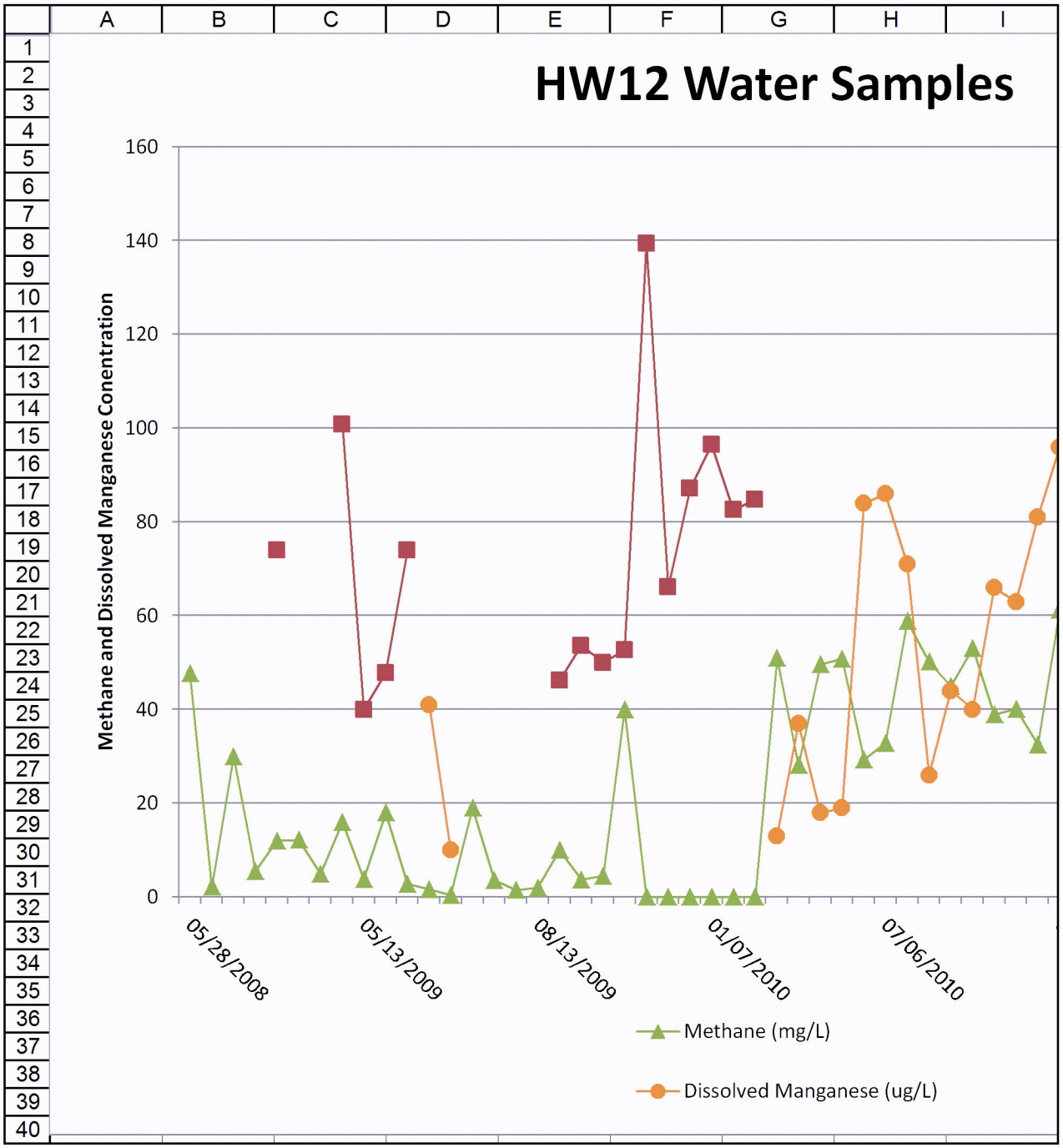
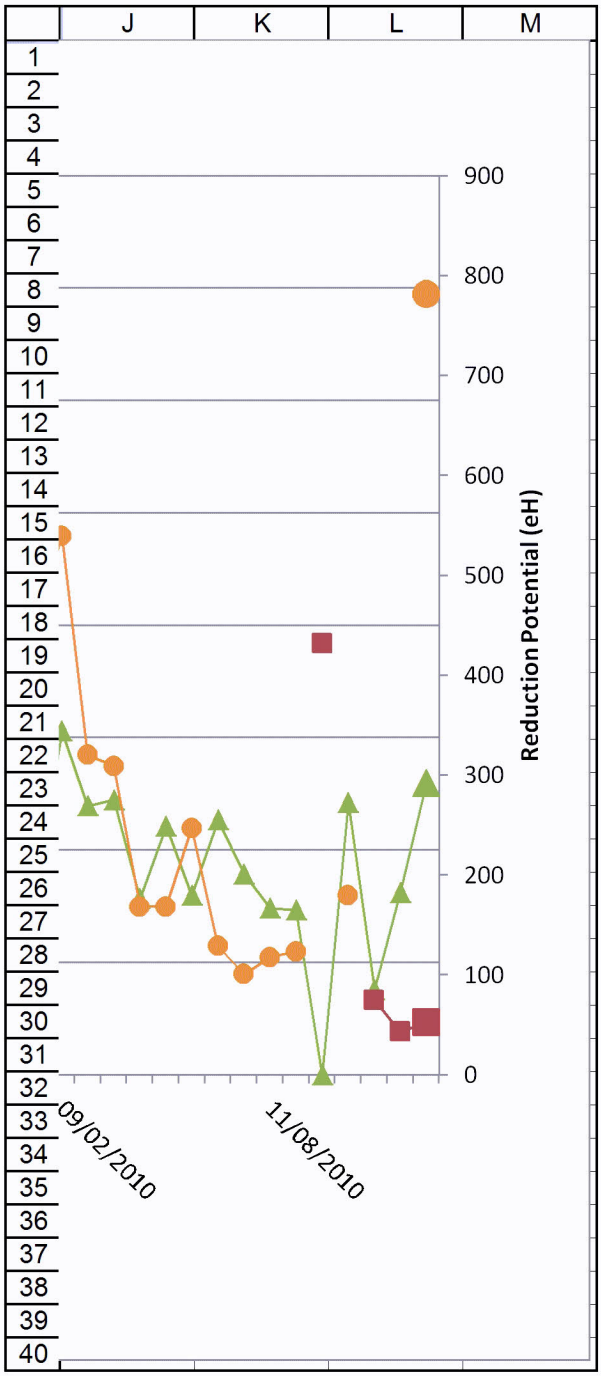

