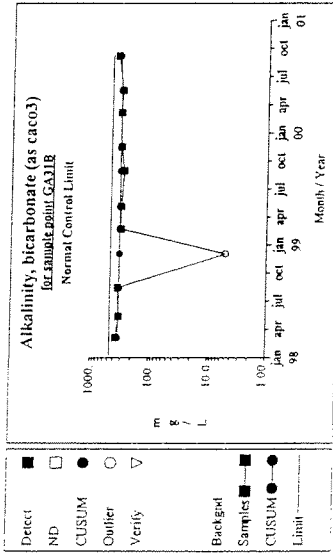


APPENDIX

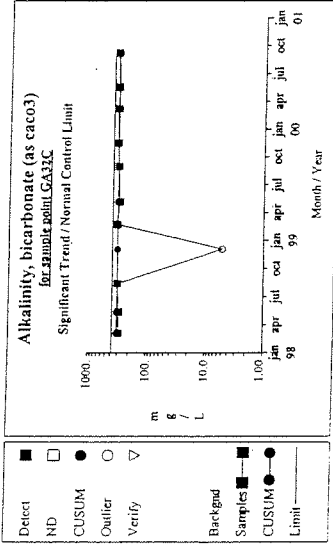
Site-Specific Results

Intra-Well Comparisons

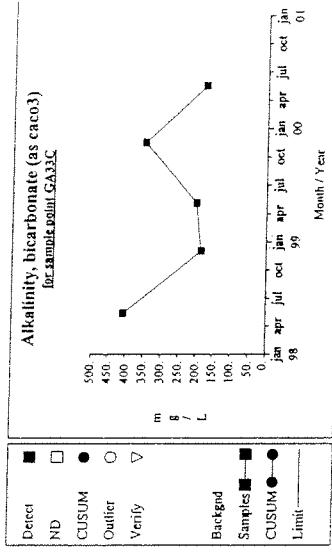
Intra-Well Control Charts



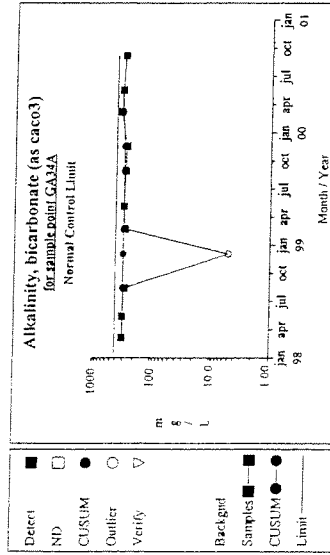
Graph 1



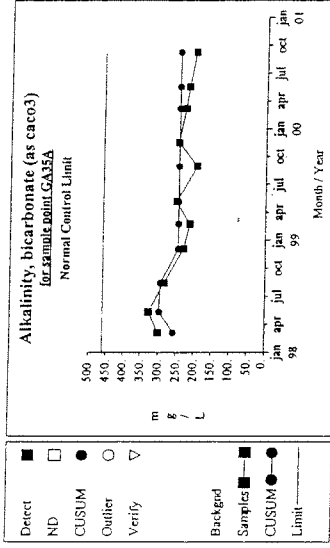
Graph 2



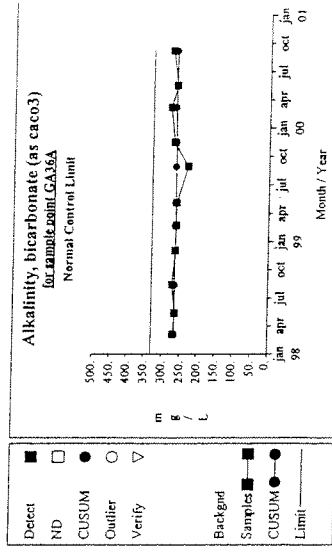
Graph 3



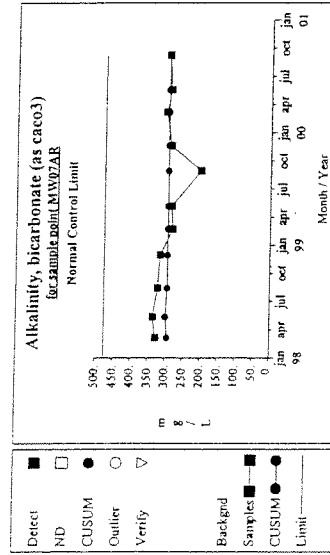
Graph 4



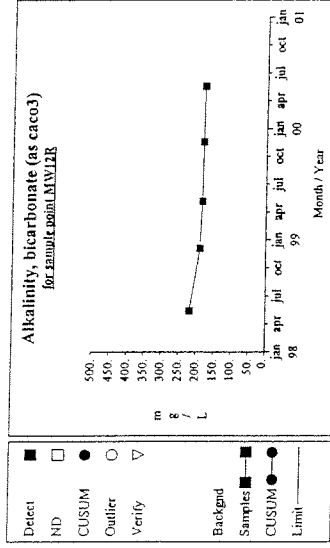
Graph 5



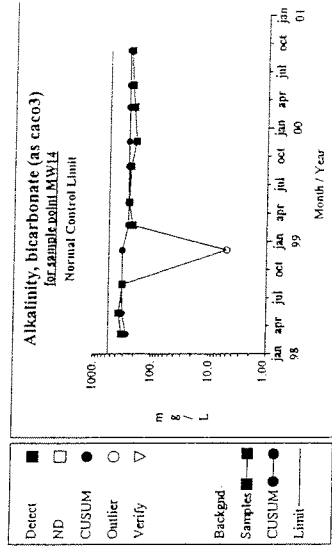
Graph 6



Graph 7

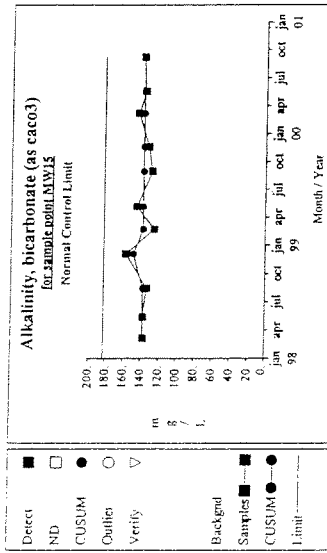


Graph 8

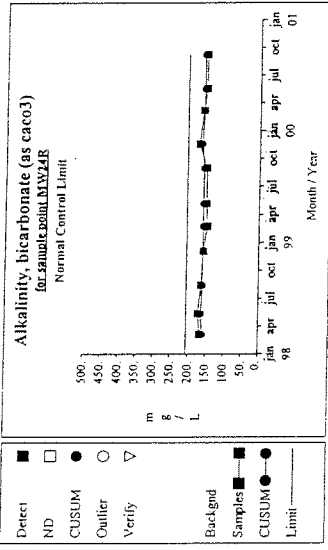


Graph 9

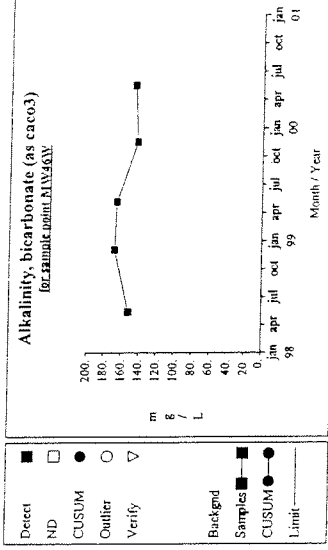
Intra-Well Control Charts



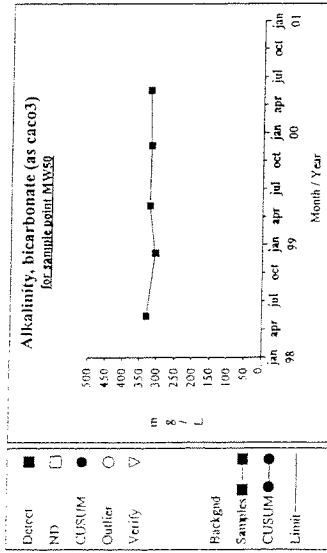
Graph 10



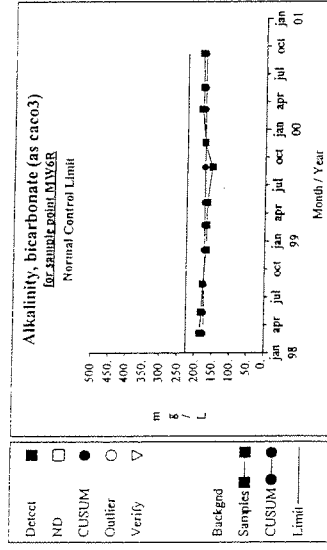
Graph 11



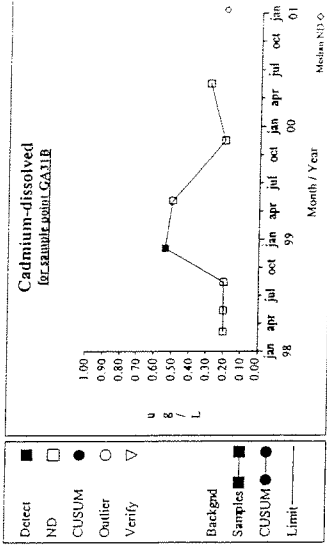
Graph 12



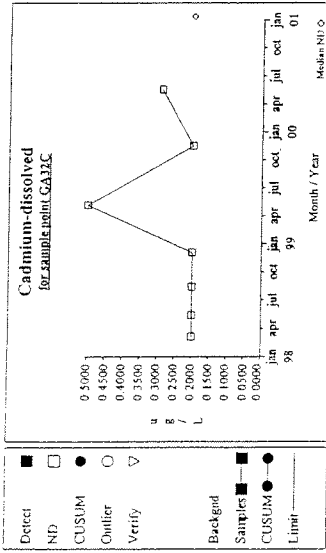
Graph 13



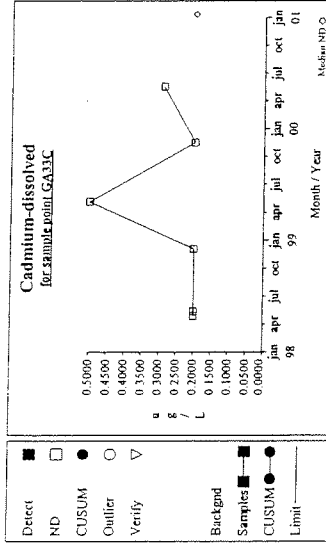
Graph 14



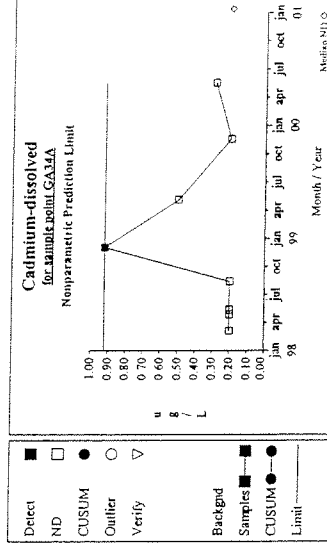
Graph 15



Graph 16

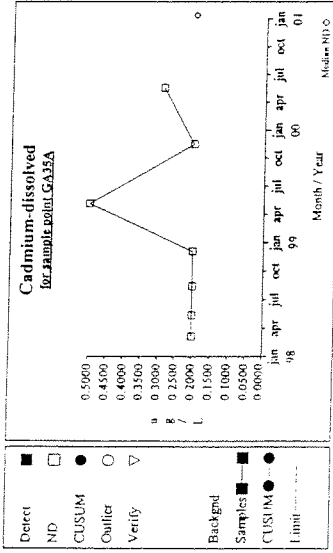


Graph 17

