG OF BORING MW-1

TETRA TECH

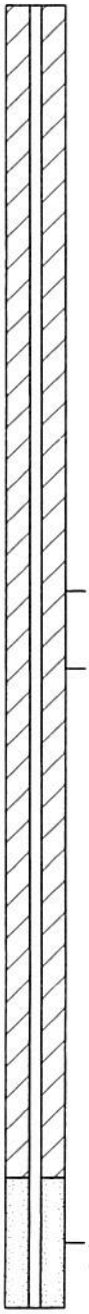
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Allprobe Environmental
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 02/19/07	TPVC Elev/Grnd Elev	: 733.56/733.94
Drilling Method	: Geoprobe - 3.0" Borehole	Driller	: G. Baker
Northing	: 430351.62	Easting	: 1360866.43

Well: MW-1
733.56

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0	Con		Hard, gray, concrete.				
1	Fill		Black, Sandy (fine to coarse), fine to coarse, with some flyash and railroad ballast, moist, Fill, moist.				(0-2') FID = 0.0 ppm
2				1	PUSH	3.0/4.0	
3							(2'-4') FID = 0.0 ppm
4							
5							(4'-6') FID = 0.0 ppm
6				2	PUSH	3.2/4.0	
7	ML/CL		Brown, soft, micaceous, sandy (very fine) silt and clayey silt, moist.				(6'-8') FID = 0.0 ppm
8							
9							(8'-10') FID = 0.0 ppm
10				3	PUSH	2.8/4.0	
11							(10'-12') FID = 0.0 ppm
12	SC		Brown, claye, micacious, fine to medium sand and sandy (fine to medium) clay, moist.				
13							(12'-14') FID = 0.0 ppm
14				4	PUSH	3.4/4.0	
15							(14'-16') FID = 0.0 ppm
16	SM		Silty, fine to coarse sand, trace to little, silty, fine to coarse gravel, moist.				
17							(16'-18') FID = 1.3 ppm
18				5	PUSH	2.9/4.0	
19							(18'-20') FID = 0.0 ppm
20							



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LOG OF BORING MW-1

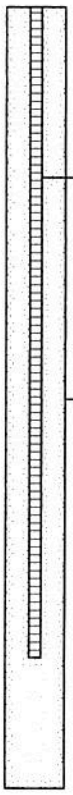
TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Allprobe Environmental
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 02/19/07	TPVC Elev/Grnd Elev	: 733.56/733.94
Drilling Method	: Geoprobe - 3.0" Borehole	Driller	: G. Baker
Northing	: 430351.62	Easting	: 1360866.43

Well: MW-1
733.56



Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
20							
21			Silty, fine to coarse sand, trace to little, silty, fine to coarse gravel, moist.				(20'-22') FID = 0.0 ppm
22				6	PUSH	3.2/4.0	
23							(22'-24') FID = 1.1 ppm
24	SM						
25							(24'-26') FID = 159 ppm
26				7	PUSH	3.1/4.0	
27							(26'-28') FID = 50.0 ppm
28			Orange brown to brown, silty, gravelly (fine-coarse), fine to coarse sand and sandy, fine to coarse gravel, moist.				
29							(28'-30') FID = 0.0 ppm
30	GM/SM			8	PUSH	3.1/4.0	
31							(30'-32') FID = 0.0 ppm
32			Bottom of boring.				
33							
34							
35							
36							
37							
38							
39							
40							

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LOG OF BORING MW-2

TETRA TECH

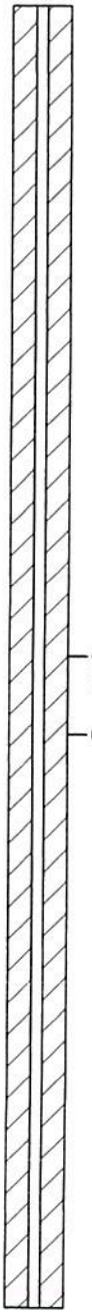
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Allprobe Environmental
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 02/21/07	TPVC Elev/Grnd Elev	: 738.44 / 738.58
Drilling Method	: Geoprobe - 3.0" Borehole	Driller	: G. Baker
Northing	: 430399.46	Easting	: 1361183.49

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0	Con		Concrete.				
1–8	FILL		Black, silty, fine-coarse sand and fine-coarse gravel, some flyash, FILL, moist.	1	PUSH	3.2/4.0	(0-2') FID = 0.0 ppm; (2'-4') FID = 3.6 ppm
				2	PUSH	3.4/4.0	(4'-6') FID = 0.0 ppm; (6'-8') FID = 0.0 ppm
8–14	ML		Soft to hard, brown-gray, sandy (fine) silt, mottled, moist (ML).	3	PUSH	3.4/4.0	(8'-10') FID = 0.0 ppm; (10'-12') FID = 0.0 ppm; (12'-14') FID = 0.0 ppm
14–20	SM		Brown, silty, micaceous, fine-medium sand, moist.	4	PUSH	3.25/4.0	(14'-16') FID = 0.0 ppm
				5	PUSH	3.4/4.0	(16'-18') FID = 0.0 ppm; (18'-20') FID = 0.0 ppm

Well: MW-2
738.44



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LOG OF BORING MW-2

TETRA TECH

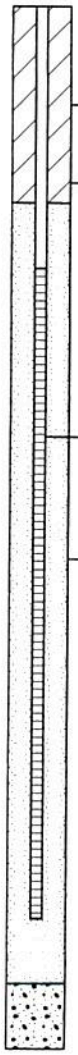
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Allprobe Environmental
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 02/21/07	TPVC Elev/Grnd Elev	: 738.44 / 738.58
Drilling Method	: Geoprobe - 3.0" Borehole	Driller	: G. Baker
Northing	: 430399.46	Easting	: 1361183.49

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
20–22	SM		Medium dense, brown, silty, fine to coarse sand, trace to little fine to medium gravel, moist.				(20'-22') FID = 0.0 ppm
22–36	GM		Brown, silty, sandy (fine-medium) fine-coarse rounded gravel, moist (GM).	6	PUSH	2.75/4.0	(22'-24') FID = 0.0 ppm
				7	PUSH	2.6/4.0	(24'-26') FID = 0.0 ppm; (26'-28') FID = 0.0 ppm
				8	PUSH	3.4/4.0	(28'-30') FID = 3.8 ppm; (30'-32') FID = 16.9 ppm
				9	PUSH	2.25/4.0	(32'-34') FID = 8.3 ppm; (34'-36') FID = 12.9

Well: MW-2
738.44



Bottom of boring.

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LOG OF BORING MW-3

TETRA TECH

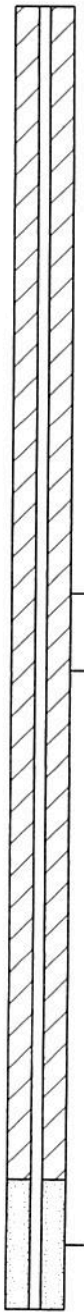
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Allprobe Environmental
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 02/20/07	Ground Elev.	: 738.00
Drilling Method	: Geoprobe - 3.0" Borehole	Driller	: G. Baker
Northing	: 430363.04	Easting	: 1361683.57

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0	Asphalt		Black, asphalt and coarse gravel sub-base, dry.				
1	Fill		Black, Sandy (fine to coarse), fine to coarse, with some flyash and railroad ballast, moist, Fill, moist.	1	PUSH	3.0/4.0	(0-2') FID = 0.0 ppm
2							
3							(2'-4') FID = 0.0 ppm
4							
5							(4'-6') FID = 0.0 ppm
6				2	PUSH	3.2/4.0	
7	ML/CL		Brown, soft, micaceous, sandy (very fine) silt and clayey silt, moist.				(6'-8') FID = 0.0 ppm
8							
9							(8'-10') FID = 0.0 ppm
10				3	PUSH	2.8/4.0	
11							(10'-12') FID = 0.0 ppm
12	SC		Brown, claye, micacious, fine to medium sand and sandy (fine to medium) clay, moist.				
13							(12'-14') FID = 0.0 ppm
14				4	PUSH	3.4/4.0	
15							(14'-16') FID = 0.0 ppm
16	SM		Silty, fine to coarse sand, trace to little, silty, fine to coarse gravel, moist.				
17							(16'-18') FID = 0.0 ppm
18				5	PUSH	2.9/4.0	
19							(18'-20') FID = 0.0 ppm
20							

Well: MW-3



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LOG OF BORING MW-3

TETRA TECH

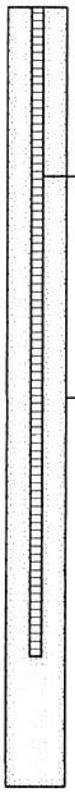
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Allprobe Environmental
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 02/20/07	Ground Elev.	: 738.00
Drilling Method	: Geoprobe - 3.0" Borehole	Driller	: G. Baker
Northing	: 430363.04	Easting	: 1361683.57

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
20	SM		Silty, fine to coarse sand, trace to little, silty, fine to coarse gravel, moist.				
21							(20'-22') FID = 0.0 ppm
22				6	PUSH	3.2/4.0	
23							(22'-24') FID = 0.0 ppm
24							
25							(24'-26') FID = 0.0 ppm
26				7	PUSH	3.1/4.0	
27							(26'-28') FID = 0.0 ppm
28	GM/SM		Orange brown to brown, silty, gravelly (fine-coarse), fine to coarse sand and sandy, fine to coarse gravel, moist.				
29							(28'-30') FID = 28.0 ppm
30				8	PUSH	3.1/4.0	
31							(30'-32') FID = 30.0 ppm
32			Bottom of boring.				
33							
34							
35							
36							
37							
38							
39							
40							

Well: MW-3



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LOG OF BORING MW-4

TETRA TECH

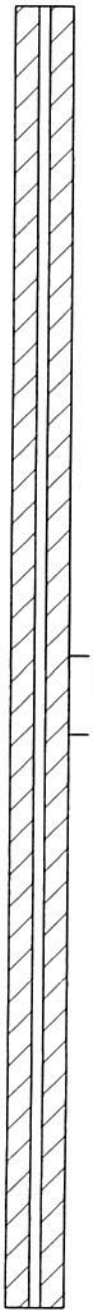
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Allprobe Environmental
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 02/20/07	TPVC Elev/Grnd Elev	: 737.78 / 737.96
Drilling Method	: Geoprobe - 3.0" Borehole	Driller	: G. Baker
Northing	: 430106.55	Easting	: 1360767.32

Depth in Feet	USCS	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0–7	Fill	Black, Sandy (fine to coarse), fine to coarse, with some flyash and railroad ballast, moist, Fill, moist.	1	PUSH	3.0/4.0	(0-2') FID = 0.0 ppm; (2'-4') FID = 3.9 ppm
			2	PUSH	3.2/4.0	(4'-6') FID = 0.0 ppm; (6'-8') FID = 0.0 ppm
7–12	ML	Gray, soft, micaceous, sandy (very fine) silt, moist.	3	PUSH	2.75/4.0	(8'-10') FID = 0.0 ppm; (10'-12') FID = 0.0 ppm
12–18	SM	Brown, silty, micacious, fine to medium sand, moist.	4	PUSH	3.4/4.0	(12'-14') FID = 0.0 ppm; (14'-16') FID = 0.0 ppm; (16'-18') FID = 0.0 ppm
18–20	GM/SM	Silty, gravelly (fine to coarse), fine to coarse sand and silty sandy (fine to coarse), fine to coarse gravel, moist.	5	PUSH	2.9/4.0	(18'-20') FID = 0.0 ppm

Well: MW-4
737.78



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LOG OF BORING MW-4

TETRA TECH

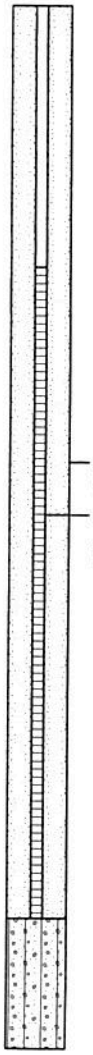
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Allprobe Environmental
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 02/20/07	TPVC Elev/Grnd Elev	: 737.78 / 737.96
Drilling Method	: Geoprobe - 3.0" Borehole	Driller	: G. Baker
Northing	: 430106.55	Easting	: 1360767.32

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
20			Orange brown to brown, silty, gravelly (fine-coarse), fine to coarse sand and sandy, fine to coarse gravel, moist.				
21							(20'-22') FID = 0.0 ppm
22				6	PUSH	3.0/4.0	
23							(22'-24') FID = 1.2 ppm
24							
25							(24'-26') FID = 0.0 ppm
26				7	PUSH	3.4/4.0	
27							(26'-28') FID = 27.0 ppm
28	GM/SM						
29							(28'-30') FID =20.0 ppm
30				8	PUSH	3.2/4.0	
31							(30'-32') FID = 6.2 ppm
32							
33							(32'-34') FID = 1.2
34				9		3.2/4.0	
35							(34'-36') FID = 1.4
36			Bottom of boring.				
37							
38							
39							
40							

Well: MW-4
737.78



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LOG OF BORING MW-5

TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Allprobe Environmental
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 02/20/07	TPVC Elev/Grnd Elev	: 738.46 / 738.71
Drilling Method	: Geoprobe - 3.0" Borehole	Driller	: G. Baker
Northing	: 430130.09	Easting	: 1360915.30