HW12 Water Samples
Methane and Dissolved Manganese Conentration
160
140
120
100
80
60
40
20
0
05/28/2008
05/13/2009
08/13/2009
01/07/2010
07/06/2010
Methane (mg/L)
Dissolved Manganese (ug/L)


J
K
L
M
900
800
700
600
500
400
300
200
100
0
Reduction Potential (eH)
09/02/2010
11/08/2010

	A	B	C	D	E	F	G
1	land_owner	tax_map_number	sample_date	laboratory	sample_id	analysis_id	analysis_status
2	Ex. 6-PII Results in Water Samples	200.00-1,048.00,000.	05/28/2008	NEEL		159	Finalized
3	Ex. 6-PII	200.00-1,048.00,000.	01/18/2009	Pennsylvania Department of Environmental Protection	Well-1-11	2697	Finalized
4	Ex. 6-PII	200.00-1,048.00,000.	01/27/2009	Pennsylvania Department of Environmental Protection	Well-1-11	2699	Finalized
5	Ex. 6-PII	200.00-1,048.00,000.	02/12/2009	Quantum Labs	Well-1-1	160	Finalized
6	Ex. 6-PII	200.00-1,048.00,000.	04/14/2009	Quantum Labs	Well 1-2	162	Finalized
7	Ex. 6-PII	200.00-1,048.00,000.	04/14/2009	Quantum Labs	Well-1-1	161	Finalized
8	Ex. 6-PII	200.00-1,048.00,000.	04/14/2009	Pennsylvania Department of Environmental Protection	Well-1-11	2701	Finalized
9	Ex. 6-PII	200.00-1,048.00,000.	04/14/2009	Pennsylvania Department of Environmental Protection	Well 1-8	2702	Finalized