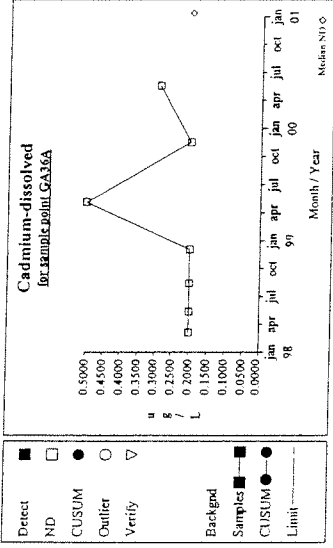


Graph 18

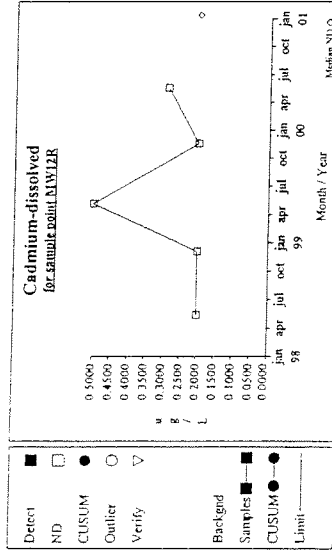
Intra-Well Control Charts



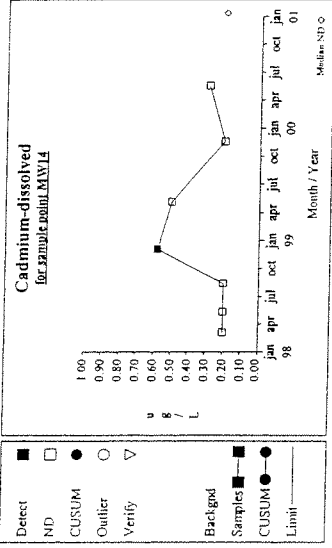
Graph 19



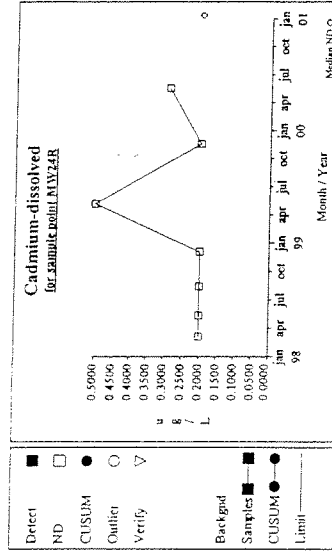
Graph 20



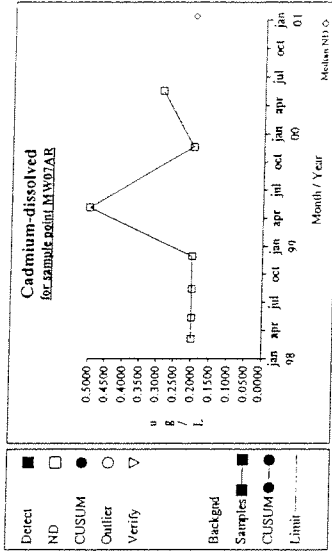
Graph 21



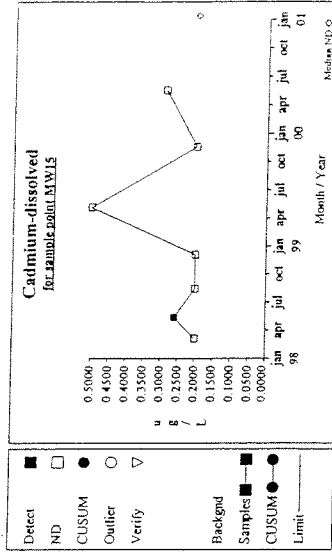
Graph 22



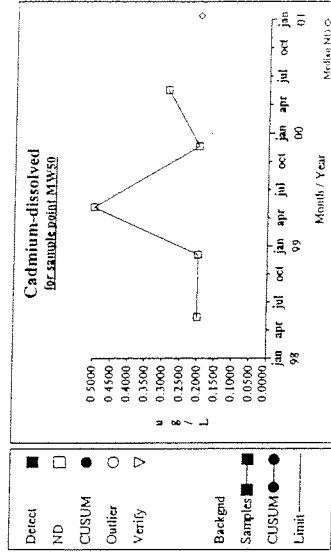
Graph 23



Graph 24

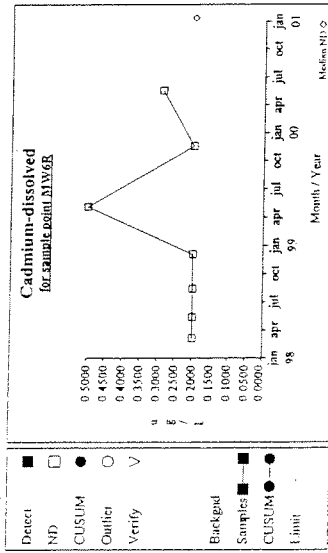


Graph 25

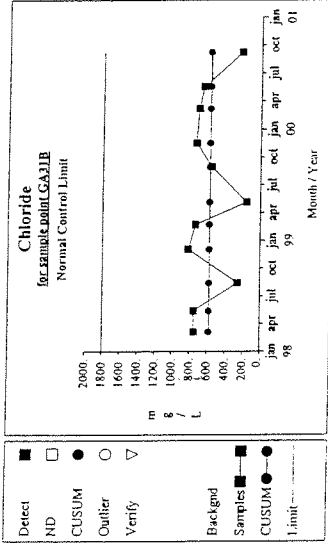


Graph 26

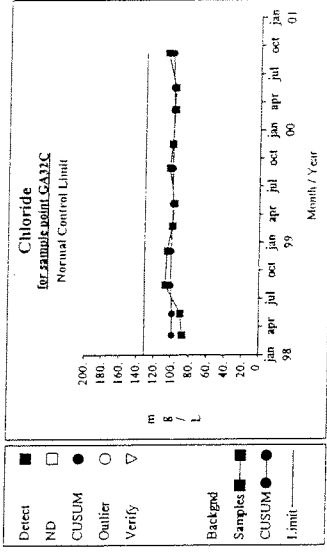
Intra-Well Control Charts



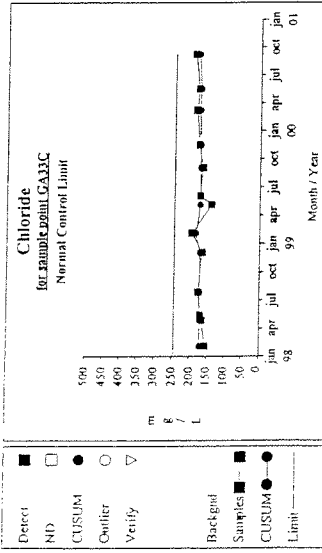
Graph 28



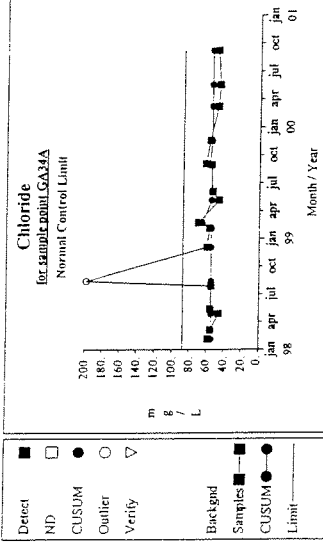
Graph 29



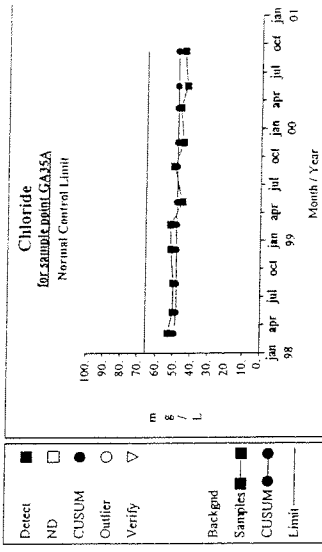
Graph 30



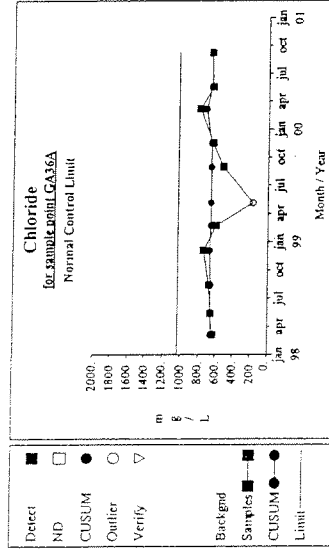
Graph 31



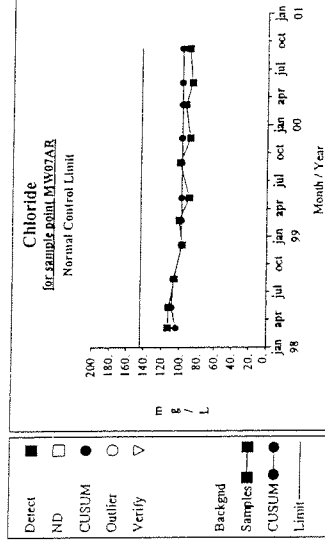
Graph 32



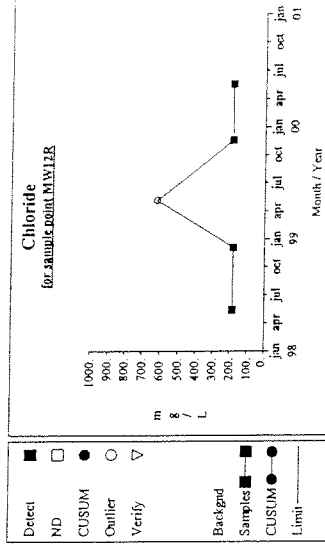
Graph 33



Graph 34



Graph 35



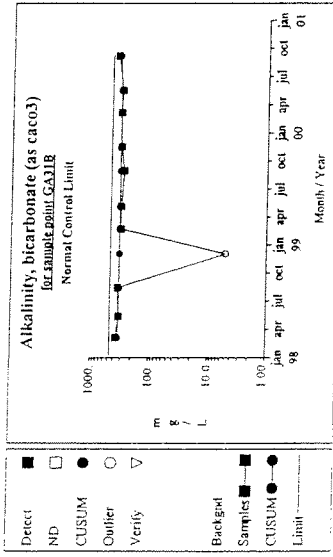
Graph 36

APPENDIX

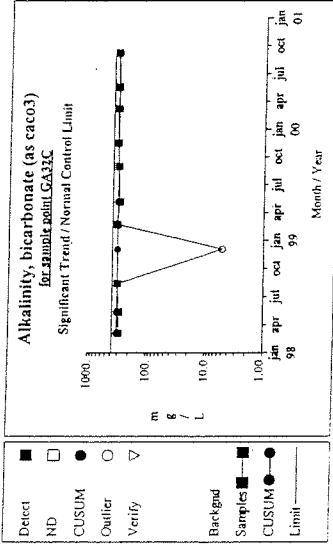
Site-Specific Results

Intra-Well Comparisons

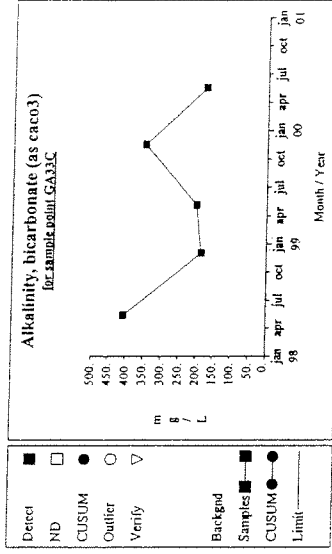