Well: MW-5
738.46

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0–6	Fill		Black, Sandy (fine to coarse), fine to coarse, with some flyash and railroad ballast, moist, Fill, moist.	1	PUSH	3.5/4.0	(0-2') FID = 0.0 ppm; (2'-4') FID = 3.9 ppm
				2	PUSH	3.0/4.0	(4'-6') FID = 0.0 ppm
6–9	CL		Brown, silty, sandy (fine), clay, moist.				(6'-8') FID = 0.0 ppm; (8'-10') FID = 0.0 ppm
9–16	SM		Brown, silty, fine to medium sand, trace fine rounded gravel, moist.	3	PUSH	3.8/4.0	(10'-12') FID = 0.0 ppm
				4	PUSH	3.4/4.0	(12'-14') FID = 0.0 ppm; (14'-16') FID = 0.0 ppm
16–20	SP		Brown, silty, medium to coarse sand, trace to little fine to medium gravel, moist.	5	PUSH	3.0/4.0	(16'-18') FID = 0.0 ppm; (18'-20') FID = 0.0 ppm

Granular bentonite (0-22')

0.75" PVC Riser Pipe

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LOG OF BORING MW-5

TETRA TECH

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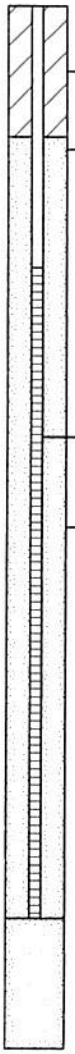
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Allprobe Environmental
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 02/20/07	TPVC Elev/Grnd Elev	: 738.46 / 738.71
Drilling Method	: Geoprobe - 3.0" Borehole	Driller	: G. Baker
Northing	: 430130.09	Easting	: 1360915.30

Well: MW-5
738.46

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
20			Tan to brown, silty, gravelly (fine-coarse), fine to coarse sand and sandy (fine-coarse), fine to coarse gravel, moist.				
21							(20'-22') FID = 0.0 ppm
22				6	PUSH	3.1/4.0	
23							(22'-24') FID = 0.0 ppm
24							
25							(24'-26') FID = 0.0 ppm
26				7	PUSH	3.0/4.0	
27							(26'-28') FID = 27.0 ppm
28	SP/GP						
29							(28'-30') FID = 20.0 ppm
30				8	PUSH	3.1/4.0	
31							(30'-32') FID = 6.2 ppm
32							
33							(32'-34') FID = 1.2 ppm
34				9	PUSH	2.8/4.0	
35							(34'-36') FID = 1.4 ppm
36			Bottom of boring.				
37							
38							
39							
40							



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LOG OF BORING MW-6

TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Allprobe Environmental
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 02/20/07	TPVC Elev/Grnd Elev	: 738.35 / 738.59
Drilling Method	: Geoprobe - 3.0" Borehole	Driller	: G. Baker
Northing	: 430169.56	Easting	: 1361134.25

Well: MW-6
738.35

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0	Con		Concrete.				
1	FILL		Black, silty, fine-coarse sand and fine-coarse gravel, some flyash, FILL, moist.	1	PUSH	3.0/4.0	(0-2') FID = 0.0 ppm
2							
3							(2'-4') FID = 71.6 ppm
4							
5							(4'-6') FID = 0.0 ppm
6	ML		Soft to hard, brown-gray, sandy (fine) silt, mottled, moist (ML).	2	PUSH	3.2/4.0	
7							(6'-8') FID = 0.0 ppm
8							
9							(8'-10') FID = 3.0 ppm
10				3	PUSH	3.8/4.0	
11							(10'-12') FID = 0.0 ppm
12							
13							(12'-14') FID = 0.0 ppm
14				4	PUSH	3.9/4.0	
15							(14'-16') FID = 0.0 ppm
16	SM		Brown, silty, micaceous, fine-medium sand, moist.				
17							(16'-18') FID = 0.0 ppm
18				5	PUSH	3.1/4.0	
19							(18'-20') FID = 0.0 ppm
20							

Granular bentonite (0-23')

0.75" PVC Riser Pipe

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LOG OF BORING MW-6

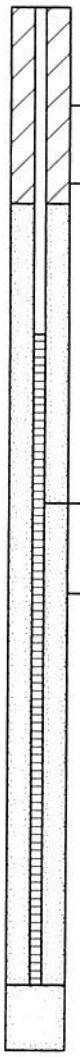
TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Allprobe Environmental
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 02/20/07	TPVC Elev/Grnd Elev	: 738.35 / 738.59
Drilling Method	: Geoprobe - 3.0" Borehole	Driller	: G. Baker
Northing	: 430169.56	Easting	: 1361134.25

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
20	GM		Brown, silty, sandy (fine-medium) fine-coarse rounded gravel, moist (GM).				
21							(20'-22') FID = 0.0 ppm
22				6	PUSH	2.9/4.0	
23							(22'-24') FID = 0.0 ppm
24							
25							(24'-26') FID = 0.0 ppm
26				7	PUSH	2.8/4.0	
27							(26'-28') FID = 0.0 ppm
28							
29							(28'-30') FID = 0.0 ppm
30				8	PUSH	3.5/4.0	
31							(30'-32') FID = 0.0 ppm
32							
33							(32'-34') FID = 7.4 ppm
34				9	PUSH	2.2/4.0	
35							(34'-36') FID = 0.0 ppm
36			Bottom of boring.				
37							
38							
39							
40							



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LOG OF BORING MW-7 (SB-2)

TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Allprobe Environmental
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 02/21/07	TPVC Elev/Grnd Elev	: 738.58 / 738.62
Drilling Method	: Geoprobe - 3.0" Borehole	Driller	: G. Baker
Northing	: 430290.88	Easting	: 1361135.04

Well: MW-7
738.58

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0	Con		Concrete.				
1	FILL		Black, silty, fine-coarse sand and fine-coarse gravel, some flyash, FILL, moist.				(0-2') FID = 0.0 ppm
2				1	PUSH	3.0/4.0	
3							(2'-4') FID = 0.0 ppm
4							
5							(4'-6') FID = 0.0 ppm
6				2	PUSH	3.2/4.0	
7	ML		Soft to hard, brown-gray, sandy (fine) silt, mottled, moist (ML).				(6'-8') FID = 124 ppm
8							
9							(8'-10') FID = 370 ppm
10	SM		Brown, silty, micaceous, fine-medium sand, moist.	3	PUSH	3.8/4.0	
11							(10'-12') FID = 735 ppm
12							
13							(12'-14') FID = 380 ppm
14				4	PUSH	3.9/4.0	
15							(14'-16') FID = 610 ppm
16							
17							(16'-18') FID = 184 ppm
18				5	PUSH	3.1/4.0	
19							(18'-20') FID = 548 ppm
20							

Granular bentonite (0-22')

0.75" PVC Riser Pipe

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LOG OF BORING MW-7 (SB-2)

TETRA TECH

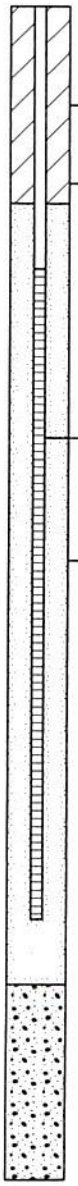
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Allprobe Environmental
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 02/21/07	TPVC Elev/Grnd Elev	: 738.58 / 738.62
Drilling Method	: Geoprobe - 3.0" Borehole	Driller	: G. Baker
Northing	: 430290.88	Easting	: 1361135.04

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
20	GM		Brown, silty, sandy (fine-medium) fine-coarse rounded gravel, moist (GM).				
21							(20'-22') FID = 290 ppm
22				6	PUSH	2.9/4.0	
23							(22'-24') FID = 70 ppm
24							
25							(24'-26') FID = 44 ppm
26				7	PUSH	2.8/4.0	
27							(26'-28') FID = 2360 ppm
28							
29							(28'-30') FID = 345 ppm
30				8	PUSH	3.5/4.0	
31							(30'-32') FID = 200 ppm
32							
33							(32'-34') FID = 45 ppm
34				9	PUSH	2.2/4.0	
35							
36							
37				10	PUSH	1.0/2.0	
38			Bottom of boring.				
39							
40							

Well: MW-7
738.58



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LOG OF BORING MW-8 (SB-3)

TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Allprobe Environmental
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 02/21/07	TPVC Elev/Grnd Elev	: 738.58 / 738.39
Drilling Method	: Geoprobe - 3.0" Borehole	Driller	: G. Baker
Northing	: 430196.73	Easting	: 1361099.45

Well: MW-8
738.39

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0	Con		Concrete.				
1	FILL		Black, silty, fine-coarse sand and fine-coarse gravel, some flyash, FILL, moist.	1	PUSH	2.8/4.0	(0-2') FID = 2.0 ppm
2							
3							(2'-4') FID = 19.0 ppm
4							
5							(4'-6') FID = 0.0 ppm
6	ML		Soft to hard, brown-gray, sandy (fine) silt, mottled, moist (ML).	2	PUSH	3.0/4.0	
7							(6'-8') FID = 0.0 ppm
8							
9							(8'-10') FID = 63.90 ppm
10	SM		Brown, silty, micaceous, fine-medium sand, little oil staining, moist.	3	PUSH	3.5/4.0	
11							(10'-12') FID = 46.0 ppm
12							
13							(12'-14') FID = 30 ppm
14				4	PUSH	3.5/4.0	
15							(14'-16') FID = 0.0 ppm
16							
17							(16'-18') FID = 1.2 ppm
18				5	PUSH	3.0/4.0	
19							(18'-20') FID = 0.0 ppm
20							

Granular bentonite (0-22')

0.75" PVC Riser Pipe

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LOG OF BORING MW-8 (SB-3)

TETRA TECH

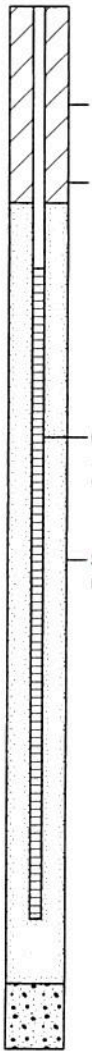
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Allprobe Environmental
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 02/21/07	TPVC Elev/Grnd Elev	: 738.58 / 738.39
Drilling Method	: Geoprobe - 3.0" Borehole	Driller	: G. Baker
Northing	: 430196.73	Easting	: 1361099.45

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
20	GM		Brown, silty, sandy (fine-medium) fine-coarse rounded gravel, moist (GM).				
21							(20'-22') FID = 0.0 ppm
22				6	PUSH	2.5/4.0	
23							(22'-24') FID = 0.0 ppm
24							
25							(24'-26') FID = 12.0 ppm
26				7	PUSH	2.5/4.0	
27							(26'-28') FID = 10.0 ppm
28							
29							(28'-30') FID = 5.0 ppm
30				8	PUSH	3.1/4.0	
31							(30'-32') FID = 5.0 ppm
32							
33							(32'-34') FID = 0.0 ppm
34				9	PUSH	2.25/4.0	
35							(34'-36') FID = 0.0
36			Bottom of boring.				
37							
38							
39							
40							

Well: MW-8
738.39



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LOG OF BORING MW-9S

TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/31/08	TPVC Elev/Grnd Elev	: 736.02 / 736.31
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430196.11	Easting	: 1360649.45

Well: MW-9S
736.02

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0	Con		Gray, Concrete.				
1–4	BR		Black to gray, fine to coarse angular gravel (flyash), some fine to coarse sand and silt, moist.	1	PUSH	3.0/4.0	(0-2') FID = 38.0 ppm (2'-4') FID = 4.7 ppm
4–7	ML		Stiff, brown, sandy (fine) silt, moist.	2	PUSH	3.8/4.0	(4'-6') FID = 4.9 ppm (6'-8') FID = 2.2 ppm
7–14	SM		Interbedded, silty, micaceous, medium to coarse sand and interbedded micaceous, sandy (fine) silt, moist.	3	PUSH	3.8/4.0	(8'-10') FID = 1.0 ppm (10'-12') FID = 0.0 ppm (12'-14') FID = 1.9 ppm
14–20	GW		Silty, fine to coarse sand and sandy fine to coarse gravel, moist. Wet @ 22'-23'.	4 5	PUSH PUSH	3.75/4.0 3.2/4.0	(14'-16') FID = 1.3 ppm (16'-18') FID = 0.0 ppm (18'-20') FID = 0.0 ppm

Granular bentonite (0-23')

1.5" PVC Riser Pipe

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LOG OF BORING MW-9S

TETRA TECH

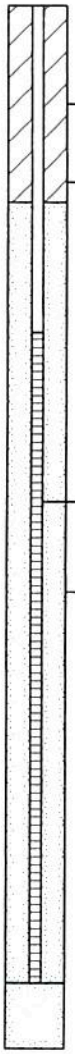
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/31/08	TPVC Elev/Grnd Elev	: 736.02 / 736.31
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430196.11	Easting	: 1360649.45