	A	B	C	D	E	F	G
10	Ex. 6-PII	200.00-1,048.00,000.	05/13/2009	Quantum Labs	Well-1-1	163	Finalized
11	Ex. 6-PII	200.00-1,048.00,000.	05/13/2009	Quantum Labs	Well 1-3	164	Finalized
12	Ex. 6-PII	200.00-1,048.00,000.	06/20/2009	Quantum Labs	Well-1-1	165	Finalized
13	Ex. 6-PII	200.00-1,048.00,000.	06/20/2009	Quantum Labs	Well 1-3	166	Finalized
14	Ex. 6-PII	200.00-1,048.00,000.	06/30/2009	Pennsylvania Department of Environmental Protection		2704	Finalized
15	Ex. 6-PII	200.00-1,048.00,000.	06/30/2009	Pennsylvania Department of Environmental Protection		2707	Finalized
16	Ex. 6-PII	200.00-1,048.00,000.	07/23/2009	Quantum Labs	Well-1-1	1380	Finalized
17		200.00-1,048.00,000.	07/23/2009	Quantum Labs	Well 1-4	167	Finalized
18		200.00-1,048.00,000.	08/13/2009	Quantum Labs	Well 1-3	56	Finalized
19		200.00-1,048.00,000.	08/13/2009	Quantum Labs	Well 1-5	57	Finalized

	A	B	C	D	E	F	G
20	Ex. 6-PII	200.00-1,048.00,000.	09/21/2009	Quantum Labs	Well 1-3	168	Finalized
21		200.00-1,048.00,000.	09/21/2009	Quantum Labs	Well 1-5	11846	Finalized
22		200.00-1,048.00,000.	10/14/2009	Quantum Labs	Well-1-3	1796	Finalized
23		200.00-1,048.00,000.	10/14/2009	Quantum Labs	Well-1-5	1797	Finalized
24		200.00-1,048.00,000.	11/12/2009	Quantum Labs	Tank-1-6	426	Finalized
25		200.00-1,048.00,000.	12/03/2009	Quantum Labs	Tank-1-6	429	Finalized
26		200.00-1,048.00,000.	01/07/2010	Quantum Labs	Tank-1-6	472	Finalized
27		200.00-1,048.00,000.	02/15/2010	Quantum Labs	Tank-1-6	678	Finalized
28		200.00-1,048.00,000.	03/04/2010	Quantum Labs	Tank-1-6	770	Finalized
29		200.00-1,048.00,000.	04/24/2010	Quantum Labs	Tank-1-6	1097	Finalized

	A	B	C	D	E	F	G
30	Ex. 6-PII	200.00-1,048.00,000.	05/06/2010	Pennsylvania Department of Environmental Protection		2709	Finalized
31		200.00-1,048.00,000.	05/27/2010	Pennsylvania Department of Environmental Protection		2711	Finalized
32		200.00-1,048.00,000.	06/09/2010	Pennsylvania Department of Environmental Protection		2712	Finalized
33		200.00-1,048.00,000.	06/15/2010	Pennsylvania Department of Environmental Protection		2726	Finalized
34		200.00-1,048.00,000.	07/06/2010	Pennsylvania Department of Environmental Protection		2732	Finalized
35		200.00-1,048.00,000.	07/13/2010	Pennsylvania Department of Environmental Protection		2736	Finalized