Intra-Well Control Charts



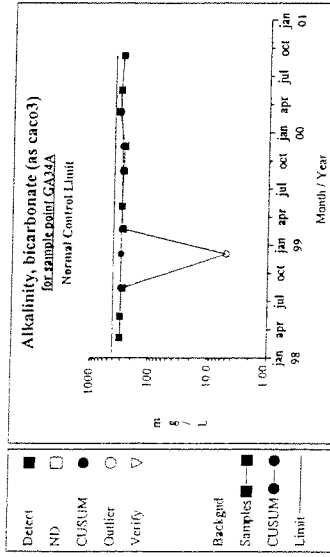
Graph 1



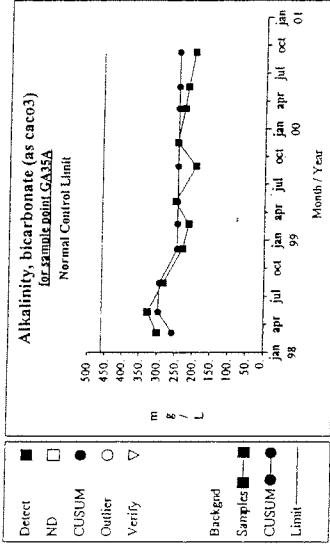
Graph 2



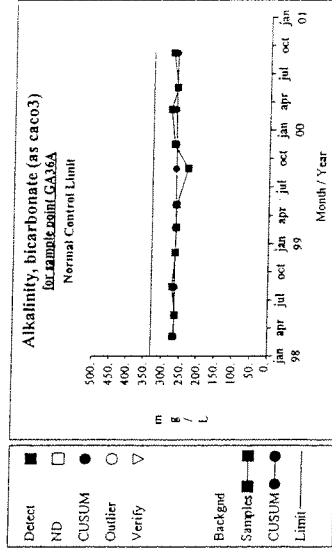
Graph 3



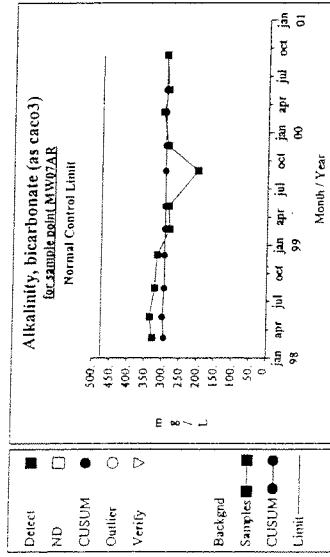
Graph 4



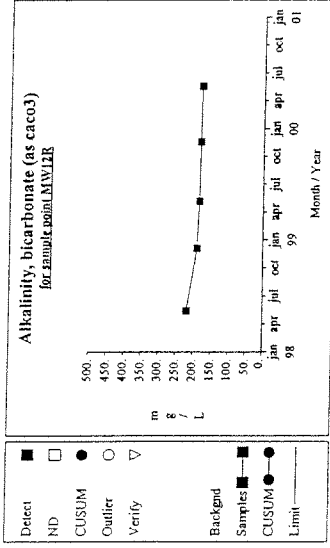
Graph 5



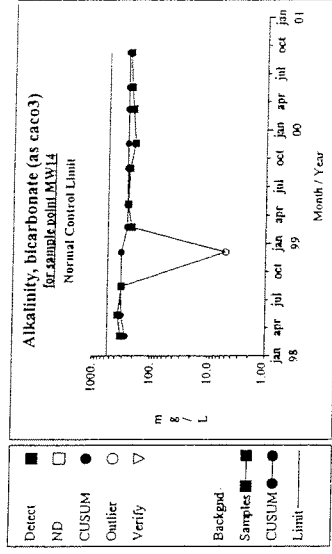
Graph 6



Graph 7

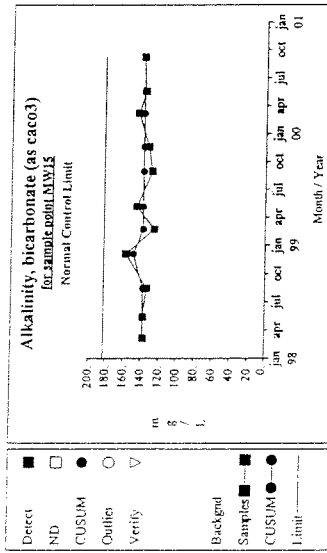


Graph 8

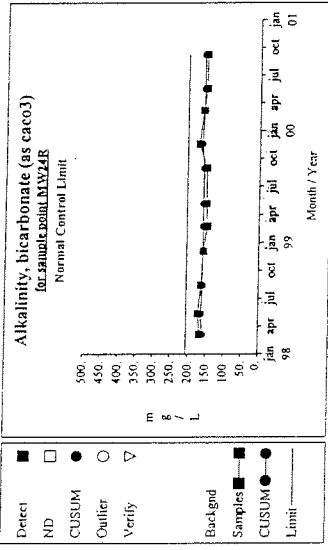


Graph 9

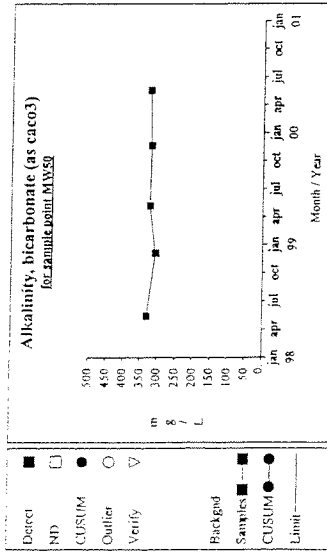
Intra-Well Control Charts



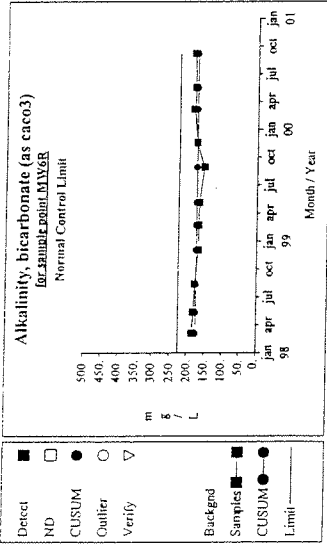
Graph 10



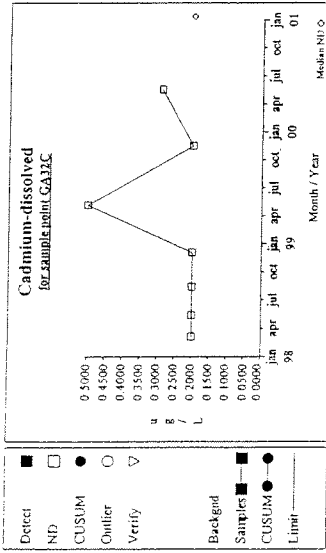
Graph 11



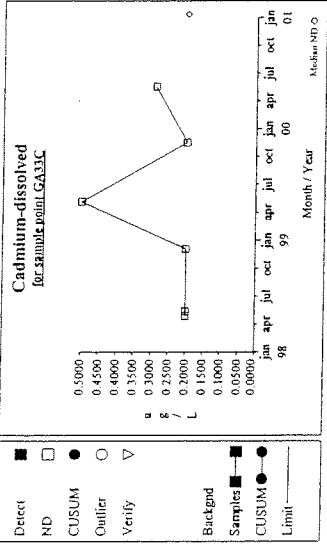
Graph 12



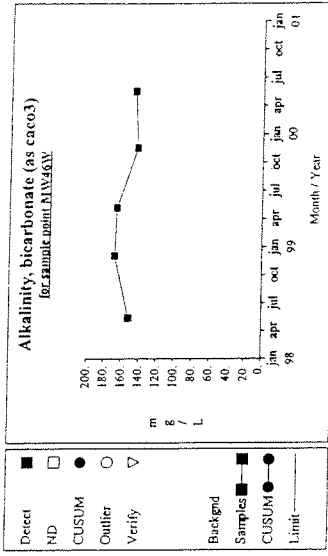
Graph 13



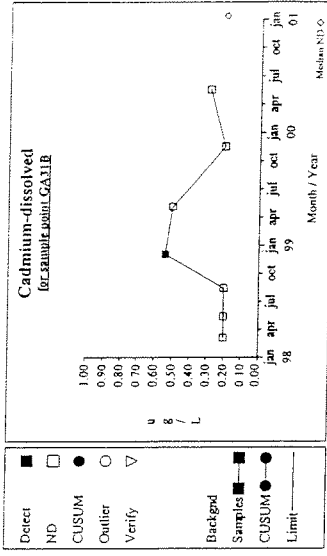
Graph 14



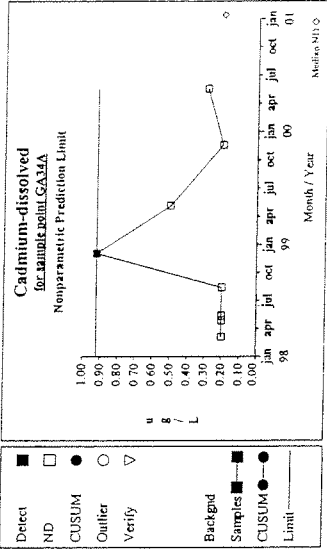
Graph 15



Graph 16

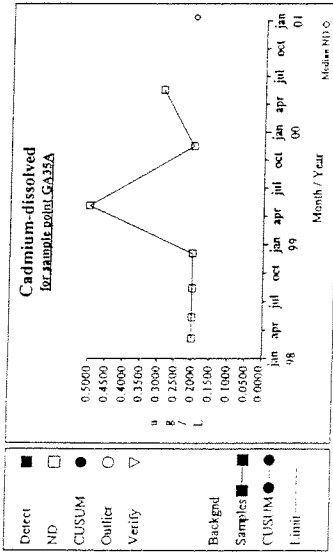


Graph 17

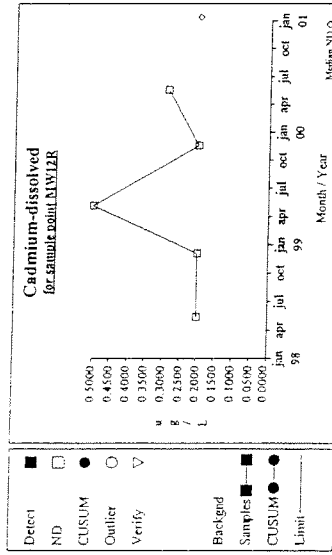


Graph 18

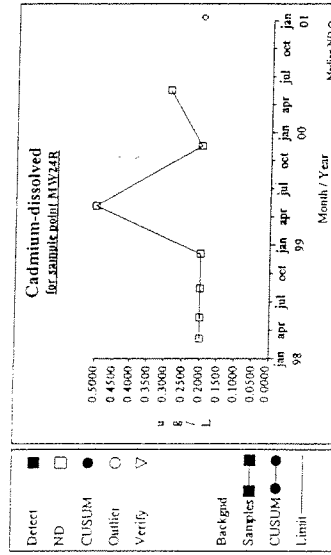
Intra-Well Control Charts



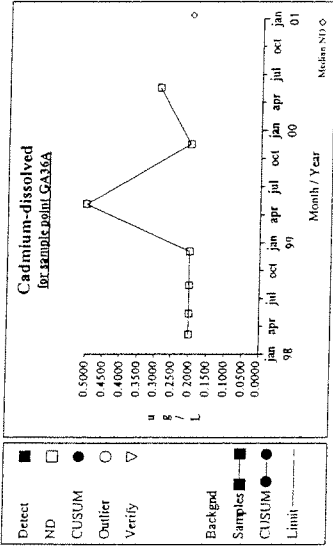