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
20	GW		Brown, silty, fine to coarse sand, some gravel and sandy, fine to coarse gravel.				
21							(20'-22') FID = 0.0 ppm
22				6	PUSH	3.2/4.0	
23							(22'-24') FID = 0.0 ppm
24							
25							(24'-26') FID = 0.0 ppm
26				7	PUSH	3.1/4.0	
27							(26'-28') FID = 0.0 ppm
28							
29							(28'-30') FID = 0.0 ppm
30				8	PUSH	3.2/4.0	
31							(30'-32') FID = 0.0 ppm
32							
33							(32'-34') FID = 0.0 ppm
34				9	PUSH	3.0/4.0	
35							(34'-36') FID = 0.0 ppm
36			Bottom of Boring - 36.0'.				
37							
38							
39							
40							

Well: MW-9S
736.02



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LOG OF BORING MW-9D

TETRA TECH

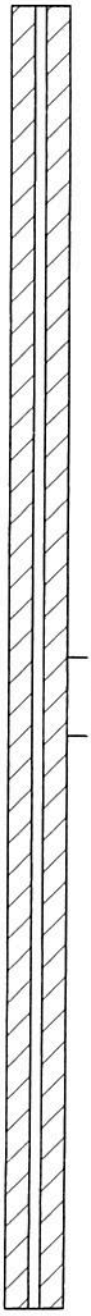
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/31/08	TPVC Elev/Grnd Elev	: 736.30 / 736.03
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430198.97	Easting	: 1360649.43

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0	Con		Gray, Concrete.				
1–4	BR		Black to gray, fine to coarse angular gravel (flyash), some fine to coarse sand and silt, moist.	1	PUSH	3.0/4.0	(0-2') FID = 38.0 ppm; (2'-4') FID = 4.7 ppm
4–7	ML		Stiff, brown, sandy (fine) silt, moist.	2	PUSH	3.8/4.0	(4'-6') FID = 4.9 ppm; (6'-8') FID = 2.2 ppm
7–14	SM		Interbedded, silty, micaceous, medium to coarse sand and interbedded micaceous, sandy (fine) silt, moist.	3	PUSH	3.8/4.0	(8'-10') FID = 1.0 ppm; (10'-12') FID = 0.0 ppm; (12'-14') FID = 1.9 ppm
14–20	GW		Silty, fine to coarse sand and sandy fine to coarse gravel, moist. Wet @ 22'-23'.	4 5	PUSH PUSH	3.75/4.0 3.2/4.0	(14'-16') FID = 1.3 ppm; (16'-18') FID = 0.0 ppm; (18'-20') FID = 0.0 ppm

Well: MW-9D
736.03



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LOG OF BORING MW-9D

TETRA TECH

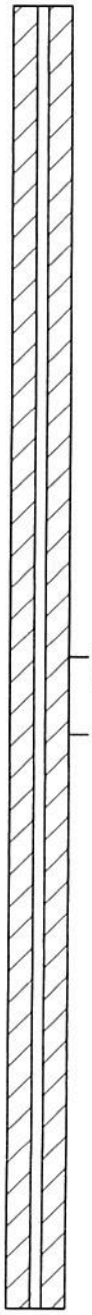
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/31/08	TPVC Elev/Grnd Elev	: 736.30 / 736.03
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430198.97	Easting	: 1360649.43

Well: MW-9D
736.03

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
20			Brown, silty, fine to coarse sand, some gravel and sandy, fine to coarse gravel.				
21							(20'-22') FID = 0.0 ppm
22				6	PUSH	3.2/4.0	
23							(22'-24') FID = 0.0 ppm
24							
25							(24'-26') FID = 0.0 ppm
26				7	PUSH	3.1/4.0	
27							(26'-28') FID = 0.0 ppm
28							
29							(28'-30') FID = 0.0 ppm
30	GW			8	PUSH	3.2/4.0	
31							(30'-32') FID = 0.0 ppm
32							
33							(32'-34') FID = 0.0 ppm
34				9	PUSH	3.0/4.0	
35							(34'-36') FID = 0.0 ppm
36							
37							
38							
39							
40							



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LOG OF BORING MW-9D

TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/31/08	TPVC Elev/Grnd Elev	: 736.30 / 736.03
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430198.97	Easting	: 1360649.43

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	Well: MW-9D 736.03	REMARKS
40	GW		Brown, silty, sandy (fine-coarse) fine to coarse gravel.				Granular bentonite (0-45')	
41								
42								
43							1.5" PVC Riser Pipe	
44								
45								
46								
47								
48								
49							1.5" Sch 40 PVC .010" slot screen (47'-57')	
50								
51							Sand Pack (45'-57')	
52								
53								
54								
55								
56								
57			Bottom of Boring - 57.0' (Refusal).					
58								
59								
60								

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TETRA TECH

LOG OF BORING MW-10

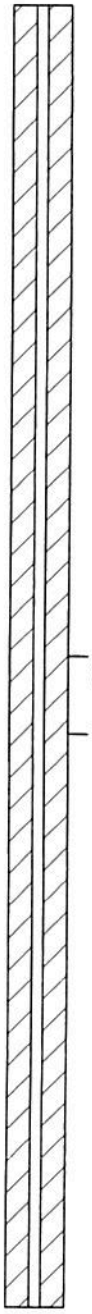
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 11/01/08	TPVC Elev/Grnd Elev	: 733.38 / 733.63
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430439.96	Easting	: 1360925.91

Well: MW-10
733.38

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0–3	BR		Black to brown, silty, fine-coarse sand and fine-coarse gravel, some to little flyash, fill, moist.	1	PUSH	2.9/4.0	(0-2') FID = 0.0 ppm (2'-4') FID = 0.0 ppm
3–12	ML		Soft, brown, sandy (fine), silt, trace fine rounded gravel, moist.	2 3	PUSH PUSH	3.0/4.0 3.3/4.0	(4'-6') FID = 0.0 ppm (6'-8') FID = 0.0 ppm (8'-10') FID = 0.0 ppm (10'-12') FID = 0.0 ppm
12–16	SM		Interbedded, silt and silty, fine sand, moist (SM/ML).	4	PUSH	3.5/4.0	(12'-14') FID = 0.0 ppm (14'-16') FID = 0.0 ppm
16–19	GM		Brown, Interbedded, silty, fine sand and fine to coarse gravel, moist (SM/GM).	5	PUSH	3.7/4.0	(16'-18') FID = 0.0 ppm
19–20	GM		Brown, Silty, sandy (fine-coarse), fine to coarse rouded gravel, moist (GM).				(18'-20') FID = 17.4 ppm



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LOG OF BORING MW-10

TETRA TECH

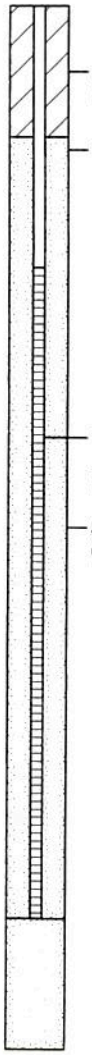
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 11/01/08	TPVC Elev/Grnd Elev	: 733.38 / 733.63
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430439.96	Easting	: 1360925.91

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
20	GM		Brown, Silty, sandy (fine-coarse), fine to coarse gravel, moist (GM).				
21							(20'-22') FID = 6.0 ppm
22				6	PUSH	3.8/4.0	
23							(22'-24') FID = 5.4 ppm
24							
25							(24'-26') FID = 3.5 ppm
26				7	PUSH	3.2/4.0	
27							(26'-28') FID = 3.0 ppm
28							
29							(28'-30') FID = 4.0 ppm
30				8	PUSH	2.8/4.0	
31							(30'-32') FID = 1.0 ppm
32							
33							(32'-34') FID = 1.5 ppm
34				9	PUSH	2.5/4.0	
35							(34'-36') FID = 2.0 ppm
36			Bottom of boring.				
37							
38							
39							
40							

Well: MW-10
733.38



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TETRA TECH

LOG OF BORING MW-11

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/31/08	TPVC Elev/Grnd Elev	: 732.71 / 732.96
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430533.41	Easting	: 1361124.58

Well: MW-11
732.71

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0	Fill		Asphalt and red brick fragment fill material.				
1	GM		Brown to black, silty, fine to coarse sand and fine to coarse gravel, moist.	1	PUSH	2.9/4.0	(0-2') FID = 0.0 ppm
2							
3							(2'-4') FID = 0.0 ppm
4	ML		Soft to medium stiff, sandy (fine) silt, trace clay, moist.				
5							(4'-6') FID = 0.0 ppm
6			Medium stiff to very stiff, sandy (fine) silt and sandy (fine) clay, mottled (ML/CL), moist.	2	PUSH	3.0/4.0	
7							(6'-8') FID = 0.0 ppm
8							
9							(8'-10') FID = 0.0 ppm
10				3	PUSH	3.3/4.0	
11							(10'-12') FID = 0.0 ppm
12							
13							(12'-14') FID = 0.0 ppm
14	SM		Soft, brown, interbedded sandy (fine to medium) silt and silty fine to medium sand, moist (SM/ML).	4	PUSH	3.5/4.0	
15							(14'-16') FID = 0.0 ppm
16							
17							(16'-18') FID = 0.0 ppm
18				5	PUSH	3.7/4.0	
19							(18'-20') FID = 17.4 ppm
20							

Granular bentonite (0-22')

1.5" PVC Riser Pipe

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LOG OF BORING MW-11

TETRA TECH

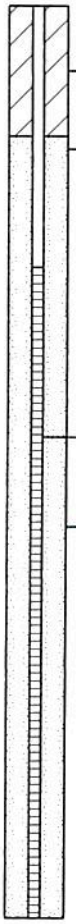
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/31/08	TPVC Elev/Grnd Elev	: 732.71 / 732.96
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430533.41	Easting	: 1361124.58

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
20–24	SM		Brown, sandy (fine-medium) silt and silty fine-medium sand, moist (SM/ML).	6	PUSH	3.8/4.0	(20'-22') FID = 6.0 ppm (22'-24') FID = 5.4 ppm
25–34			Brown, silty, sandy (fine-coarse) fine to coarse gravel and gravelly (fine-coarse) fine to coarse sand, wet (SM/GM).	7	PUSH	3.2/4.0	(24'-26') FID = 3.5 ppm (26'-28') FID = 3.0 ppm
				8	PUSH	2.8/4.0	(28'-30') FID = 4.0 ppm (30'-32') FID = 1.0 ppm
				9	PUSH	2.0/2.0	(32'-34') FID = 1.5 ppm (32'-34') FID = 2.0 ppm
34			Bottom of boring.				

Well: MW-11
732.71



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LOG OF BORING MW-12

TETRA TECH

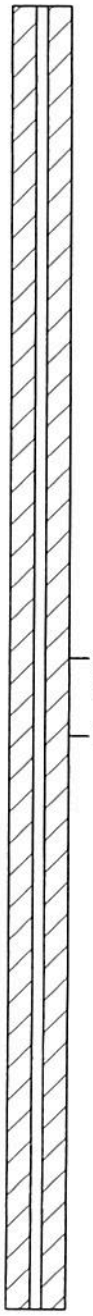
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/21/08	TPVC Elev/Grnd Elev	: 736.28 / 736.81
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430410.63	Easting	: 1361454.89

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0–3	Fill		Black to brown, silty, fine-coarse sand and silty sandy (fine) fine-coarse gravel, Fill, moist.	1	PUSH	2.9/4.0	(0-2') FID = 0.0 ppm; (2'-4') FID = 0.0 ppm
3–6	Fill		Black, sandy (fine) fine-coarse gravel, flyash, Fill, moist.	2	PUSH	3.0/4.0	(4'-6') FID = 0.0 ppm
6–16	CL/ML		Soft to medium stiff, brown to gray, sandy (fine) silt and sandy (fine) clay, mottled, moist.	3	PUSH	3.3/4.0	(6'-8') FID = 0.0 ppm; (8'-10') FID = 0.0 ppm; (10'-12') FID = 0.0 ppm
				4	PUSH	3.5/4.0	(12'-14') FID = 0.0 ppm; (14'-16') FID = 0.0 ppm
16–20	SM		Brown, interbedded, silt and silty fine-coarse sand, wet.	5	PUSH	3.7/4.0	(16'-18') FID = 0.0 ppm; (18'-20') FID = 0.0 ppm

Well: MW-12
736.28



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LOG OF BORING MW-12

TETRA TECH

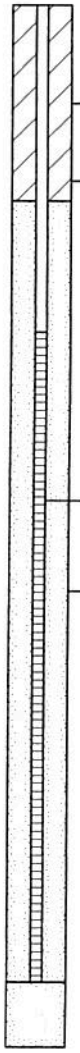
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/21/08	TPVC Elev/Grnd Elev	: 736.28 / 736.81
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430410.63	Easting	: 1361454.89

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
20	SM		Brown, silty, micaceous, fine-coarse sand, wet.	6	PUSH	3.8/4.0	(20'-22') FID = 0.0 ppm
21							
22							(22'-24') FID = 0.0 ppm
23							
24							
25	GM/GP		Brown, silty, fine-coarse sand and fine-coarse rounded gravel, wet.	7	PUSH	3.2/4.0	(24'-26') FID = 0.0 ppm
26							
27							(26'-28') FID = 0.0 ppm
28							
29							(28'-30') FID = 0.0 ppm
30				8	PUSH	2.8/4.0	
31							(30'-32') FID = 0.0 ppm
32							
33							(32'-34') FID = 0.0 ppm
34				9	PUSH	2.5/4.0	
35							(34'-36') FID = 0.0 ppm
36			Bottom of boring.				
37							
38							
39							
40							