	A	B	C	D	E	F	G
36	Ex. 6-PII	200.00-1,048.00,000.	07/21/2010	Pennsylvania Department of Environmental Protection		2744	Finalized
37		200.00-1,048.00,000.	07/29/2010	Pennsylvania Department of Environmental Protection		2747	Finalized
38		200.00-1,048.00,000.	08/04/2010	Pennsylvania Department of Environmental Protection		2751	Finalized
39		200.00-1,048.00,000.	08/11/2010	Pennsylvania Department of Environmental Protection		2757	Finalized
40		200.00-1,048.00,000.	08/18/2010	Pennsylvania Department of Environmental Protection		2760	Finalized
41		200.00-1,048.00,000.	08/24/2010	Pennsylvania Department of Environmental Protection		2762	Finalized

	A	B	C	D	E	F	G
42	Ex. 6-PII	200.00-1,048.00,000.	09/02/2010	Pennsylvania Department of Environmental Protection		2767	Finalized
43		200.00-1,048.00,000.	09/09/2010	Pennsylvania Department of Environmental Protection		2772	Finalized
44		200.00-1,048.00,000.	09/16/2010	Pennsylvania Department of Environmental Protection		2776	Finalized
45		200.00-1,048.00,000.	09/21/2010	Pennsylvania Department of Environmental Protection		2784	Finalized
46		200.00-1,048.00,000.	09/29/2010	Pennsylvania Department of Environmental Protection		2792	Finalized
47		200.00-1,048.00,000.	10/13/2010	Pennsylvania Department of Environmental Protection		2802	Finalized

	A	B	C	D	E	F	G
48	Ex. 6-PII	200.00-1,048.00,000.	10/19/2010	Pennsylvania Department of Environmental Protection		2806	Finalized
49		200.00-1,048.00,000.	10/26/2010	Pennsylvania Department of Environmental Protection		2808	Finalized
50		200.00-1,048.00,000.	11/08/2010	Pennsylvania Department of Environmental Protection		2809	Finalized
51		200.00-1,048.00,000.	11/15/2010	Pennsylvania Department of Environmental Protection		2813	Finalized
52		200.00-1,048.00,000.	11/22/2010	Pennsylvania Department of Environmental Protection		2816	Finalized
53		200.00-1,048.00,000.	11/29/2010	Quantum Labs	Tank-1-6	2023	Finalized
54		200.00-1,048.00,000.	12/07/2010	Pennsylvania Department of Environmental Protection		2817	Finalized

	A	B	C	D	E	F	G
55	Ex. 6-PII	200.00-1,048.00,000.	10/25/2011	TestAmerica Labs	Well 1-5	7184	Finalized
56		200.00-1,048.00,000.	12/16/2011	TestAmerica Labs	Well-1-5	11042	Finalized
57			1/26/2012				

	H	I	J	K	L	M	N	O	P
1	inspection_id	field_company	interviewer	water_source	sample_location	well_depth	Latitude_1	Longitude_1	Latitude_2
2									
3									
4									
5	4287		Ralph Policichio	Well	Holding Tank	500.00000	41.7301388900	-75.8784444400	41.7301388900
6	4447		Virgil Runco	Well	Outside Faucet After Treatment		41.7301388900	-75.8784444400	
7	4286		Virgil Runco	Well	Holding Tank Before Treatment	500.00000	41.7301388900	-75.8784444400	41.7301388900
8									
9									

	H	I	J	K	L	M	N	O	P
10	4303		Virgil Runco	Well	Holding Tank Before Treatment	500.00000	41.7301388900	-75.8784444400	41.7301388900
11	4305		Virgil Runco	Well	Kitchen Sink After Treatment		41.7301388900	-75.8784444	
12	4312		Virgil Runco	Well	Holding Tank Before Treatment	500.00000	41.7301388900	-75.8784444400	41.7301388900
13	4315		Virgil Runco	Well	Outside Hose After Treatment		41.7301388900	-75.8784444400	
14									
15									
16	4281		Virgil Runco	Well	Pressure Tank Before Treatment	500.00000	41.7301388900	-75.8784444400	41.7301388900
17	5019		Virgil Runco	Well	After Treatment		41.7302520000	-75.878313	
18	4302		Ralph Policichio	Well	Kitchen Sink After Treatment	500.00000	41.7301388900	-75.8784444400	41.7301388900
19	4320		Ralph Policichio	Well	Pressure Tank Before Treatment	500.00000	41.7301388900	-75.8784444400	41.7301388900