Graph 19



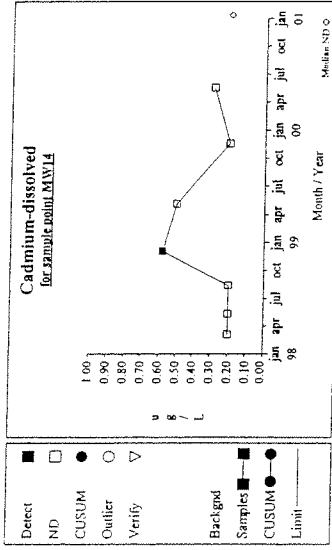
Graph 22



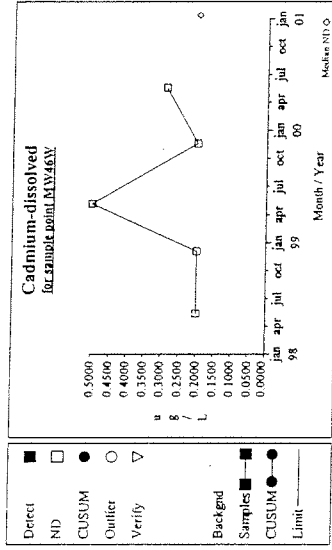
Graph 25



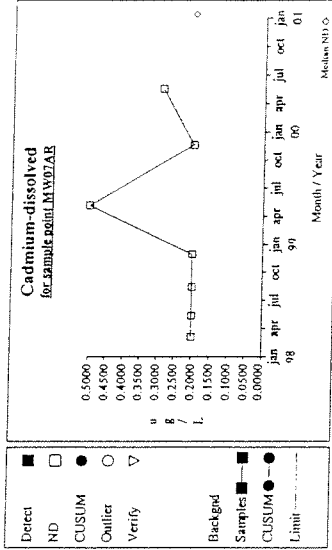
Graph 20



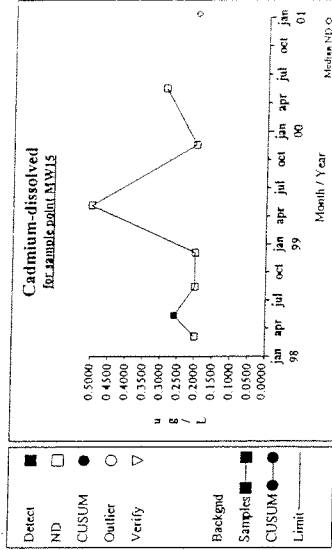
Graph 23



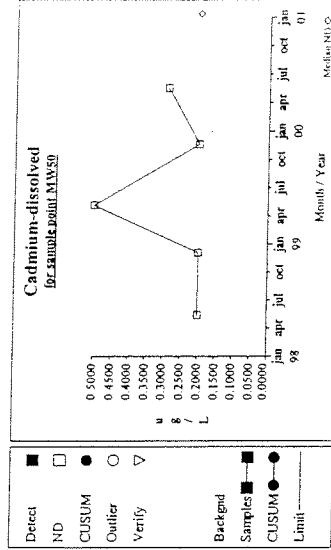
Graph 26



Graph 21

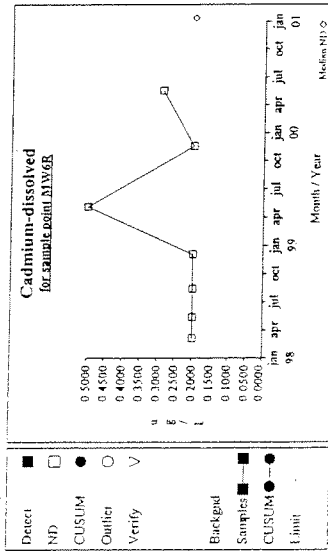


Graph 24

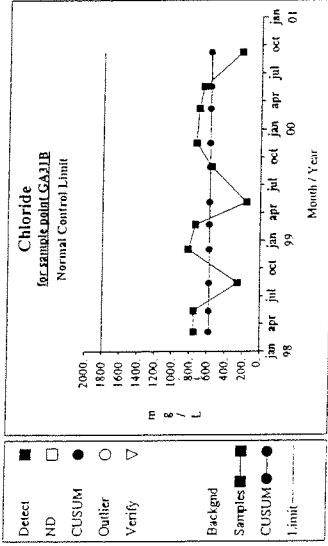


Graph 27

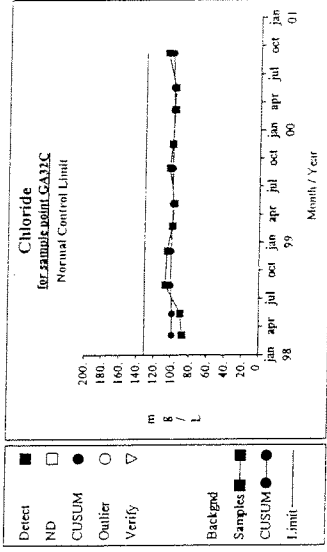
Intra-Well Control Charts



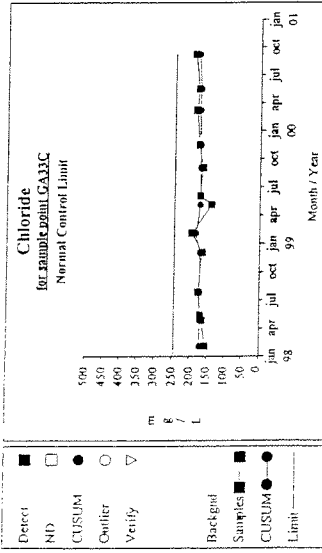
Graph 28



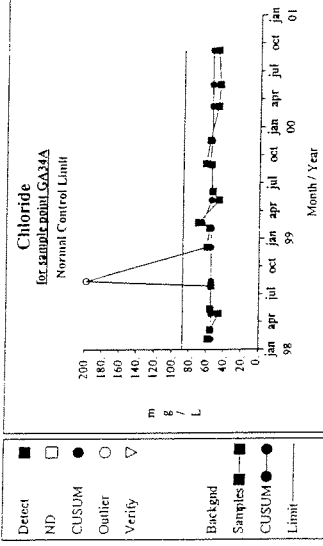
Graph 29



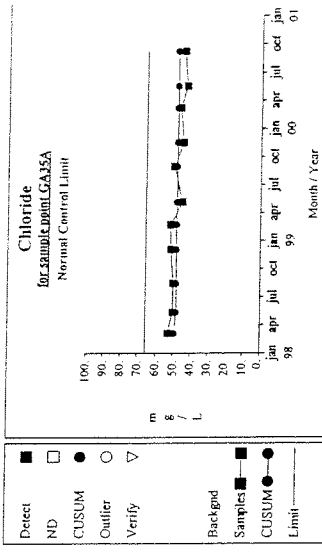
Graph 30



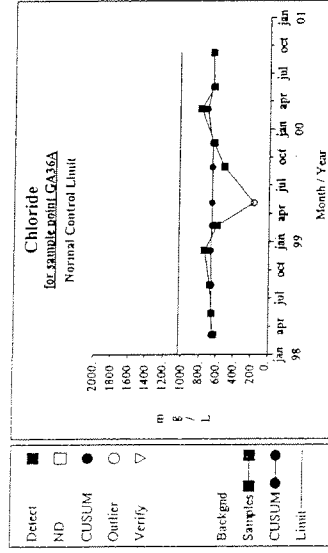
Graph 31



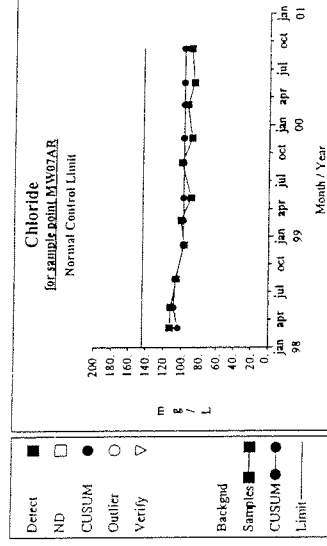
Graph 32



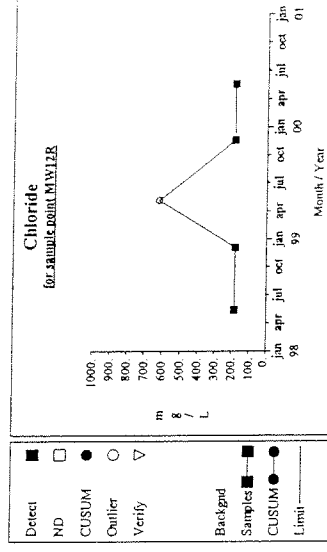
Graph 33



Graph 34

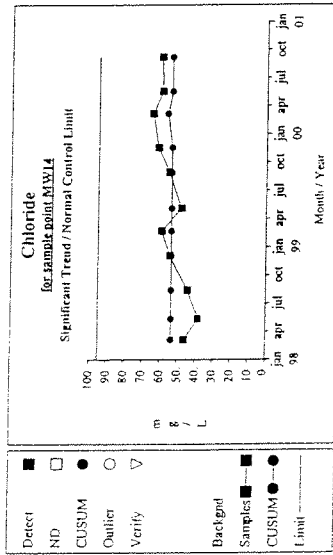


Graph 35

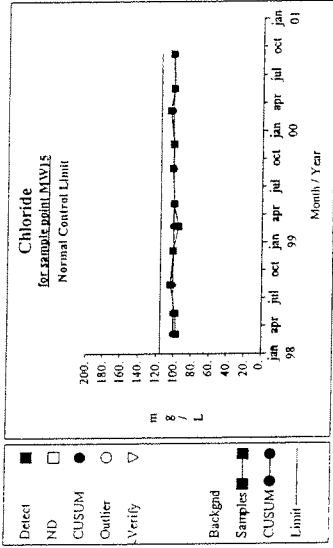


Graph 36

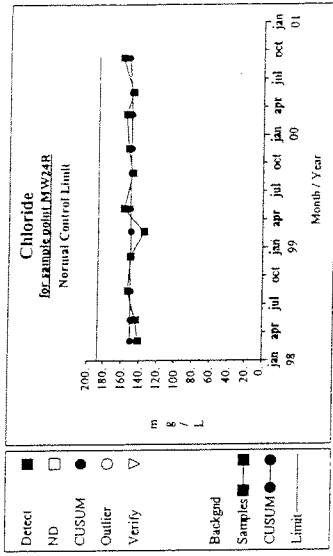
Intra-Well Control Charts



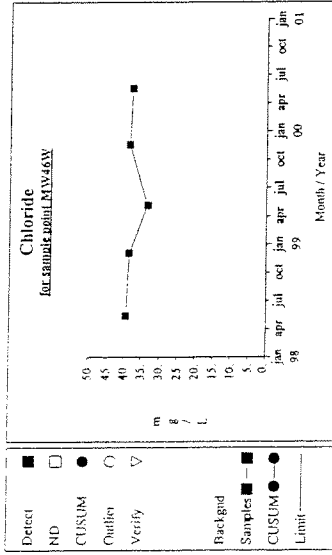
Graph 37



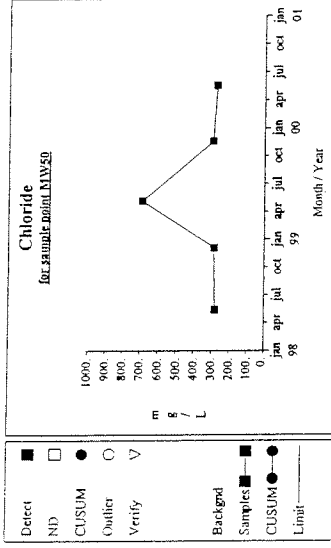
Graph 38