Well: MW-12
736.28



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TETRA TECH

LOG OF BORING MW-13

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 11/2/08	TPVC Elev/Grnd Elev	: 738.44 / 738.73
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430278.76	Easting	: 1361054.22

Well: MW-13
738.44

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0	Con		Concrete.				
1	BR		Black, silty, fine to coarse sand and fine to coarse gravel, FLYASH, trace brick fragments, moist.	1	PUSH	2.8/4.0	(0-2') FID = 1.4 ppm
2							
3							(2'-4') FID = 4.8 ppm
4							
5				2	PUSH	3.2/4.0	(4'-6') FID = 12.0 ppm
6							
7			Soft, brown, sandy (fine) silt, little to some clay, moist.				(6'-8') FID = 22.0 ppm
8							
9							(8'-10') FID = 88 ppm
10				3	PUSH	3.5/4.0	Granular bentonite (0-20')
11							1.5" PVC Riser Pipe; (10'-12') FID = 84.0 ppm
12			Medium stiff, brown-gray, interbedded silt and silty fine to medium sand, moist.				
13							(12'-14') FID = 383.0 ppm
14	SM			4	PUSH	3.6/4.0	
15							(14'-16') FID = 50.6 ppm
16			Brown, silty, fine-medium sand, and fine-coarse gravel, moist (SM/GM).				
17							(16'-18') FID = 67.0 ppm
18				5	PUSH	3.2/4.0	
19							(18'-20') FID = 88.6 ppm
20							

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LOG OF BORING MW-13

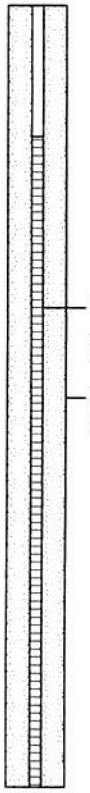
TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 11/2/08	TPVC Elev/Grnd Elev	: 738.44 / 738.73
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430278.76	Easting	: 1361054.22

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
20			Brown, silty, fine-coarse sand and fine-coarse gravel, moist (SM/GM).				
21							(20'-22') FID = 30.0 ppm
22				6	PUSH	2.9/4.0	
23							(22'-24') FID = 7.2 ppm
24							
25							(24'-26') FID = 7.4 ppm
26				7	PUSH	2.7/4.0	
27							(26'-28') FID = 7.3 ppm
28							
29							(28'-30') FID = 5.0 ppm
30				8	PUSH	2.8/4.0	
31							(30'-32') FID = 25 ppm
32			Bottom of boring.				
33							
34							
35							
36							
37							
38							
39							
40							



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TETRA TECH

LOG OF BORING MW-14

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 11/1/08	TPVC Elev/Grnd Elev	: 738.55 / 738.82
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430318.91	Easting	: 1361234.96

Well: MW-14
738.55

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0	Con		Concrete.				
1	FILL		Black, silty, fine-coarse sand and fine-coarse gravel, some flyash, FILL, moist.	1	PUSH	3.0/4.0	(0-2') FID = 0.0 ppm
2							
3							(2'-4') FID = 0.0 ppm
4							
5							(4'-6') FID = 0.0 ppm
6	ML		Soft to hard, brown-gray, sandy (fine) silt, mottled, moist (ML).	2	PUSH	3.2/4.0	
7							(6'-8') FID = 0.0 ppm
8							
9							(8'-10') FID = 1.2 ppm
10				3	PUSH	3.8/4.0	Granular bentonite (0-26')
11							1.5" PVC Riser Pipe (10'-12') FID = 1.4 ppm
12							
13							(12'-14') FID = 1.3 ppm
14				4	PUSH	3.9/4.0	
15							(14'-16') FID = 0.0 ppm
16	SM		Brown, silty, micaceous, fine-medium sand, moist.				
17							(16'-18') FID = 0.0 ppm
18				5	PUSH	3.1/4.0	
19							(18'-20') FID = 0.5 ppm
20							

LOG OF BORING MW-14

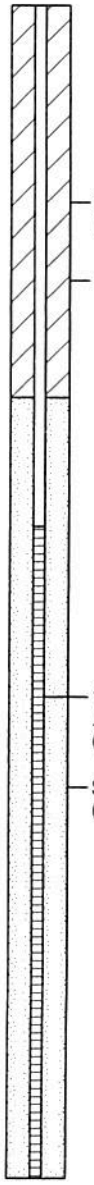
TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 11/1/08	TPVC Elev/Grnd Elev	: 738.55 / 738.82
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430318.91	Easting	: 1361234.96

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
20	GM		Brown, silty, sandy (fine-medium) fine-coarse rounded gravel, moist (GM).				
21							(20'-22') FID = 1.0 ppm
22				6	PUSH	2.9/4.0	
23							(22'-24') FID = 2.1 ppm
24							
25							(24'-26') FID = 0.2 ppm
26				7	PUSH	2.8/4.0	
27							(26'-28') FID = 0.2 ppm
28							
29							(28'-30') FID = 0.0 ppm
30				8	PUSH	3.5/4.0	
31							(30'-32') FID = 0.0 ppm
32							
33							(32'-34') FID = 0.0 ppm
34				9	PUSH	2.2/4.0	
35							(34'-36') FID = 0.0 ppm
36							
37				10	PUSH	1.0/2.0	(36'-38') FID = 0.0 ppm
38			Bottom of boring.				
39							
40							



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LOG OF BORING MW-15

TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 11/1/08	TPVC Elev/Grnd Elev	: 738.81 / 738.58
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430394.40	Easting	: 1361185.83

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	Well: MW-15 738.58	REMARKS
0	Con		Concrete.					
1–6	FILL		Black, silty, fine-coarse sand and fine-coarse gravel, some flyash, FILL, moist.					Lithology derived from MW-2.
6–16	ML		Soft to hard, brown-gray, sandy (fine) silt, mottled, moist (ML).				Granular bentonite (0-47') 1.5" PVC Riser Pipe	
16–20	SM		Brown, silty, micaceous, fine-medium sand, moist.					

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LOG OF BORING MW-15

TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 11/1/08	TPVC Elev/Grnd Elev	: 738.81 / 738.58
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430394.40	Easting	: 1361185.83

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	Well: MW-15 738.58	REMARKS
20			Brown, silty, sandy (fine-medium) fine-coarse rounded gravel, moist (GM).					Lithology derived from MW-2.
21								
22								
23								
24								
25								
26								
27								
28								
29								
30	GM						Granular bentonite (0-47')	
31							1.5" PVC Riser Pipe	
32								
33								
34								
35								
36								
37								
38								
39								
40								

LOG OF BORING MW-15

TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 11/1/08	TPVC Elev/Grnd Elev	: 738.81 / 738.58
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430394.40	Easting	: 1361185.83

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	Well: MW-15 738.58	REMARKS
40	GM		Brown, silty, sandy (fine-coarse), fine-coarse rounded gravel, moist.					Lithology derived from MW-2.
41								
42								
43								
44							Granular bentonite (0-47')	
45							1.5" PVC Riser Pipe	
46								
47								
48								
49								
50								
51								
52							1.5" Sch 40 PVC .010" slot screen (49'-59')	
53							Sand Pack (47'-59')	
54								
55								
56								
57								
58								
59			Bottom of boring.					
60								

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LOG OF BORING MW-16

TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/21/08	TPVC Elev/Grnd Elev	: 738.884 / 739.07
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430223.16	Easting	: 1361532.08

Well: MW-16
738.84

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0	Con		Concrete.				
1	ML		Brown, sandy (fine) silt and clay, trace fine gravel, moist (ML).				(0-2') FID = 0.0 ppm
2	Fill		Black, sandy (fine-coarse), fine-coarse gravel, FLYASH, moist.	1	PUSH	4.0/4.0	
3							(2'-4') FID = 0.0 ppm
4							
5							(4'-6') FID = 0.0 ppm
6				2	PUSH	4.0/4.0	
7							(6'-8') FID = 0.0 ppm
8							
9							(8'-10') FID = 0.0 ppm
10	FILL		Black-brown, coal, silty clay and FLYASH, fill material, moist.	3	PUSH	3.5/4.0	
11							(10'-12') FID = 0.0 ppm
12							
13							(12'-14') FID = 0.0 ppm
14				4	PUSH	3.8/4.0	
15							(14'-16') FID = 0.0 ppm
16	ML/CL		Stiff, brown, sandy (fine), mottled, silt and clay, moist.				
17							(16'-18') FID = 0.0 ppm
18				5	PUSH	3.0/4.0	
19							(18'-20') FID = 0.0 ppm
20							

Granular bentonite (0-24')

1.5" PVC Riser Pipe

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LOG OF BORING MW-16

TETRA TECH

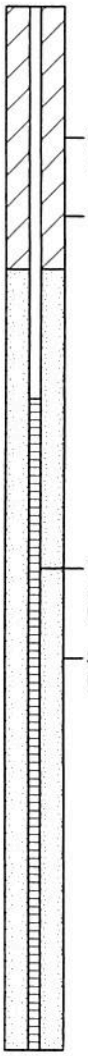
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/21/08	TPVC Elev/Grnd Elev	: 738.884 / 739.07
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430223.16	Easting	: 1361532.08

Well: MW-16
738.84

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
20							
21			Stiff, brown, sandy (fine), mottled, silt and clay, moist.				(20'-22') FID = 0.0 ppm
22				6	PUSH	3.8/4.0	
23	ML/CL						(22'-24') FID = 0.0 ppm
24							
25							(24'-26') FID = 0.0 ppm
26			Brown, silty, fine-medium sand and fine to medium gravel, moist.	7	PUSH	3.8/4.0	
27	SM/GM						(26'-28') FID = 0.0 ppm
28			Brown, silty, fine-coarse sand and fine-coarse gravel, moist.				
29							(28'-30') FID = 0.0 ppm
30				8	PUSH	3.0/4.0	
31							(30'-32') FID = 0.0 ppm
32	GW						
33							(32'-34') FID = 0.0 ppm
34				9	PUSH	3.75/4.0	
35							(34'-36') FID = 0.0 ppm
36			Bottom of boring.				
37							
38							
39							
40							



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LOG OF BORING MW-17S

TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/20/08	TPVC Elev/Grnd Elev	: 737.76 / 738.03
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430318.91	Easting	: 1361769.86

Well: MW-17S
737.76

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0	Con		Concrete.				
1	Fill		Black-red brown, silty, sandy (fine-coarse) fine-coarse gravel, flyash and brick fragments, moist.				(0-2') FID = 0.0 ppm
2				1	PUSH	3.8/4.0	
3							(2'-4') FID = 0.0 ppm
4							
5							(4'-6') FID = 8.0 ppm
6	ML		Soft-stiff, brown-gray, mottled, sandy (fine) silt, trace-little clay, trace wood fragments, moist.	2	PUSH	4.0/4.0	
7							(6'-8') FID = 100.0 ppm
8							
9							(8'-10') FID = 167.0 ppm
10				3	PUSH	3.8/4.0	
11							(10'-12') FID = 183.0 ppm
12							
13							(12'-14') FID = 5.0 ppm
14				4	PUSH	3.25/4.0	
15							(14'-16') FID = 4.4 ppm
16	ML/CL		Stiff, brown-gray, mottled, silty, sandy (fine) clay and mottled, sandy (fine) silt, moist.				
17							(16'-18') FID = 0.0 ppm
18				5	PUSH	3.2/4.0	
19							(18'-20') FID = 0.0 ppm
20							

Granular bentonite (0-24')

1.5" PVC Riser Pipe

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LOG OF BORING MW-17S

TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/20/08	TPVC Elev/Grnd Elev	: 737.76 / 738.03
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430318.91	Easting	: 1361769.86

Well: MW-17S
737.76

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0	Con		Concrete.				
1	Fill		Black-red brown, silty, sandy (fine-coarse) fine-coarse gravel, flyash and brick fragments, moist.	1	PUSH	3.8/4.0	(0-2') FID = 0.0 ppm
2							
3							(2'-4') FID = 0.0 ppm
4				2	PUSH	4.0/4.0	
5							(4'-6') FID = 8.0 ppm
6	ML		Soft-stiff, brown-gray, mottled, sandy (fine) silt, trace-little clay, trace wood fragments, moist.				
7							(6'-8') FID = 100.0 ppm
8							
9							(8'-10') FID = 167.0 ppm
10				3	PUSH	3.8/4.0	
11							(10'-12') FID = 183.0 ppm
12							
13							(12'-14') FID = 5.0 ppm
14				4	PUSH	3.25/4.0	
15							(14'-16') FID = 4.4 ppm
16	ML/CL		Stiff, brown-gray, mottled, silty, sandy (fine) clay and mottled, sandy (fine) silt, moist.				
17							(16'-18') FID = 0.0 ppm
18				5	PUSH	3.2/4.0	
19							(18'-20') FID = 0.0 ppm
20							

Granular bentonite (0-28')

1.5" PVC Riser Pipe

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LOG OF BORING MW-17S

TETRA TECH

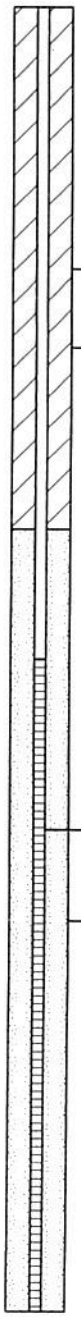
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/20/08	TPVC Elev/Grnd Elev	: 737.76 / 738.03
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430318.91	Easting	: 1361769.86