	H	I	J	K	L	M	N	O	P
20	4301		Ralph Policichio	Well	Kitchen Sink After Treatment	500.00000	41.7301388900	-75.8784444400	41.7301388900
21	4322		Ralph Palicichio	Well	Pressure Tank Before Treatment	500.00000	41.7301388900	-75.8784444400	41.7301388900
22	4459		Ralph Policichio	Well	Kitchen Sink After Treatment	500	41.7301388900	-75.8784444400	
23	4460		Ralph Policihio	Well	Pressure Tank Before Treatment	500.00000	41.7301388900	75.8784444400	
24	64		Ralph Policichio	Tank	Kitchen Sink Provided Water	500.00000	41.730252	-75.878313	41.7301388900
25	66		Ralph Policicihio	Tank	KITCHEN SINK - PROVIDED WATER	500.00000	41.730252	-75.878313	41.7301300000
26	38		Ralph Policichio	Tank	KITCHEN SINK - PROVIDED WATER	500	41.730252	-75.878313	41.7302200000
27	236		Bethany Rieder	Tank	KITCHEN SINK- PROVIDED WATER	500.00000	41.7301200000	-75.8784300000	41.7301200000
28	310		Bethany Rieder	Tank	KITCHEN SINK - PROVIDED WATER	250	41.7302520000	-75.8783130000	41.7302520000
29	510		Bethany Rieder	Tank	KITCHEN SINK- PROVIDED WATER	500.00000	41.730252	-75.878313	

	H	I	J	K	L	M	N	O	P
30									
31									
32									
33									
34									
35									

	H	I	J	K	L	M	N	O	P
36									
37									
38									
39									
40									
41									

	H	I	J	K	L	M	N	O	P
42									
43									
44									
45									
46									
47									

	H	I	J	K	L	M	N	O	P
48									
49									
50									
51									
52									
53	596		Bethany Rieder	Tank	KITCHEN SINK PROVIDED WATER	250.00000	41.7299200000	-75.8782300000	
54									

	H	I	J	K	L	M	N	O	P
55	3740	Amec Environment & Infrastructure	Matt Gentoso/ Chris Husted	Well	Pressure Tank		41.7301200000	-75.8784200000	41.7301200000
56	4388	Amec Environment & Infrastructure	Matt Gentoso	Well	At Pressure Tank in Basement		41.73012	-75.87842	41.73012
57									

	Q	R	S	T	U	V	W
1	Longitude_2	survey_type	other_survey_type	Inspection_Conductivity_Us_cm	Inspection_Do_Mg_l	inspection_orp_mv	Analysis_Orp_mv
2							
3							
4							
5	-75.8784444400	Complaint					
6							
7	-75.8784444400	Other (List)	Monitoring		1.98000	191.00000	
8							
9							

	Q	R	S	T	U	V	W
10	-75.8784444400	Other (List)	Monitoring		1.46000	342.30000	
11							
12	-75.8784444400	Other (List)	Monitoring		2.40000	43.90000	43.9
13							191
14							
15							
16	-75.8784444400	Other (List)	Monitoring		0.21000	61.30000	
17							
18	-75.8784444400	Other (List)	Monitoring		7.45000	31.50000	
19	-75.8784444400	Other (List)	Monitoring		8.57000	46.40000	