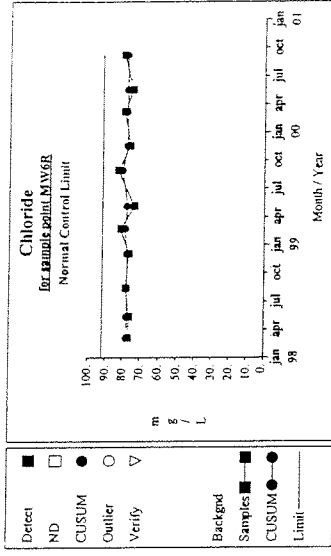
Graph 39



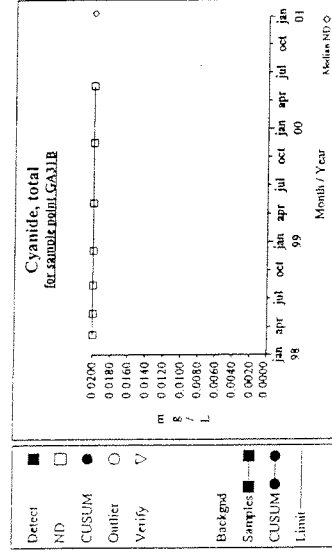
Graph 40



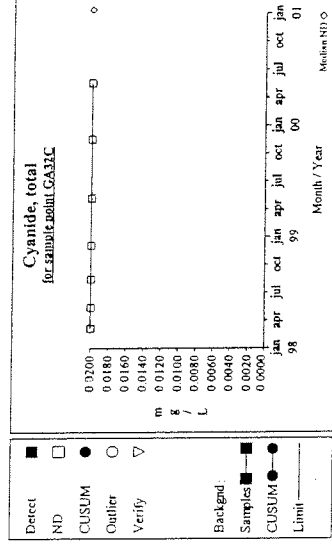
Graph 41



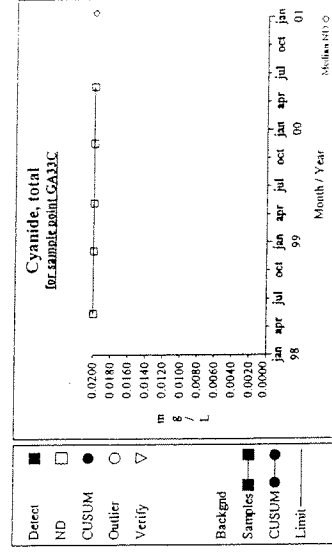
Graph 42



Graph 43

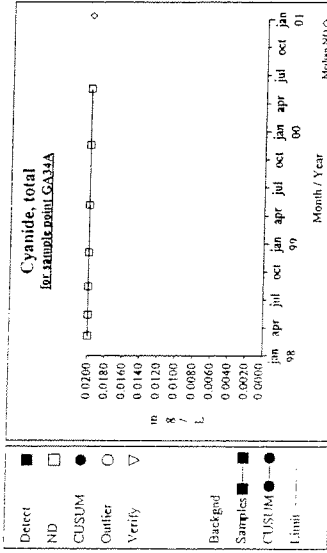


Graph 44

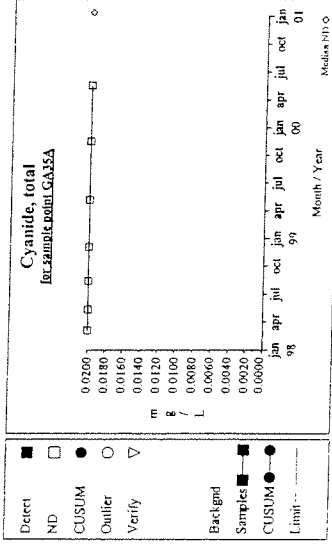


Graph 45

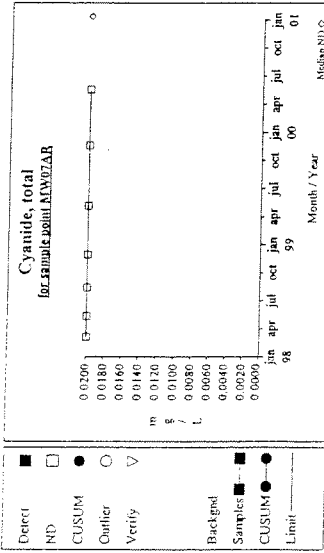
Intra-Well Control Charts



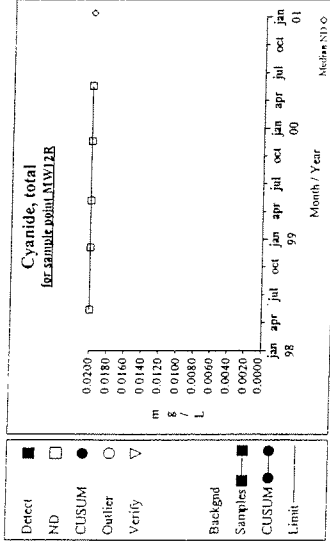
Graph 46



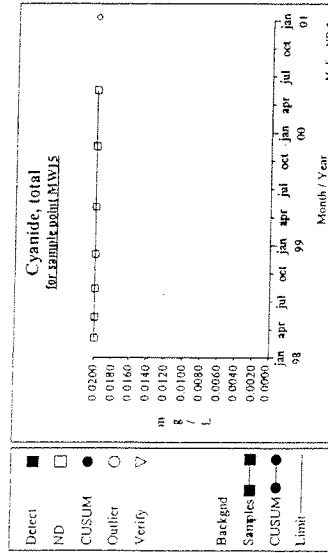
Graph 47



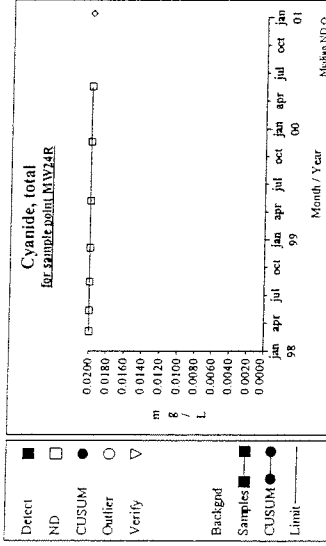
Graph 48



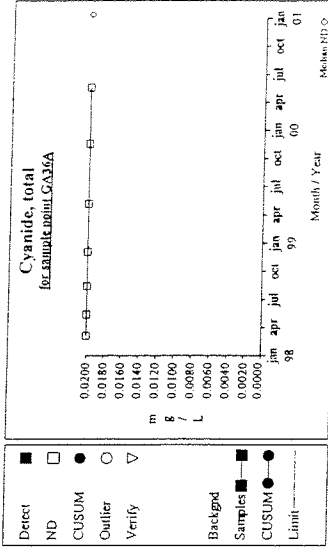
Graph 49



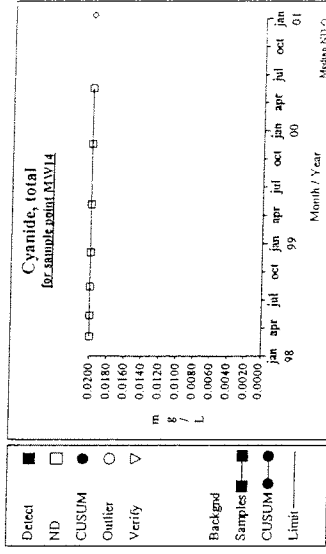
Graph 50



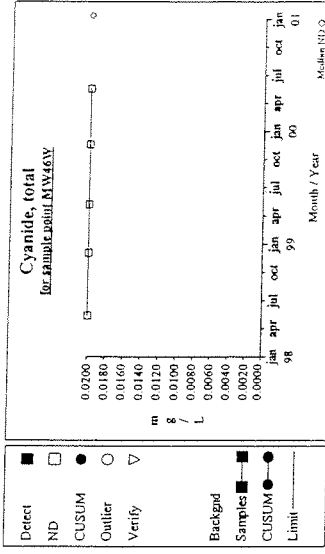
Graph 51



Graph 52

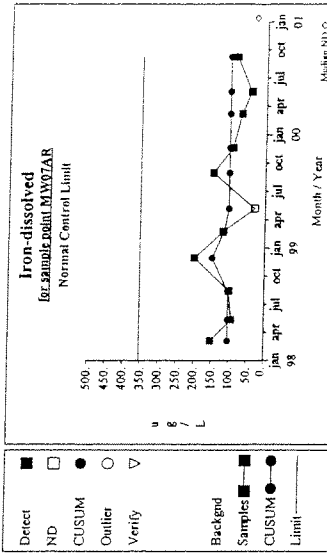
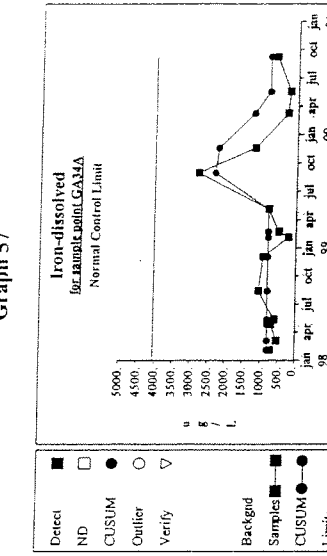
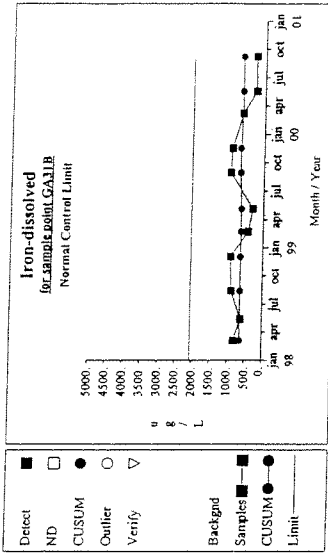
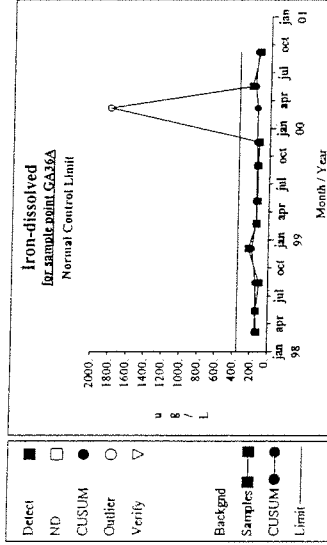
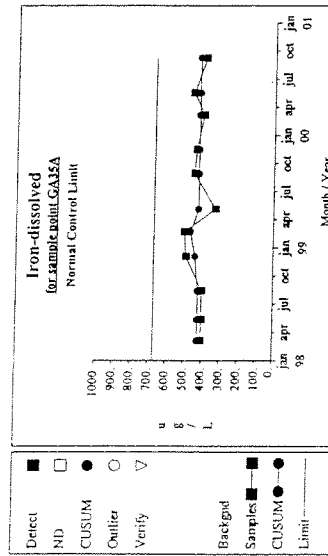
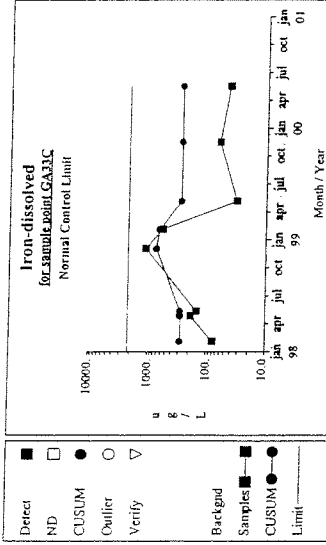
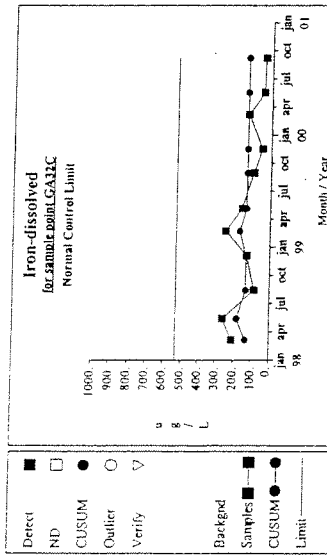
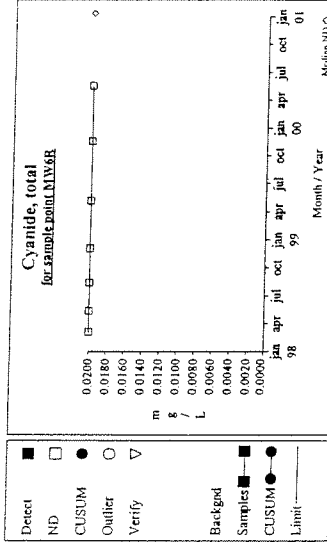
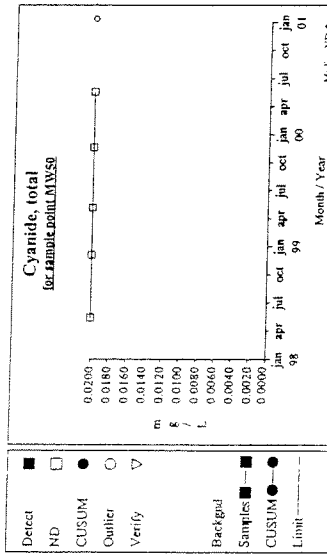