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
20	ML/CL		Stiff, brown-gray, mottled, silty, sandy (fine) clay and mottled, sandy (fine) silt, moist.				
21							(20'-22') FID = 0.0 ppm
22				6	PUSH	3.0/4.0	
23							(22'-24') FID = 0.0 ppm
24							
25	GC		Brown, clayey, fine-coarse sand, trace fine-medium rounded gravel, wet.				(24'-26') FID = 0.0 ppm
26				7	PUSH	4.0/4.0	
27							(26'-28') FID = 0.0 ppm
28							
29							(28'-30') FID = 0.0 ppm
30				8	PUSH	4.0/4.0	
31							(30'-32') FID = 0.0 ppm
32							
33							(32'-34') FID = 0.0 ppm
34				9	PUSH	4.0/4.0	
35							(34'-36') FID = 0.0 ppm
36							
37							(36'-38') FID = 0.0 ppm
38				10	PUSH	4.0/4.0	
39							(38'-40') FID = 0.0 ppm
40							

Well: MW-17S
737.76



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TETRA TECH

LOG OF BORING MW-17D

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/20/08	TPVC Elev/Grnd Elev	: 737.75 / 738.02
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430407.53	Easting	: 1361771.90

Well: MW-17D
737.75

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0	Con		Concrete.				
1	Fill		Black-red brown, silty, sandy (fine-coarse) fine-coarse gravel, flyash and brick fragments, moist.				(0-2') FID = 0.0 ppm
2				1	PUSH	3.8/4.0	
3							(2'-4') FID = 0.0 ppm
4							
5							(4'-6') FID = 8.0 ppm
6	ML		Soft-stiff, brown-gray, mottled, sandy (fine) silt, trace-little clay, trace wood fragments, moist.	2	PUSH	4.0/4.0	
7							(6'-8') FID = 100.0 ppm
8							
9							(8'-10') FID = 167.0 ppm
10				3	PUSH	3.8/4.0	Granular bentonite (0-48')
11							1.5" PVC Riser Pipe; (10'-12') FID = 183.0 ppm
12							
13							(12'-14') FID = 5.0 ppm
14				4	PUSH	3.25/4.0	
15							(14'-16') FID = 4.4 ppm
16	ML/CL		Stiff, brown-gray, mottled, silty, sandy (fine) clay and mottled, sandy (fine) silt, moist.				
17							(16'-18') FID = 0.0 ppm
18				5	PUSH	3.2/4.0	
19							(18'-20') FID = 0.0 ppm
20							

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LOG OF BORING MW-17D

TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/20/08	TPVC Elev/Grnd Elev	: 737.75 / 738.02
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430407.53	Easting	: 1361771.90

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	Well: MW-17D 737.75	REMARKS
20			Stiff, brown-gray, mottled, silty, sandy (fine) clay and mottled, sandy (fine) silt, moist.					
21								(20'-22') FID = 0.0 ppm
22	ML/CL			6	PUSH	3.0/4.0		
23								(22'-24') FID = 0.0 ppm
24								
25			Brown, clayey, fine-coarse sand, trace fine-medium rounded gravel, wet.					(24'-26') FID = 0.0 ppm
26				7	PUSH	4.0/4.0		
27								(26'-28') FID = 0.0 ppm
28								
29								(28'-30') FID = 0.0 ppm
30				8	PUSH	4.0/4.0	Granular bentonite (0-48')	
31							1.5" PVC Riser Pipe	(30'-32') FID = 0.0 ppm
32	GC							
33								(32'-34') FID = 0.0 ppm
34				9	PUSH	4.0/4.0		
35								(34'-36') FID = 0.0 ppm
36								
37								(36'-38') FID = 0.0 ppm
38				10	PUSH	4.0/4.0		
39								(38'-40') FID = 0.0 ppm
40								

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LOG OF BORING MW-17D

TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/20/08	TPVC Elev/Grnd Elev	: 737.75 / 738.02
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430407.53	Easting	: 1361771.90

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	Well: MW-17D 737.75	REMARKS
40			Brown, silty, sandy (fine-coarse) fine to coarse rounded gravel, wet.					Blind drilling 40'-60', refusal at 60'.
41								
42								
43								
44							Granular bentonite (0-48')	
45							1.5" PVC Riser Pipe	
46								
47								
48								
49								
50	GM							
51								
52								
53							1.5" Sch 40 PVC .010" slot screen (50'-60')	
54							Sand Pack (48'-60')	
55								
56								
57								
58								
59								
60								

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LOG OF BORING MW-18S

TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/20/08	TPVC Elev/Grnd Elev	: 737.76 / 738.03
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430318.91	Easting	: 1361769.86

Well: MW-18S
737.76

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0	Con		Concrete.				
1	Fill		Black-red brown, silty, sandy (fine-coarse) fine-coarse gravel, flyash and brick fragments, moist.				(0-2') FID = 0.0 ppm
2				1	PUSH	3.8/4.0	
3							(2'-4') FID = 0.0 ppm
4							
5							(4'-6') FID = 8.0 ppm
6	ML		Soft-stiff, brown-gray, mottled, sandy (fine) silt, trace-little clay, trace wood fragments, moist.	2	PUSH	4.0/4.0	
7							(6'-8') FID = 100.0 ppm
8							
9							(8'-10') FID = 167.0 ppm
10				3	PUSH	3.8/4.0	Granular bentonite (0-28')
11							1.5" PVC Riser Pipe; (10'-12') FID = 183.0 ppm
12							
13							(12'-14') FID = 5.0 ppm
14				4	PUSH	3.25/4.0	
15							(14'-16') FID = 4.4 ppm
16	ML/CL		Stiff, brown-gray, mottled, silty, sandy (fine) clay and mottled, sandy (fine) silt, moist.				
17							(16'-18') FID = 0.0 ppm
18				5	PUSH	3.2/4.0	
19							(18'-20') FID = 0.0 ppm
20							

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TETRA TECH

LOG OF BORING MW-18S

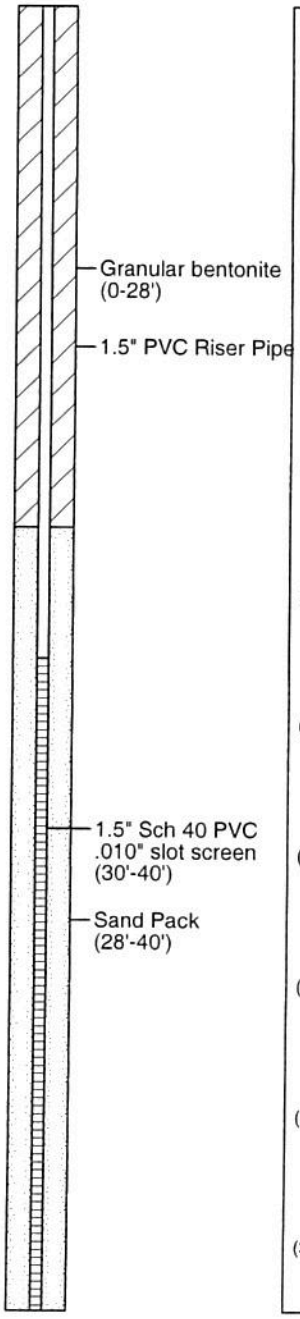
Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/20/08	TPVC Elev/Grnd Elev	: 737.76 / 738.03
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430318.91	Easting	: 1361769.86

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
20	ML/CL		Stiff, brown-gray, mottled, silty, sandy (fine) clay and mottled, sandy (fine) silt, moist.				
21							(20'-22') FID = 0.0 ppm
22				6	PUSH	3.0/4.0	
23							(22'-24') FID = 0.0 ppm
24							
25	GC		Brown, clayey, fine-coarse sand, trace fine-medium rounded gravel, wet.				(24'-26') FID = 0.0 ppm
26				7	PUSH	4.0/4.0	
27							(26'-28') FID = 0.0 ppm
28							
29							(28'-30') FID = 0.0 ppm
30				8	PUSH	4.0/4.0	
31							(30'-32') FID = 0.0 ppm
32							
33							(32'-34') FID = 0.0 ppm
34				9	PUSH	4.0/4.0	
35							(34'-36') FID = 0.0 ppm
36							
37							(36'-38') FID = 0.0 ppm
38				10	PUSH	4.0/4.0	
39							(38'-40') FID = 0.0 ppm
40							

Well: MW-18S
737.76



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LOG OF BORING MW-18D

TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/22/08	TPVC Elev/Grnd Elev	: 735.61 / 735.41
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430385.31	Easting	: 1360633.12

Well: MW-18D
735.41

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
0	Con		Concrete.				
1	Fill		Tan-gray, slag, moist.				(0-2') FID = 0.0 ppm
2	Fill		Black, sandy (fine), fine-coarse gravel, FLYASH, moist.	1	PUSH	3.8/4.0	
3			Brown-gray, very stiff, mottled, sandy (fine) clay and mottled, sandy (fine) silt, moist.				(2'-4') FID = 0.0 ppm
4							
5							(4'-6') FID = 8.0 ppm
6				2	PUSH	4.0/4.0	
7							(6'-8') FID = 100.0 ppm
8	ML/CL						
9							(8'-10') FID = 167.0 ppm
10				3	PUSH	3.8/4.0	
11							(10'-12') FID = 183.0 ppm
12							
13			Brown, silty, micaceous, fine-medium sand, moist, some interbedded silt lenses, moist.				(12'-14') FID = 5.0 ppm
14				4	PUSH	3.25/4.0	
15							(14'-16') FID = 4.4 ppm
16	SM						
17							(16'-18') FID = 0.0 ppm
18				5	PUSH	3.2/4.0	
19							(18'-20') FID = 0.0 ppm
20			Brown, fine-coarse rounded gravel, some fine-coarse sand, moist-wet.				
21							(20'-22') FID = 0.0 ppm
22	GW			6	PUSH	3.0/4.0	
23							(22'-24') FID = 0.0 ppm
24				7	PUSH	4.0/4.0	
25							~~(24'-26') FID = 0.0 ppm~~

Granular bentonite (0-52')

1.5" PVC Riser Pipe

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LOG OF BORING MW-18D

TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/22/08	TPVC Elev/Grnd Elev	: 735.61 / 735.41
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430385.31	Easting	: 1360633.12

Well: MW-18D
735.41

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	REMARKS
25							~~(24'-26') FID = 0.0 ppm~~
26				7	PUSH	4.0/4.0	
27							(26'-28') FID = 6.6 ppm
28							
29							(28'-30') FID = 1.5 ppm
30				8	PUSH	4.0/4.0	
31							(30'-32') FID = 2.5 ppm
32	GW						
33							(32'-34') FID = 2.60 ppm
34				9	PUSH	4.0/4.0	
35							(34'-36') FID = 3.0 ppm
36							
37							
38							Granular bentonite (0-52')
39							1.5" PVC Riser Pipe
40			Brown, silty, fine-coarse sand and fine-coarse gravel, wet.				
41							
42							
43							
44							
45	GW						
46							
47							
48							
49							
50							

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LOG OF BORING MW-18D

TETRA TECH

Tetra Tech MM, Inc.
600 River Avenue, Suite 203
Pittsburgh, PA 15212

RCI-ARTEZ-Henry Miller Springs

Project	: 112C01243	Drilling Contractor	: Water Quality Systems
Site	: Henry Miller Springs	Logged By	: J. Ferguson
Date	: 10/22/08	TPVC Elev/Grnd Elev	: 735.61 / 735.41
Drilling Method	: Geoprobe - 3.5" Borehole	Driller	: J. Wolfe
Northing	: 430385.31	Easting	: 1360633.12

Depth in Feet	USCS	GRAPHIC	DESCRIPTION	Samples	Blow Count	Rec. (ft.)	Well: MW-18D 735.41	REMARKS
50								
51							Granular bentonite (0-52')	
52								
53							1.5" PVC Riser Pipe	
54								
55	GW							
56							1.5" Sch 40 PVC .010" slot screen (54'-64')	
57								
58							Sand Pack (52'-64')	
59								
60			Brown, silty, fine-coarse sand and fine-coarse gravel, wet.					
61								
62	GW							
63								Blind drilling from 40'. Refusal at 64'.
64			Bottom of boring.					
65								
66								
67								
68								
69								
70								
71								
72								
73								
74								
75								

APPENDIX H

Low Flow Purge Data Sheets

Tet ech NUS, Inc
Low Flow Purging Data Sheet

MW-1 LOW FLOW SAMPLING DATA SHEET

SITE: Former Henry Miller Springs Site
DATE: February 12, 2009
WEATHER: Clear

Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL: MW-1
WELL PERMIT #:
WELL DEPTH: 30' BTPVC
WELL DIAMETER: 0.75" Inches
SCREENED/OPEN INTERVAL: 20'-30'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: (tubing intake) 30' ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 21.55' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
10:30	X		6.24		1.954		111.1		1.97		22.7		13.65		<100	21.55
10:35	X		6.30		1.791		79.8		0.79		11.8		13.46		<100	
10:40	X		6.31		1.636		61.7		0.44		4.33		13.62		<100	
10:45	X		6.32		1.591		53.7		0.41		4.34		13.59		<100	
10:50	X		6.33		1.555		48.7		0.28		4.32		13.67		<100	
10:55		X	6.33		1.548		45.6		0.29		4.31		13.70		<100	21.83

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Tet ·chNUS, Inc
Lov. ·ow Purging Data Sheet

MW-1 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 12, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-1
WELL PERMIT #:
WELL DEPTH: 30' BTPVC
WELL DIAMETER: 0.75" Inches
SCREENED/OPEN INTERVAL: 20'-30'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: (tubing intake) 30' ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 21.55' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
10:30	X		6.24	NA	1.954	NA	111.1	NA	1.97	NA	22.7	NA	13.65	NA	<100	21.55
10:35	X		6.30		1.711		79.8		0.79		11.8		13.46		<100	
10:40	X		6.31		1.636		61.7		0.44		4.33		13.62		<100	
10:45	X		6.32		1.591		53.7		0.41		4.34		13.59		<100	
10:50	X		6.33		1.555		48.7		0.28		4.32		13.67		<100	
10:55		X	6.33		1.548		45.6		0.29		4.31		13.70		<100	21.55

COMMENTS: Sample analyzed for VOCs by EPA 8260B.