	Q	R	S	T	U	V	W
20	-75.8784444400	Other (List)	Monitoring		5.65000	35.00000	35
21	-75.8784444400	Other (List)	Monitoring		7.84000	76.70000	76.7
22		Other (List)	Monitoring		7.14000	56.20000	56.2
23		Other (List)	Monitoring		3.55000	71.20000	71.2
24	-75.8784444400	Other (List)	Monitoring		9.41000	559.10000	559.1
25	-75.8784000000	Other (List)	Monitoring	493.00000	10.29000	147.00000	147
26	-75.8784000000	Other (List)	Monitoring		12.36000	265.40000	265.4
27	-75.8784300000	Other (List)	Monitoring	458.00000	12.10000	317.80000	317.8
28	-75.8783130000	Other (List)	Monitoring	507.00000	14.98	239.80000	239.8
29		Pre-Drill		464	10.83000	251.70000	251.7

	Q	R	S	T	U	V	W
30							
31							
32							
33							
34							
35							

	Q	R	S	T	U	V	W
36							
37							
38							
39							
40							
41							

	Q	R	S	T	U	V	W
42							
43							
44							
45							
46							
47							

	Q	R	S	T	U	V	W
48							
49							
50							
51							
52							
53		Other (List)	Monitoring	322.00000	9.53000	206.90000	206.9
54							

	Q	R	S	T	U	V	W
55	-75.8784200000	Other (list)	Consent Order	183	0.75	-149.7	
56	-75.87842	Other (list)	Consent Order	155	2.81	-181.4	
57							

	X	Y	Z	AA	AB
1	eH - Reduction Potential (estimated from ORP)	Methane (ug/L)	Methane (mg/L)	Manganese_mg_l	Manganese_Dissolved_mg_l
2					
3		47,700	48		
4		2,140	2		
5		30,000	30	0.242	
6		5,500	6	0.025	
7	416	12,000	12	0.025	
8		12,200	12		
9		4,970	5		

	X	Y	Z	AA	AB
10	567	16,000	16	0.025	
11	225	3,800	4		
12	269	18,000	18	0.025	
13	416	2,800	3		
14		1,630	2		0.041
15		378	0		0.010
16		19,000	19	0.041	
17		3,600	4		
18		1,500	2		
19		2,000	2	0.025	

	X	Y	Z	AA	AB
20	260	10,000	10	0.025	
21	302	3,700	4	0.025	
22	281	4,500	5	0.043	
23	296	40,000	40	0.038	
24	784	1.10	0	0.025	
25	372	2.3	0	0.025	
26	490	0.20	0	0.025	
27	543	0.18	0	0.025	
28	465	0.19	0	0.025	
29	477	0.40	0	0.025	

	X	Y	Z	AA	AB
30		51,000	51		0.013
31		28,100	28		0.037
32		49,600	50		0.018
33		50,800	51		0.019
34		29,300	29		0.084
35		32,800	33		0.086

	X	Y	Z	AA	AB
36		58,800	59		0.071
37		50,200	50		0.026
38		45,000	45		0.044
39		53,100	53		0.040
40		38,900	39		0.066
41		40,100	40		0.063

	X	Y	Z	AA	AB
42		32,500	33		0.081
43		61,200	61		0.096
44		47,900	48		0.057
45		49,000	49		0.055
46		31,400	31		0.030
47		44,300	44		0.030

	X	Y	Z	AA	AB
48		32,000	32		0.044
49		45,400	45		0.023
50		35,800	36		0.018
51		29,700	30		0.021
52		29,400	29		0.022
53	432	0.13	0	0.003	
54		48,500	49		0.032

	X	Y	Z	AA	AB
55	75	15,200	15		
56	44	32,400	32		
57	53	52,000	52	0.12	0.139

	AC
1	Dissolved Manganese (ug/L)
2	
3	
4	
5	
6	
7	
8	
9	

	AC
10	
11	
12	
13	
14	41
15	10
16	
17	
18	
19	

	AC
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	

	AC
30	13
31	37
32	18
33	19
34	84
35	86

	AC
36	71
37	26
38	44
39	40
40	66
41	63

	AC
42	81
43	96
44	57
45	55
46	30
47	30

	AC
48	44
49	23
50	18
51	21
52	22
53	
54	32

	AC
55	
56	
57	139