Graph 53

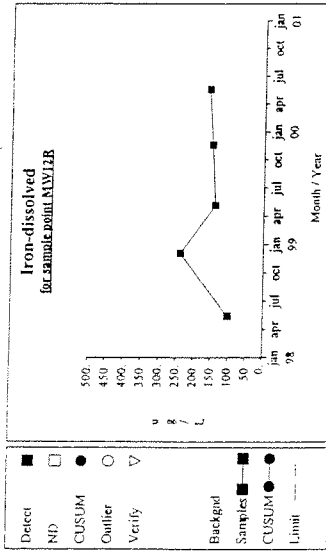


Graph 54

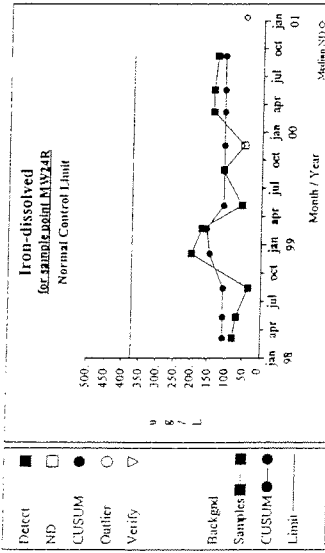
Intra-Well Control Charts



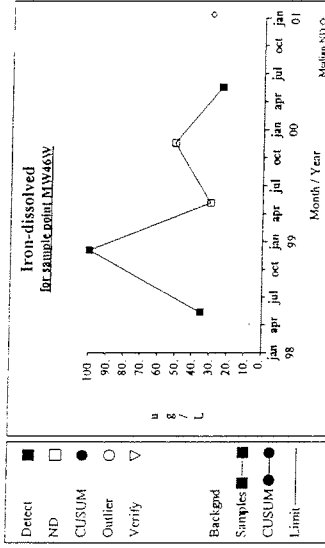
Intra-Well Control Charts



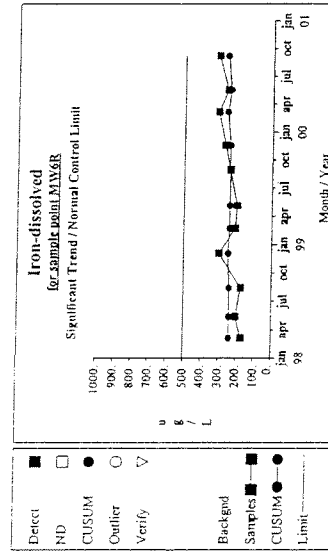
Graph 64



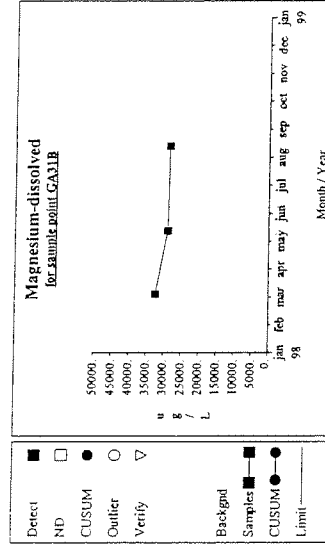
Graph 65



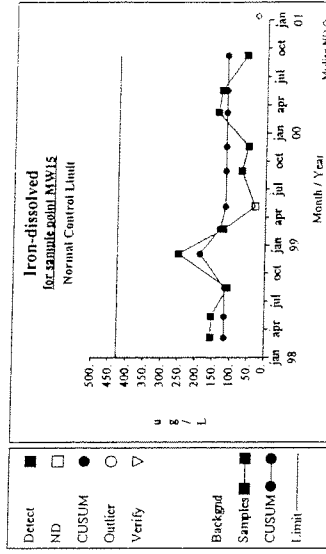
Graph 66



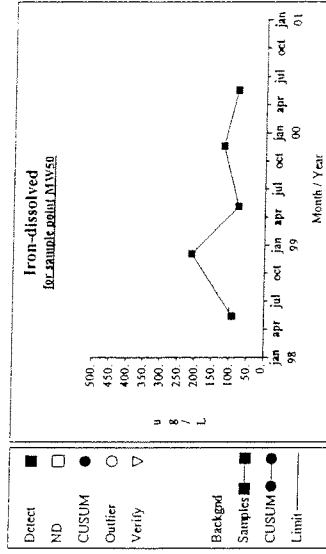
Graph 67



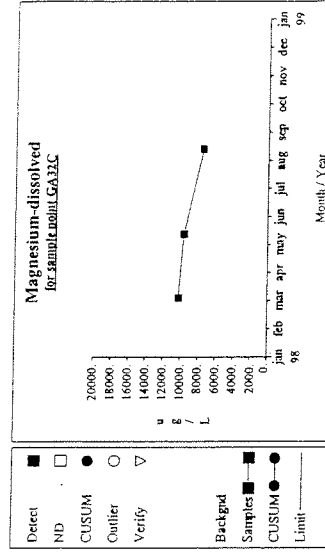
Graph 68



Graph 69

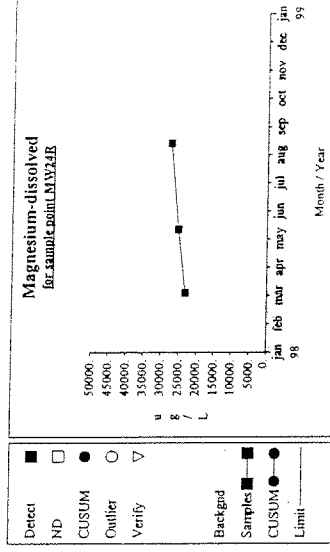
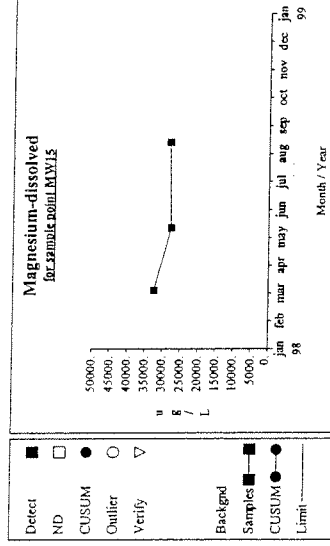
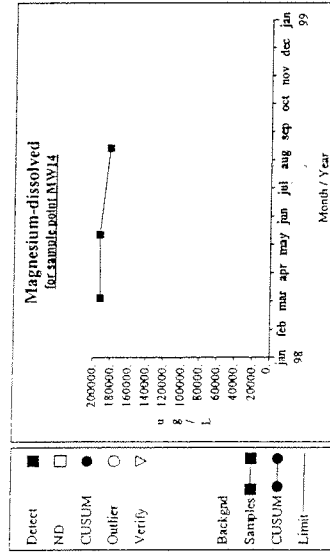
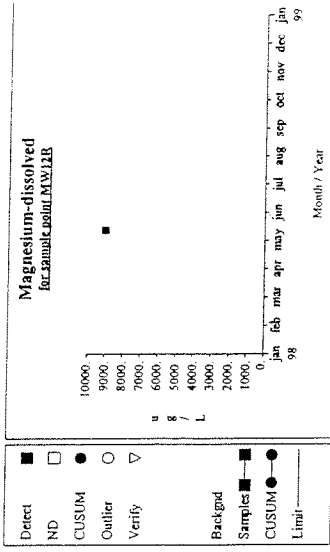
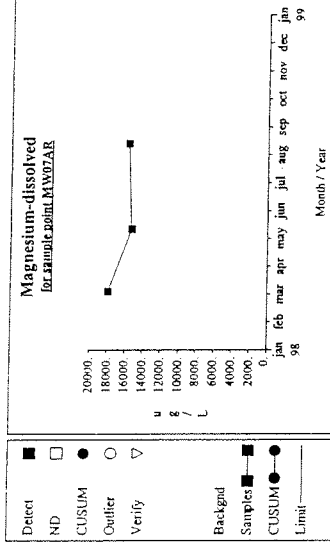
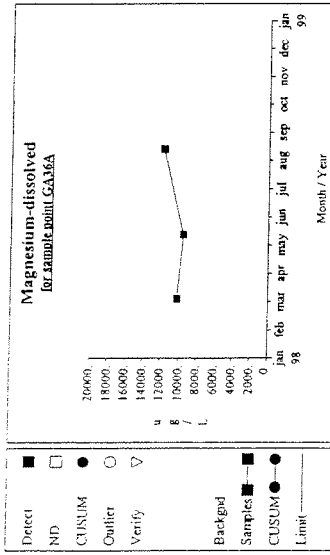
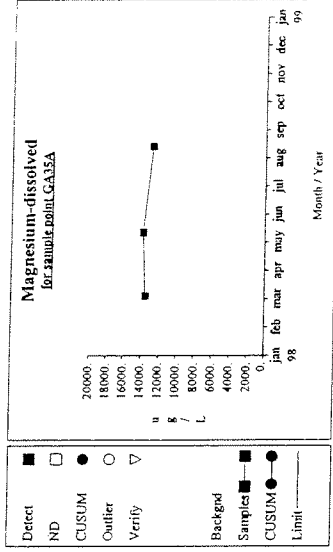
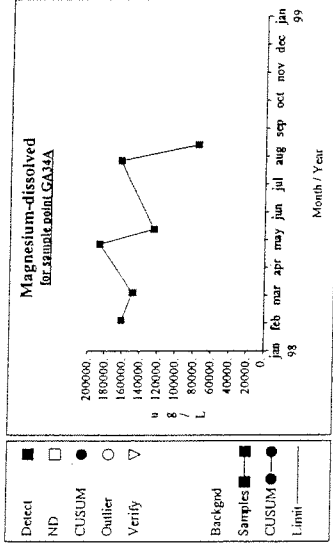
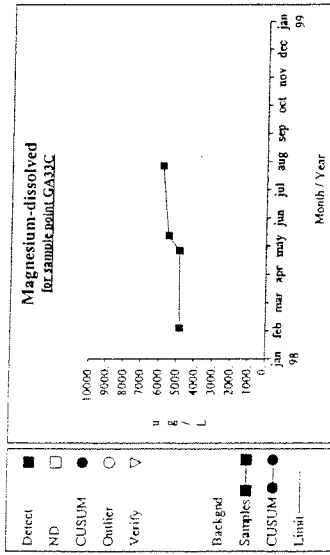