MW-2 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 10, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-2
WELL PERMIT #:
WELL DEPTH: 34' BTPVC
WELL DIAMETER: 0.75 Inches
SCREENED/OPEN INTERVAL: 24'-34'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 32' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 27.87' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
12:30	X		6.19		0.371		141.4		3.30		15.0		10.94		<100	27.87
12:40	X		5.92		0.342		143.7		2.34		13.6		11.78		<100	
12:50	X		5.86		0.327		144.9		1.82		8.23		12.26		<100	
13:00	X		5.79		0.314		148.6		2.23		4.52		11.37		<100	
13:10	X		5.75		0.314		151.5		1.73		1.74		12.41		<100	
13:15		X	5.76		0.315		151.5		1.75		1.70		12.64		<100	27.91

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Tet ch NUS, Inc
Low ow Purging Data Sheet

MW-3 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 11, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-3
WELL PERMIT #:
WELL DEPTH: 30' BTPVC
WELL DIAMETER: 1 Inches
SCREENED/OPEN INTERVAL: 20'-30'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 28' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : +/- 24'-25'ft below TOC
Note: *Unable to measure water level accurately at MW-3.

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
08:40	X		5.95		3.279		180.8		0.98		171		15.24		<100	Note *
08:45	X		5.94		3.252		182.6		0.45		99.6		14.95		<100	
08:50	X		5.94		3.235		183.4		0.28		72.9		14.76		<100	
08:55	X		5.94		3.190		183.5		0.30		42.9		14.58		<100	
09:00		X	5.94		3.191		183.7		0.30		40.3		14.61		<100	

COMMENTS: Sample analyzed for VOCs by EPA method 8260B. Unable to get accurate water level measurement.

Tet ch NUS, Inc
Low Flow Purging Data Sheet

MW-4 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 11, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-4
WELL PERMIT #:
WELL DEPTH: 34' BTPVC
WELL DIAMETER: 0.75 Inches
SCREENED/OPEN INTERVAL: 24.0'-34.0'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 32' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 27.70' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
14:30	X		6.57		0.590		17.7		2.75		218		15.19		<100	27.70
14:35	X		6.55		0.600		23.2		2.63		113		15.24		<100	
14:40	X		6.54		0.624		32.1		2.52		78		15.30		<100	
14:45	X		6.53		0.639		44.3		2.41		67.4		15.33		<100	
14:50	X		6.52		0.645		45.6		2.25		53.1		15.32		<100	
14:55		X	6.52		0.650		48.8		2.20		40.7		15.32		<100	27.70

COMMENTS: Well sampled for VOCs by EPA Method 8260B.

Te ch NUS, Inc
Lo. ow Purging Data Sheet

MW-5 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 11, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-5
WELL PERMIT #:
WELL DEPTH: 34' BTPVC
WELL DIAMETER: 0.75 Inches
SCREENED/OPEN INTERVAL: 24'-34'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 7' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 4.85' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		

COMMENTS: Well not sampled, obstruction at approximately 6' below top of PVC.

Te ech NUS, Inc
Lo. ow Purging Data Sheet

MW-6 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 11, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL: MW-6
WELL PERMIT #:
WELL DEPTH: 35' BTPVC
WELL DIAMETER: 0.75 Inches
SCREENED/OPEN INTERVAL: 25'-35'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 32' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 27.30' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
14:00	X		6.16		1.008		184.7		3.89		141		17.13		<100	27.30
14:05	X		6.22		0.929		149.7		2.02		112		17.06		<100	
14:10	X		6.29		0.847		90.1		1.19		56.5		16.75		<100	
14:15	X		6.31		0.806		80.5		1.16		36.1		17.10		<100	
14:20		X	6.31		0.799		40.0		0.63		19.2		17.29		<100	27.33

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Te ech NUS, Inc
Lo ow Purging Data Sheet

MW-7 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 10, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-7 **WELL DEPTH:** 34' BTPVC **SCREENED/OPEN INTERVAL:** 24'-34'
WELL PERMIT #: **WELL DIAMETER:** 0.75 Inches

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 32' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 27.94' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
14:30	X		6.44		0.541		87.9		1.74		20.5		11.66		<100	27.94
14:35	X		6.42		0.547		46.3		0.79		20.5		12.72		<100	
14:40	X		6.39		0.548		8.5		0.36		12.1		13.06		<100	
14:45	X		6.48		0.548		-1.1		0.27		7.11		13.09		<100	
14:50	X		6.49		0.546		-8.2		0.25		5.17		13.12		<100	
14:55	X		6.49		0.546		-8.8		0.32		4.88		13.17		<100	
15:00		X	6.50		0.546		-8.9		0.31		4.86		13.15		<100	27.95

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Te ech NUS, Inc
Lo. ow Purging Data Sheet

MW-8 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 10, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-8
WELL PERMIT #:
WELL DEPTH: 12' BTPVC
WELL DIAMETER: 0.75 Inches
SCREENED/OPEN INTERVAL: 24'-34'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 32' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 27.73' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
15:30	X		6.50		0.54		-10.9		2.70		63.2		12.12		<100	27.73
15:40	X		6.48		0.561		-13.2		0.98		57.7		12.51		<100	
15:50	X		6.45		0.641		-1.8		0.67		22.7		13.59		<100	
16:00	X		6.38		0.641		13.2		0.55		8.7		13.84		<100	
16:05		X	6.36		0.639		16.3		0.51		7.3		13.97		<100	27.73

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Te ech NUS, Inc
Lo ow Purging Data Sheet

MW-9D LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 11, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-9D
WELL PERMIT #:
WELL DEPTH: 55' BTPVC
WELL DIAMETER: 1.5 Inches
SCREENED/OPEN INTERVAL: 45'-55'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 40' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 24.90' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
13:00	X		6.35		1.106		183.1		3.78		52.2		15.76		<100	24.90
13:09	X		6.22		1.091		184.1		2.58		50.1		15.70		<100	
13:10	X		6.15		1.073		184.9		1.75		34.3		15.58		<100	
13:15	X		6.11		1.057		186.7		0.63		22.0		15.83		<100	
13:20		X	6.11		1.056		186.2		0.58		21.3		15.81		<100	24.90

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Te' ech NUS, Inc
Lo. ow Purging Data Sheet

MW-9S LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 11, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-9S
WELL PERMIT #:
WELL DEPTH: 40' BTPVC
WELL DIAMETER: 1.5 Inches
SCREENED/OPEN INTERVAL: 30'-40'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 30' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 24.90' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
13:30	X		6.10		1.069		189.0		2.75		68.0		16.19		<100	24.90
13:35	X		5.96		1.073		193.7		2.63		38.4		16.24		<100	
13:40	X		6.01		1.070		193.7		2.21		25.7		16.02		<100	
13:45	X		5.98		1.070		194.0		1.92		23.2		16.06		<100	
13:50		X	5.98		1.070		194.0		1.92		23.2		16.06		<100	24.89

COMMENTS: Sample analyzed for VOCs by EPA method 8260B.

Te ech NUS, Inc
Lo ow Purging Data Sheet

MW-10 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 11, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-10
WELL PERMIT #:
WELL DEPTH: 45' BTPVC
WELL DIAMETER: 1.5 Inches
SCREENED/OPEN INTERVAL: 35'-45'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 32' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 22.42' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
11:00	X		6.35		1.011		185.1		1.10		733		15.08		<100	22.42
11:05	X		6.38		0.961		182.2		0.42		163		15.12		<100	
11:10	X		6.38		0.952		181.2		0.42		72.4		15.11		<100	
11:15	X		6.40		0.952		180.4		0.47		30.2		15.18		<100	
11:20	X		6.39		0.954		179.7		0.39		16.5		15.24		<100	
11:25		X	6.39		0.954		179.5		0.39		15.0		15.28		<100	22.46

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Te' Tech NUS, Inc
Lo ow Purging Data Sheet

MW-11 LOW FLOW SAMPLING DATA SHEET

SITE: Former Henry Miller Springs Site
DATE: February 11, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL: MW-11
WELL PERMIT #:
WELL DEPTH: 45' BTPVC
WELL DIAMETER: 1 Inches
SCREENED/OPEN INTERVAL: 35'-45'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 32' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 21.70' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
10:15	X		5.93		1.347		179.3		3.70		1392		15.56		<100	21.70
10:20	X		5.88		1.351		183.7		1.95		328		15.18		<100	
10:25	X		5.87		1.344		185.7		1.81		213		15.04		<100	
10:30	X		5.86		1.342		187.2		1.80		168		14.99		<100	
10:35	X		5.88		1.341		187.6		1.84		120		15.00		<100	
10:40	X		5.88		1.338		187.8		1.41		100		15.02		<100	
10:45		X	5.88		1.338		188.1		1.15		74		15.06		<100	21.71

COMMENTS: Well sampled for total nickel.

MW-12 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 11, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-12
WELL PERMIT #:
WELL DEPTH: 40' BTPVC
WELL DIAMETER: 1.5 Inches
SCREENED/OPEN INTERVAL: 30'-40'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 35' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 25.58' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
09:20	X		6.15		1.632		180.5		1.98		312		13.46		<100	25.58
09:25	X		6.40		0.997		164.2		1.80		210		14.14		<100	
09:30	X		6.44		0.679		161.8		1.84		167		14.18		<100	
09:35	X		6.43		0.654		162.8		1.84		128		14.03		<100	
09:40	X		6.42		0.638		161.8		1.85		98.3		13.94		<100	
09:45	X		6.42		0.632		162.0		1.85		86.7		13.94		<100	
09:50		X	6.44		0.629		162.2		1.86		19.3		13.92		<100	25.62

COMMENTS: Sample analyzed for VOCs by EPA method 8260B.

Te ech NUS, Inc
Lo. .ow Purging Data Sheet

MW-13 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 10, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. King/J. Ferguson

MONITOR WELL MW-13
WELL PERMIT #:
WELL DEPTH: 40 BTPVC
WELL DIAMETER: 1.5" Inches
SCREENED/OPEN INTERVAL: 25'-40'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 35' (tubing intake) ft below static water level
DEPTH TO WATER BEFORE Tubing Installation : 28.50' ft below static water level

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
17:15																

COMMENTS: Collected SPL sample. Analyzed sample for VOCs by EPA Method 8260B, SVOCs by EPA Method 8270C.

Te ech NUS, Inc
Lo. ow Purging Data Sheet

MW-14 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 10, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-14
WELL PERMIT #:
WELL DEPTH: 40' BTPVC
WELL DIAMETER: 1 Inches
SCREENED/OPEN INTERVAL: 30'-40'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 33' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 27.98' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
11:25	X		6.44		0.481		141.4		3.09		2.51		9.12		<100	27.98
11:30	X		6.47		0.467		140.0		2.73		2.48		9.83		<100	
11:35	X		6.43		0.448		136.5		2.75		1.51		10.47		<100	
11:40	X		6.31		0.426		133.1		2.62		2.26		11.60		<100	
11:45	X		6.29		0.418		134.2		2.73		1.34		11.76		<100	
11:50	X		6.27		0.416		132.9		2.44		0.69		11.95		<100	
12:00		X	6.26		0.414		133.8		2.31		0.66		11.98		<100	28.01

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B. MS/MSD collected at this location.

Te ch NUS, Inc
Lo ow Purging Data Sheet

MW-15 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 10, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-15
WELL PERMIT #:
WELL DEPTH: 55' BTPVC
WELL DIAMETER: 1.5 Inches
SCREENED/OPEN INTERVAL: 45'-55'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 40' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 27.97' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
13:25	X		5.78		0.323		152.1		2.50		4.49		11.80		<100	27.97
13:30	X		6.21		0.455		149.1		0.67		7.26		12.98		<100	
13:35	X		6.23		0.536		147.6		0.58		4.28		12.99		<100	
13:40	X		6.22		0.550		148.2		0.65		2.49		12.94		<100	
13:45		X	6.22		0.66		149.1		0.66		2.31		12.82		<100	27.99

COMMENTS: Sampled for VOCs by EPA Method 8260B.