Graph 70

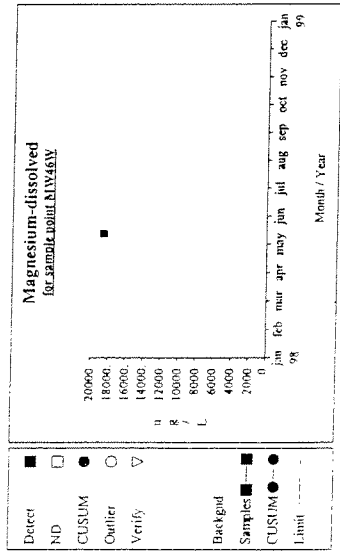


Graph 71

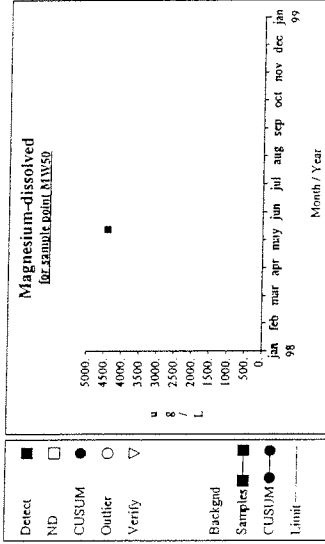
Intra-Well Control Charts



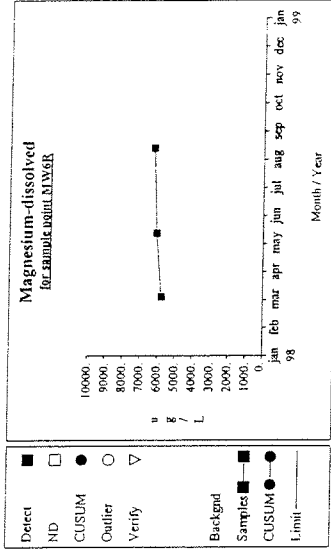
Intra-Well Control Charts



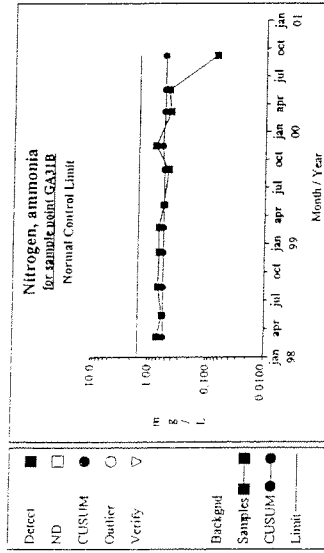
Graph 82



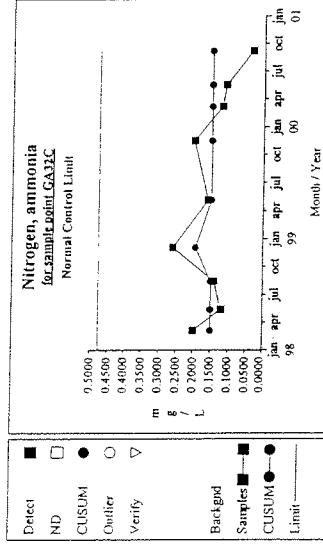
Graph 83



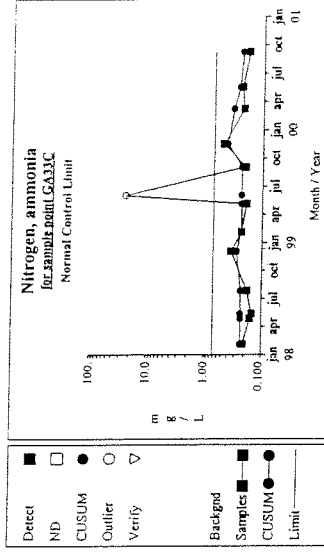
Graph 84



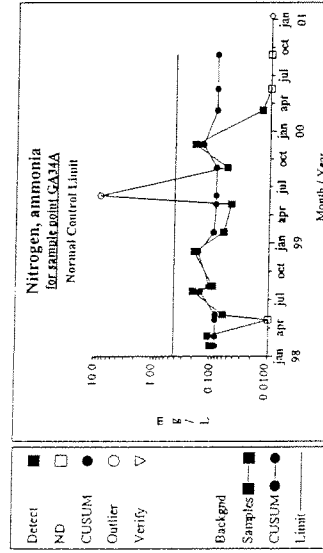
Graph 85



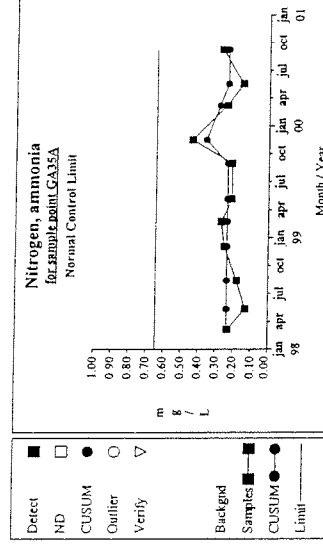
Graph 86



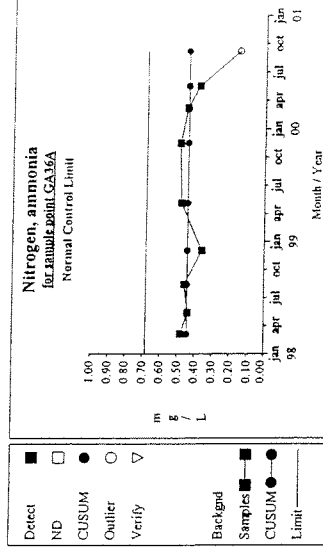
Graph 87



Graph 88

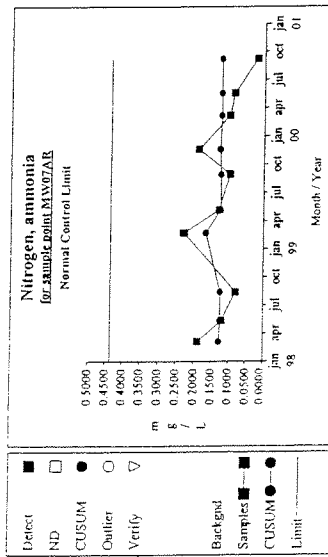


Graph 89

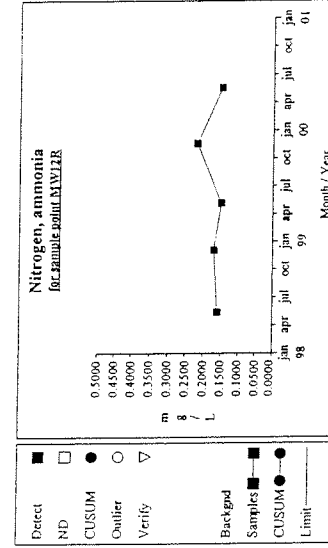


Graph 90

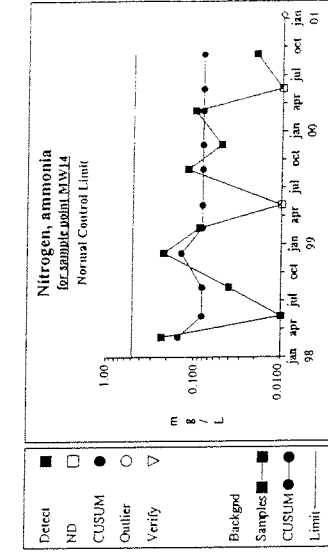
Intra-Well Control Charts



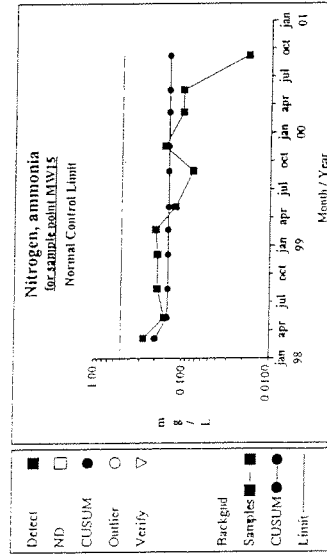
Graph 91



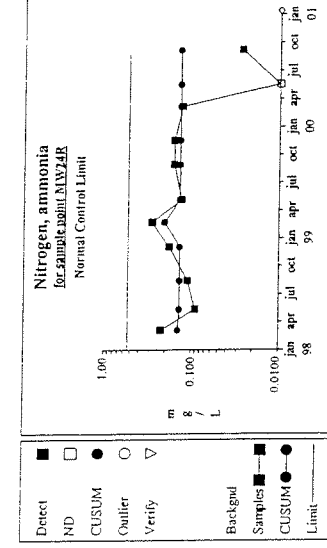
Graph 92



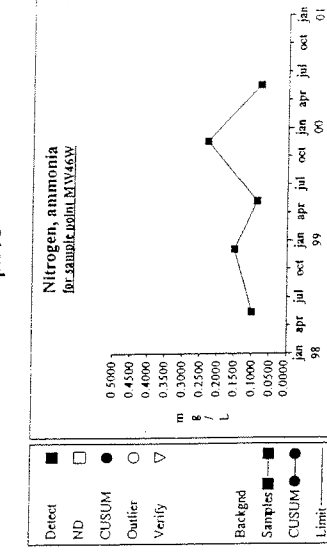
Graph 93



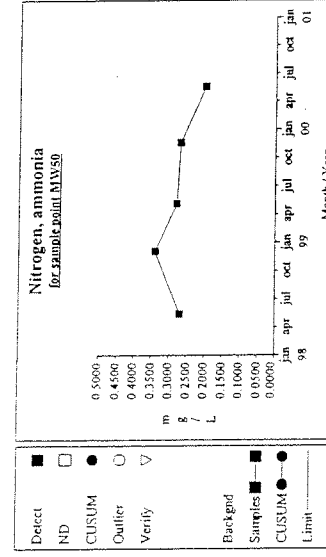
Graph 94



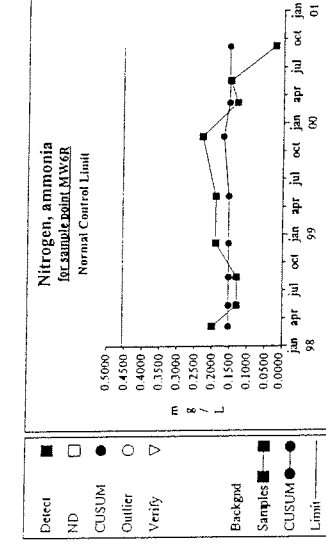
Graph 95



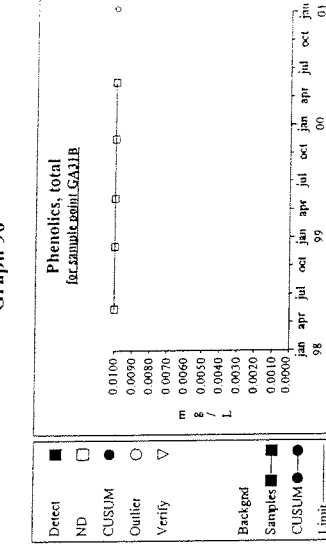
Graph 96



Graph 97

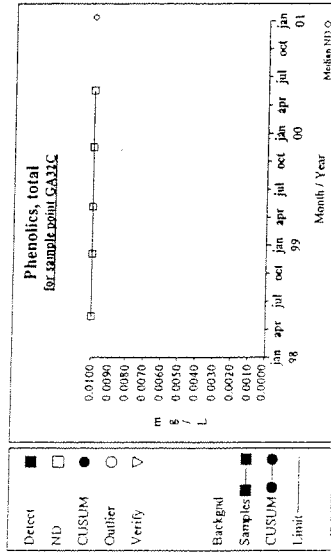


Graph 98

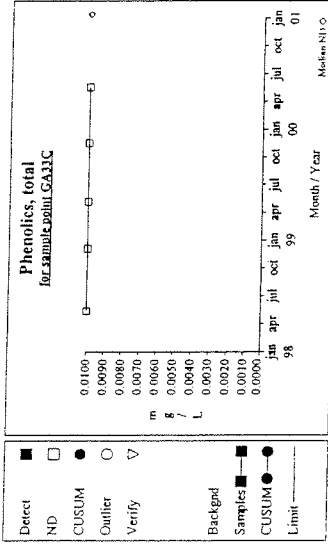