Tet ech NUS, Inc
Low Flow Purging Data Sheet

MW-16 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 10, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-16
WELL PERMIT #:
WELL DEPTH: 45' BTPVC
WELL DIAMETER: 1.5 Inches
SCREENED/OPEN INTERVAL: 35'-45'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 35' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 28.27' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
10:30	X		6.67	NA	0.772	NA	157.1	NA	2.60	NA	16.2	NA	12.90	NA	75	28.27'
10:35	X		6.60		0.763		143.0		0.30		9.0		13.47		75	
10:40	X		6.61		0.754		140.3		0.35		5.95		13.05		75	
10:45	X		6.59		0.751		140.5		0.23		4.53		12.96		75	
10:50	X		6.58		0.749		139.8		0.22		4.41		12.92		75	
10:55	X		6.58		0.750		139.5		0.19		4.11		12.94		75	
11:00		X	6.58		0.751		139.6		0.19		4.10		12.93		75	28.28

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B. Duplicate sample collected at this well.

Tet ch NUS, Inc
Lov ow Purging Data Sheet

MW-17D LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 11, 2008
WEATHER: Clear

Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL: MW-17D
WELL PERMIT #:
WELL DEPTH: 55' BTPVC
WELL DIAMETER: 1 Inches
SCREENED/OPEN INTERVAL: 45'-55'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 35' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 26.72' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
08:00	X		6.38	NA	1.424	NA	167.6	NA	1.65	NA	108.7	NA	14.16	NA	<100	26.72
08:05	X		6.44		1.323		166.8		1.06		84.5		14.76		<100	
08:10	X		6.47		1.292		164.4		1.40		76.2		14.69		<100	
08:15	X		6.41		1.277		163.9		1.17		76.6		14.64		<100	
08:20		X	6.41		1.270		163.8		1.11		74.2		14.62		<100	26.72

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Te ech NS, Inc
Lo. .ow Purging Data Sheet

MW-17S LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 11, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-17S
WELL PERMIT #:
WELL DEPTH: 45' BTPVC
WELL DIAMETER: 1.5 Inches
SCREENED/OPEN INTERVAL: 35'-45'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 35' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 26.84' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
07:20	X		6.39	NA	0.880	NA	181.3	NA	3.68	NA	139	NA	14.18	NA	<100	26.84
07:25	X		6.26		0.897		164.4		2.55		122		14.50		<100	
07:30	X		6.20		0.975		160.1		2.07		99.8		14.75		<100	
07:35	X		6.18		1.175		164.9		1.51		98.2		14.83		<100	
07:40	X		6.17		1.370		168.4		1.43		97.1		14.84		<100	
07:45	X		6.19		1.462		168.3		1.41		99.2		14.84		<100	
07:50		X	6.20		1.468		169.0		1.41		99.6		14.74		<100	26.84

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Tet ech NUS, Inc
Lo ow Purging Data Sheet

MW-18D LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 11, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-18D
WELL PERMIT #:
WELL DEPTH: 55' BTPVC
WELL DIAMETER: 1.5 Inches
SCREENED/OPEN INTERVAL: 45'-55'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 7' (tubing intake) 32 ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 24.22' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
12:25	X		6.00	NA	1.490	NA	202.4	NA	2.75	NA	19.4	NA	15.42	NA	<100	24.22
12:30	X		6.13		1.184		194.8		0.45		14.6		15.33		<100	
12:35	X		6.13		1.169		194.1		0.32		12.8		15.31		<100	
12:40	X		6.12		1.161		192.6		0.28		12.6		15.30		<100	
12:45		X	6.12		1.163		192.5		0.25		12.7		15.30		<100	24.24

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Te ech NUS, Inc
Lo ow Purging Data Sheet

MW-18S LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 11, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-18S
WELL PERMIT #:
WELL DEPTH: 45' BTPVC
WELL DIAMETER: 1 Inches
SCREENED/OPEN INTERVAL: 35'-45'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 32' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 24.33' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (mS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
11:55	X		6.06	NA	1.145	NA	193.7	NA	3.85	NA	353	NA	14.75	NA	75	24.33
12:00	X		6.03		1.403		197.2		2.51		309		14.69		75	
12:05	X		6.00		1.444		199.9		2.41		205		14.93		75	
12:10	X		6.01		1.463		200.6		2.17		95.3		15.03		75	
12:15	X		6.00		1.474		201.0		2.12		30.2		15.04		75	
12:20		X	5.99		1.474		201.1		1.99		28.6		15.06		75	24.35

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Tet ch NUS, Inc
Low ow Purging Data Sheet

Sharpsburg 1 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
Project Number: 112C01244
DATE: February 12, 2009
FIELD PERSONNEL: J. Ferguson
WEATHER: Clear

MONITOR WELL Etna 8
WELL DEPTH: 75' BTPVC
SCREENED/OPEN INTERVAL: 25'-75'
WELL PERMIT #:
WELL DIAMETER: 1 Inches

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 35' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 22.44' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
12:15	X	X	7.41	NA	374	NA	-1.5	NA	1.20	NA		NA	14.21	NA	75	22.44

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B. Grab sample while well was pumping.

Shaler Etna 11 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: February 12, 2009
WEATHER: Clear
Project Number: 112C01243
FIELD PERSONNEL: J. Ferguson

MONITOR WELL Shaler Etna 11
WELL PERMIT #:
WELL DEPTH: 75' BTPVC
WELL DIAMETER: 1 Inches
SCREENED/OPEN INTERVAL: 25'-75'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 55' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 46.47' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
08:20	X	X	—		—		—		—		—		—		—	46.47

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B. Grab sample, unable to purge well for water quality parameters with peristaltic pump due to pumping level in well. Sample was a grab sample from water drawn up into tubing with peristaltic pump. Etna 11 well was pumping at the time of sampling.

Tet ch NUS, Inc
Low ow Purging Data Sheet

MW-1 LOW FLOW SAMPLING DATA SHEET

SITE: Former Henry Miller Springs Site
DATE: November 25, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-1
WELL PERMIT #:
WELL DEPTH: 30' BTPVC
WELL DIAMETER: 0.75" Inches
SCREENED/OPEN INTERVAL: 20'-30'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: (tubing intake) 30' ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 23.25' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
16:30	X		7.12	NA	2166	NA	-17.1	NA	0.09	NA	23.0	NA	14.73	NA	75	23.25
16:40	X		7.09		2189		-16.6		0.08		17.0		14.70		75	
16:45	X		7.09		2204		-15.0		0.09		12.3		14.65		75	
16:50	X		7.10		2220		-14.4		0.08		12.2		14.62		75	
16:55		X	7.10		2221		-14.6		0.08		12.3		14.62		75	

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Tet ch NUS, Inc
Low ow Purging Data Sheet

MW-2 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: November 25, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-2
WELL PERMIT #:
WELL DEPTH: 34' BTPVC
WELL DIAMETER: 0.75 Inches
SCREENED/OPEN INTERVAL: 24'-34'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 32' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 28.39' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
13:35	X		7.46	NA	445	NA	-26.7	NA	10.13	NA	180	NA	12.24	NA	75	28.39
13:450	X		7.52		441		-31.4		7.87		25		12.88		75	
13:55	X		7.48		442		-31.6		7.48		9.6		12.87		75	
14:00	X		7.44		443		-31.7		7.35		8.8		12.86		75	
14:05	X		7.40		442		-31.9		7.28		8.4		12.82		75	

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B. DO measurements elevated due to leaking "O" ring at base of flow through cell.

Tet ·ch NUS, Inc
Lov. ·w Purging Data Sheet

MW-3 LOW FLOW SAMPLING DATA SHEET

SITE: Former Henry Miller Springs Site
DATE: November 25, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-3
WELL PERMIT #:
WELL DEPTH: 30' BTPVC
WELL DIAMETER: 1 Inches
SCREENED/OPEN INTERVAL: 20'-30'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 28' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : +/- 24'-25'ft below TOC
Note: *Unable to measure water level accurately at MW-3.

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
16:46	X		6.52	NA	2666	NA	-2.4	NA	0.85	NA	483	NA	15.32	NA	75	Note *
16:50	X		6.33		2684		5.7		0.34		287		14.27		50	
16:55	X		6.32		2689		7.9		0.78		119		14.25		50	
17:00	X		6.38		2688		8.8		0.68		52.7		14.23		50	
17:05	X		6.39		2681		8.9		0.54		25.8		14.20		50	
17:15		X	6.36		2678		9.6		0.55		16		14.21		50	

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B. Unable to get accurate water level measurement in well.

Te ch NUS, Inc
Low ow Purging Data Sheet

MW-4 LOW FLOW SAMPLING DATA SHEET

SITE: Former Henry Miller Springs Site
DATE: November 26, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-4
WELL PERMIT #:
WELL DEPTH: 34' BTPVC
WELL DIAMETER: 0.75 Inches
SCREENED/OPEN INTERVAL: 24.0'-34.0'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 32' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 27.68' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
15:35	X		7.40		665		-20.0		9.77		340		10.80		75	27.68
15:45	X		7.36		663		-22.4		9.21		220		10.78		75	
15:50	X		7.50		660		-22.0		9.10		98		10.79		75	
15:55	X		7.57		658		-21.7		8.98		38		10.79		75	
16:00	X		7.58		650		-22.1		8.94		32		10.72		75	
16:05		X	7.59		642		-22.5		8.92		29		10.69		75	

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B. DO measurements are elevated due to air leakage at "O" ring at base of flow through cell.

Te ech NUS, Inc
Lo ow Purging Data Sheet

MW-5 LOW FLOW SAMPLING DATA SHEET

SITE: Former Henry Miller Springs Site
DATE: November 25, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-5
WELL PERMIT #:
WELL DEPTH: 34' BTPVC
WELL DIAMETER: 0.75 Inches
SCREENED/OPEN INTERVAL: 24'-34'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 7' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 4.85' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
				NA		NA		NA		NA		NA		NA	75	

COMMENTS: **Well damaged**, unable to advance water level indicator > 6 feet below top of PVC riser pipe.

Tet ch NUS, Inc
Low ow Purging Data Sheet

MW-6 LOW FLOW SAMPLING DATA SHEET

SITE: Former Henry Miller Springs Site
DATE: November 26, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-6 **WELL DEPTH:** 35' BTPVC **SCREENED/OPEN INTERVAL:** 25'-35'
WELL PERMIT #: **WELL DIAMETER:** 0.75 Inches

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 32' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 28.28' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
15:30	X		5.48	NA	1320	NA	2.1	NA	0.19	NA	324	NA	13.13	NA	75	23.28
15:35	X		6.70		1243		-14.3		0.15		118		13.64		75	
15:40	X		7.13		1206		-29.0		0.11		62		14.00		75	
15:45	X		7.14		1197		-29.3		0.12		18		14.08		75	
15:50		X	7.14		1196		-29.4		0.11		16		14.06		75	23.35

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Te Tech NUS, Inc
Lo ow Purging Data Sheet

MW-7 LOW FLOW SAMPLING DATA SHEET

SITE: Former Henry Miller Springs Site
DATE: November 26, 2008
WEATHER: Clear
Project Number: 112C01504
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-7
WELL PERMIT #:
WELL DEPTH: 34' BTPVC
WELL DIAMETER: 0.75 Inches
SCREENED/OPEN INTERVAL: 24'-34'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 32' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 28.41' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
16:55	X		4.78	NA	210	NA	-24.3	NA	7.50	NA	>1100	NA	12.90	NA	75	28.41
17:00	X		7.22		735		-51.1		3.40		310		13.68		75	
17:10	X		7.86		745		-51.9		2.08		270		14.00		75	
17:15	X		7.82		752		-52.9		1.20		250		14.03		75	
17:20	X		7.80		752		-50.7		1.29		248		14.05		75	
17:25		X	7.74		752		-51.3		1.18		221		14.07		75	

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Te ech NUS, Inc
Lo. ow Purging Data Sheet

MW-8 LOW FLOW SAMPLING DATA SHEET

SITE: Former Henry Miller Springs Site
DATE: November 26, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-8
WELL PERMIT #:
WELL DEPTH: 12' BTPVC
WELL DIAMETER: 0.75 Inches
SCREENED/OPEN INTERVAL: 24'-34'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 32' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 28.30' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
14:20	X		6.58	NA	822	NA	-32.1	NA	9.93	NA	120	NA	12.25	NA	75	28.30
14:30	X		6.98		819		-33.6		9.55		26		12.67		75	
14:40	X		7.61		812		-34.3		6.34		13		12.61		75	
14:45	X		7.60		808		-35.1		5.98		12.8		12.70		75	
14:50		X	7.59		805		-36.1		5.89		8.7		12.88		75	

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B. DO measurements elevated due to leaking "O" ring at base of flow through cell.

MW-9D LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: November 26, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-9D
WELL PERMIT #:
WELL DEPTH: 55' BTPVC
WELL DIAMETER: 1.5 Inches
SCREENED/OPEN INTERVAL: 45'-55'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 40' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 25.88' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
14:05	X		6.74		1898		37.9		0.39		33.4		12.76		75	25.88
14:15	X		6.54		1847		17.3		0.10		17.3		14.25		75	
14:20	X		6.59		1848		15.0		0.09		12.3		14.27		75	
14:25	X		6.50		1842		12.1		0.09		7.4		14.26		75	
14:30		X	6.49		1841		11.2		0.09		7.4		14.26		75	
		X														

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Tech NUS, Inc
Low Purging Data Sheet

MW-9S LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: November 26, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-9S
WELL PERMIT #:
WELL DEPTH: 40' BTPVC
WELL DIAMETER: 1.5 Inches
SCREENED/OPEN INTERVAL: 30'-40'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 30' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 25.86' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
14:40	X		5.99	NA	1850	NA	19.1	NA	0.29	NA	19.4	NA	14.56	NA	75	25.86
14:51	X		5.98		1854		16.9		0.29		10.2		14.48		75	
15:00	X		5.88		1855		16.0		0.29		7.2		14.52		75	
15:10	X		5.89		1856		16.3		0.29		7.1		14.57		75	
15:15		X	5.89		1856		16.4		0.29		6.7		14.59		75	26.20

COMMENTS: Sample analyzed for VOCs by EPA method 8260B.

Te ech NUS, Inc
Lo. ow Purging Data Sheet

MW-10 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: November 26, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-10 **WELL DEPTH:** 45' BTPVC **SCREENED/OPEN INTERVAL:** 35'-45'
WELL PERMIT #: **WELL DIAMETER:** 1.5 Inches

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 32' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 23.30' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
11:45	X		6.56	NA	1715	NA	49.6	NA	0.25	NA	34.3	NA	14.29	NA	75	23.30
11:50	X		6.50		1714		28.8		0.19		22.3		14.65		75	
11:55	X		6.56		1727		25.1		0.18		9.86		14.65		75	
12:00	X		6.52		1744		22.0		0.19		8.40		14.76		75	
12:05		X	6.68		1749		18.1		0.18		7.51		14.79		75	

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Te' 'ech NUS, Inc
Lo. ow Purging Data Sheet

MW-11 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: November 25, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-11 **WELL DEPTH:** 45' BTPVC **SCREENED/OPEN INTERVAL:** 35'-45'
WELL PERMIT #: **WELL DIAMETER:** 1 Inches

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 32' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 22.62' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
17:55	X		6.44	NA	1752	NA	20.9	NA	0.68	NA	243	NA	13.92	NA	75	22.62
18:00	X		6.38		1734		17.0		0.41		190		14.27		75	
18:05	X		6.32		1712		12.0		0.34		151		14.30		75	
18:10	X		6.18		1694		15.2		0.23		54.2		14.41		75	
18:15	X		6.16		1691		15.0		0.22		41.6		14.41		75	
18:25	X		6.11		1672		17.0		0.19		21.2		14.36		75	
18:30		X	6.10		1673		17.5		0.20		18.4		14.38		75	

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

MW-12 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: November 26, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-12 **WELL DEPTH:** 40' BTPVC **SCREENED/OPEN INTERVAL:** 30'-40'
WELL PERMIT #: **WELL DIAMETER:** 1.5 Inches

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 35' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 26.49' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
10:55	X		6.54	NA	1550	NA	47.7	NA	3.01	NA	29.3	NA	12.73	NA	75	26.49
11:00	X		6.44		1561		42.5		1.02		25.0		12.71		75	
11:10	X		6.58		1712		36.3		0.84		15.2		12.67		75	
11:15	X		6.61		1715		36.2		0.81		10.1		12.75		75	
11:17	X		6.65		1727		34.2		0.78		7.39		12.97		75	
11:20		X	6.60		1719		30.9		0.67		7.21		12.56		75	

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Te ech NUS, Inc
Lo. ow Purging Data Sheet

MW-13 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: November 26, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. King/J. Ferguson

MONITOR WELL MW-13 **WELL DEPTH:** 40 BTPVC **SCREENED/OPEN INTERVAL:** 25'-40'
WELL PERMIT #: **WELL DIAMETER:** 1.5" Inches

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 35' (tubing intake) ft below static water level
DEPTH TO WATER BEFORE Tubing Installation : 28.50' ft below static water level

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
17:45	X		7.53	NA	1479	NA	-75.6	NA	0.19	NA	110	NA	13.66	NA	75	28.50
17:50	X		7.90		1435		-85.7		0.12		93.1		13.87		75	
17:55	X		8.10		1399		-95.2		0.09		62.7		14.10		75	
18:00	X		8.11		1386		-110.6		0.07		32.1		14.27		75	
18:05	X		8.11		1390		-113.0		0.07		18.2		14.30		75	
18:15		X	8.10		1389		-113.0		0.07		17.3		14.30		75	28.9

COMMENTS: Collected SPL Sample only. SPL analyzed for VOCs by EPA Method 8260B and SVOCs by 8270C.

Te ech NUS, Inc
Lo. ow Purging Data Sheet

MW-14 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: November 26, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-14
WELL PERMIT #:
WELL DEPTH: 40' BTPVC
WELL DIAMETER: 1 Inches
SCREENED/OPEN INTERVAL: 30'-40'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 33' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 28.48' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
11:30	X		7.86	NA	508	NA	-25.4	NA	7.97	NA	280	NA	11.45	NA	75	28.48
11:40	X		7.29		494		-25.1		7.13		100		12.48		75	
11:50	X		7.85		487		-30.6		7.86		65		12.03		75	
12:00	X		7.79		466		-30.4		7.28		60		12.56		75	
12:10		X	7.77		465		-33.3		7.14		58		12.70		75	

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Te ech NUS, Inc
Lo. ow Purging Data Sheet

MW-15 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: November 26, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-15
WELL PERMIT #:
WELL DEPTH: 55' BTPVC
WELL DIAMETER: 1.5 Inches
SCREENED/OPEN INTERVAL: 45'-55'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 40' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 28.50' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
11:30	X		7.86	NA	508	NA	-25.4	NA	7.97	NA	280	NA	11.45	NA	75	28.50
11:40	X		7.29		494		-25.1		7.13		100		12.48		75	
11:50	X		7.85		487		-30.6		7.86		65		12.03		75	
12:00	X		7.79		466		-30.4		7.28		60		12.56		75	
12:10		X	7.77		465		-33.3		7.14		58		12.70		75	

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B. DO measurements elevated due to leaking "O" ring at base of flow through cell.

Te Tech NUS, Inc
Lo ow Purging Data Sheet

MW-16 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: November 26, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-16
WELL PERMIT #:
WELL DEPTH: 45' BTPVC
WELL DIAMETER: 1.5 Inches
SCREENED/OPEN INTERVAL: 35'-45'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 35' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 28.76' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
10:15	X		6.63	NA	NA	NA	7.5	NA	11.63	NA	650	NA	6.34	NA	75	28.76'
10:20	X		7.07		NA		-0.1		10.43		350		8.98		75	
10:30	X		7.67		NA		-1.7		9.44		180		11.91		75	
10:40	X		7.89		NA		-5.2		8.12		220		12.63		75	
10:50	X		7.47		NA		-8.4		7.94		150		13.25		75	
11:00		X	7.50		NA		-10.1		7.73		160		13.25		75	

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B. Specific conductivity probe malfunctioned, no data. Elevated DO measurement due to leaking "O" ring at base of flow through cell.

Te ech NUS, Inc
Lo ow Purging Data Sheet

MW-17D LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: November 25, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-17D
WELL PERMIT #:
WELL DEPTH: 55' BTPVC
WELL DIAMETER: 1 Inches
SCREENED/OPEN INTERVAL: 45'-55'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 35' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 55' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
14:25	X		6.95	NA	1245	NA	32.3	NA	1.26	NA	20	NA	14.16	NA	75	27.76
14:35	X		6.89		1259		0.6		0.48		10		14.76		75	
14:40	X		6.75		1265		6.9		0.36		10		14.69		75	
14:50	X		6.67		1265		7.4		0.28		12		14.64		75	
15:00	X		6.64		1266		7.4		0.26		12		14.62		75	
15:05		X	6.64		1266		7.4		0.26		16		14.62		75	

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Te' ech NUS, Inc
Lo. ow Purging Data Sheet

MW-17S LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: November 25, 2008
WEATHER: Clear

Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-17S
WELL PERMIT #:
WELL DEPTH: 45' BTPVC
WELL DIAMETER: 1.5 Inches
SCREENED/OPEN INTERVAL: 35'-45'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 35' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 27.86' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
15:20	X		6.43	NA	1078	NA	13.9	NA	0.50	NA	110	NA	12.29	NA	75	27.86
15:30	X		6.34		1187		14.7		0.34		90		12.19		75	
15:40	X		6.32		1205		14.6		0.33		40		12.05		75	
15:50	X		6.34		1233		12.5		0.29		15		12.05		75	
16:00		X	6.34		1232		13.1		0.29		15		12.05		75	

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

MW-18D LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: November 26, 2008
WEATHER: Clear

Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-18D
WELL PERMIT #:
WELL DEPTH: 55' BTPVC
WELL DIAMETER: 1.5 Inches
SCREENED/OPEN INTERVAL: 45'-55'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 7' (tubing intake) 32 ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 25.25' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
13:10	X		7.06	NA	1980	NA	-11.0	NA	0.18	NA	58.0	NA	13.07	NA	75	25.25
13:15	X		7.21		2018		-13.8		0.16		32.3		13.36		75	
13:20	X		7.18		2024		-18.8		0.14		8.4		13.45		75	
13:25		X	7.10		2023		-20.2		0.13		7.3		13.52		75	

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Te ech NUS, Inc
Lo. ow Purging Data Sheet

MW-18S LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: November 26, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL MW-18S
WELL PERMIT #:
WELL DEPTH: 45' BTPVC
WELL DIAMETER: 1 Inches
SCREENED/OPEN INTERVAL: 35'-45'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 32' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 25.17' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
13:30	X		5.44	NA	1988	NA	9.1	NA	0.38	NA	34.3	NA	13.43	NA	75	25.17
13:40	X		5.42		2044		10.2		0.88		22.1		13.41		75	
13:45	X		5.32		2157		15.0		0.91		10.2		13.37		75	
13:50	X		5.30		2212		20.4		0.92		7.3		13.36		75	
14:00		X	5.31		2210		20.4		0.91		2.3		13.36		75	

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Shaler 6 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: November 24, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL Shaler 6
WELL PERMIT #:
WELL DEPTH: 75' BTPVC
WELL DIAMETER: 12 Inches
SCREENED/OPEN INTERVAL: 25-75'

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:
PUMP INTAKE DEPTH: 35' (tubing intake) 32 ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 23.47' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
12:50	X		7.54	NA	369	NA	4.0	NA	2.82	NA		NA	12.06	NA	75	23.47
12:55	X		8.02		369		-7.4		1.41				12.10		75	
13:00	X		7.96		370		-8.5		1.30				12.16		75	
13:05	X		7.91		371		-7.3		1.21				12.19		75	
13:10	X		7.86		371		-7.4		1.19				12.17		75	
13:15		X	7.86		371		-7.5		1.19				12.16		75	

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Tetra Tech NUS, Inc
Low Flow Purging Data Sheet

Shaler 8 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: November 24, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL Shaler 8
WELL PERMIT #:
WELL DEPTH: 75' BTPVC
WELL DIAMETER: 12 Inches
SCREENED/OPEN INTERVAL:

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 35' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 22.43' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
11:50	X		7.47	NA	363	NA	-4.3	NA	1.2	NA		NA	12.63	NA	75	22.43
11:55	X		7.83		364		-8.1		0.68				12.63		75	
12:00	X		8.08		365		-13.6		0.51				12.69		75	
12:05	X		8.22		365		-14.7		0.45				12.70		75	
12:10	X		8.35		365		-14.7		0.42				12.71		75	
12:15		X	8.42		365		-15.1		0.39				12.71			

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.

Te Tech NUS, Inc
Lo ow Purging Data Sheet

Etna 11 LOW FLOW SAMPLING DATA SHEET

SITE: Henry Miller Springs Site
DATE: November 24, 2008
WEATHER: Clear
Project Number: 112C01244
FIELD PERSONNEL: J. Ferguson

MONITOR WELL Etna 11 **WELL DEPTH:** 75' BTPVC **SCREENED/OPEN INTERVAL:** 25'-75'
WELL PERMIT #: **WELL DIAMETER:** 1 Inches

PID/FID READINGS
BACKGROUND: Not Applic.
BENEATH OUTER CAP:
BENEATH INNER CAP:

PUMP INTAKE DEPTH: 35' (tubing intake) ft below TOC
DEPTH TO WATER BEFORE PUMP INSTALLATION : 22.51' ft below TOC

TIME	PURGING	SAMPLING	pH (pH units)		SPECIFIC CONDUCTIVITY (uS/cm)		REDOX POTENTIAL (mv)		DISSOLVED OXYGEN (mg/l)		TURBIDITY (NTU)		TEMPERATURE (degrees C)		PUMPING RATE (ml/min)	DEPTH TO WATER (ft below TOC)
			READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE	READING	CHANGE		
10:10	X		6.79	NA	432	NA	12.6	NA	1.56	NA		NA	13.61	NA	75	22.51
10:15	X		7.20		431		-1.8		0.89				13.67		75	
10:20	X		7.32		432		-7.0		0.60				13.79		75	
10:25	X		7.38		433		-7.5		0.44				13.84		75	
10:30	X		7.38		433		-8.6		0.39				13.82		75	
10:35		X	7.46		434		-9.4		0.39				13.86		75	

COMMENTS: Sample analyzed for VOCs by EPA Method 8260B.