Graph 99

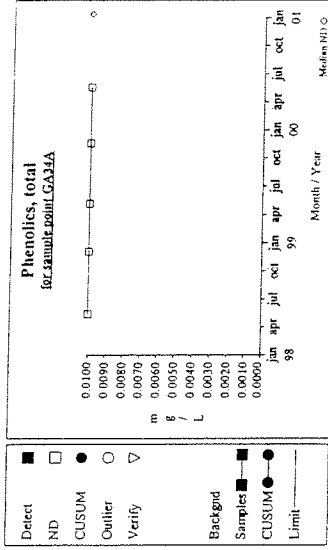
Intra-Well Control Charts



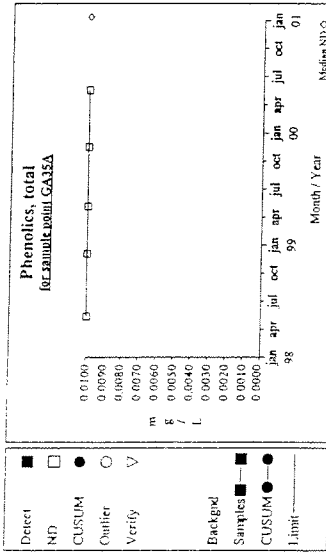
Graph 100



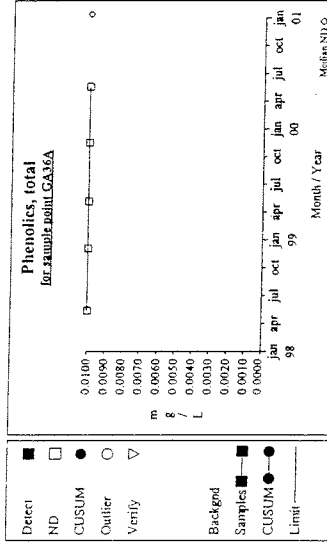
Graph 101



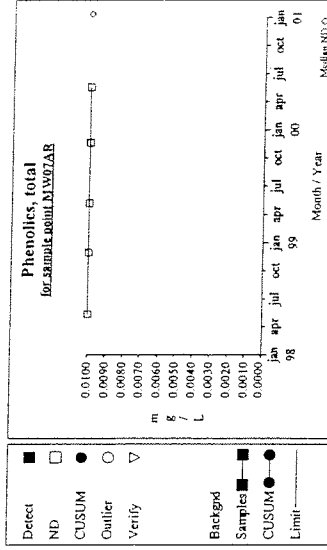
Graph 102



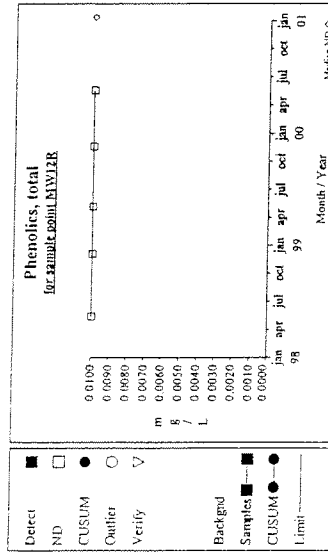
Graph 103



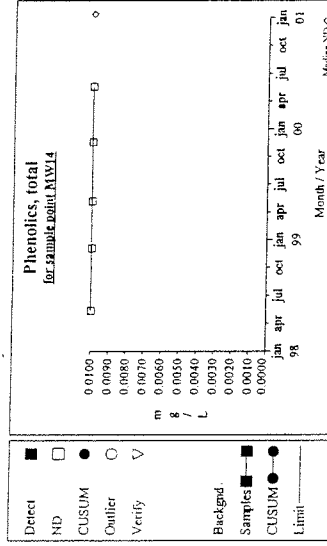
Graph 104



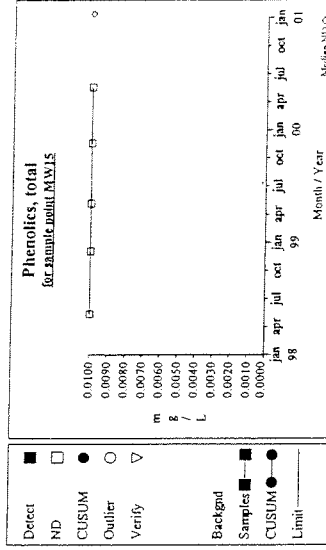
Graph 105



Graph 106

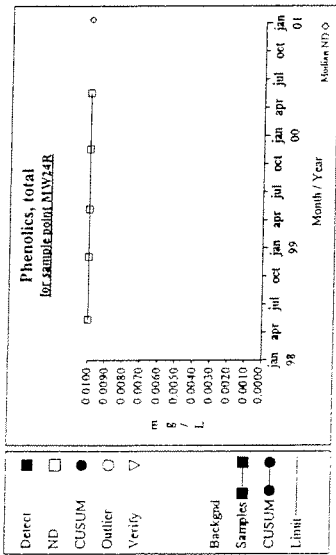


Graph 107

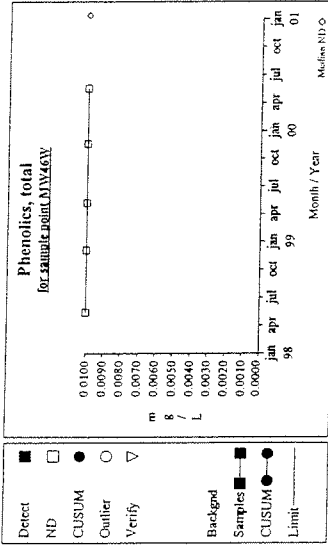


Graph 108

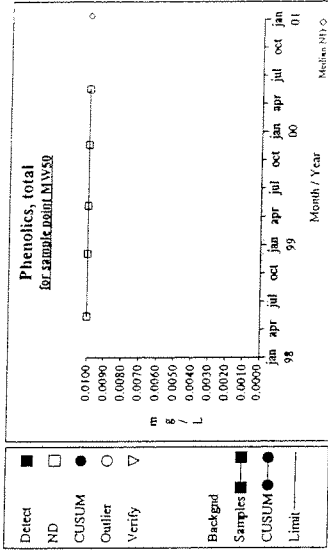
Intra-Well Control Charts



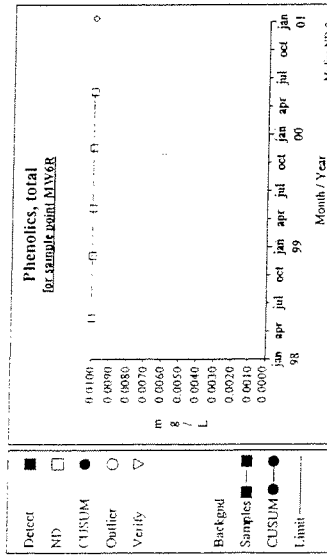
Graph 109



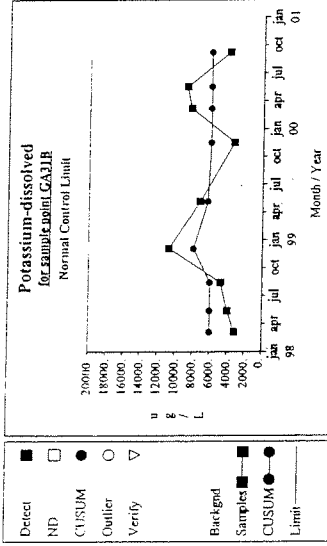
Graph 110



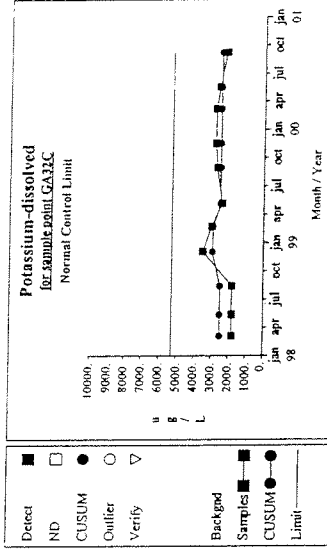
Graph 111



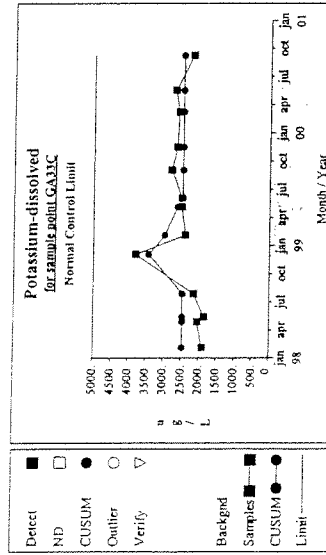
Graph 112



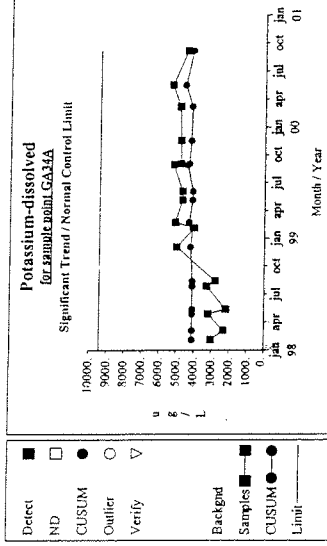
Graph 113



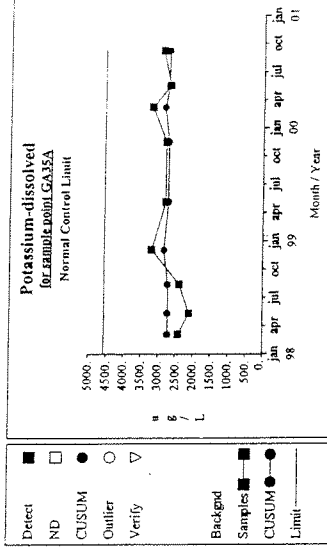
Graph 114



Graph 115

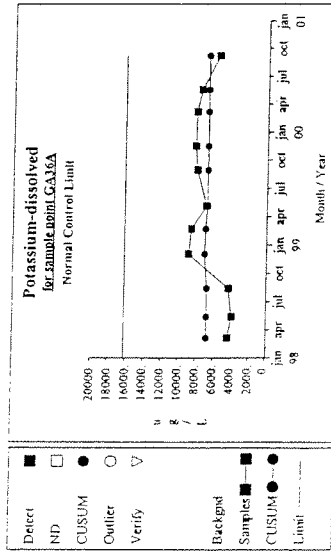


Graph 116

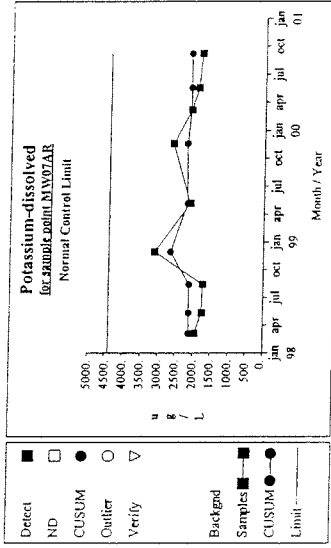


Graph 117

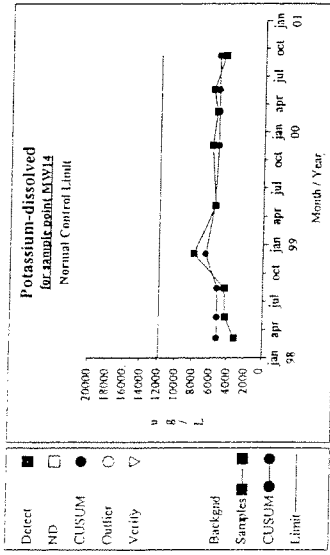
Intra-Well Control Charts



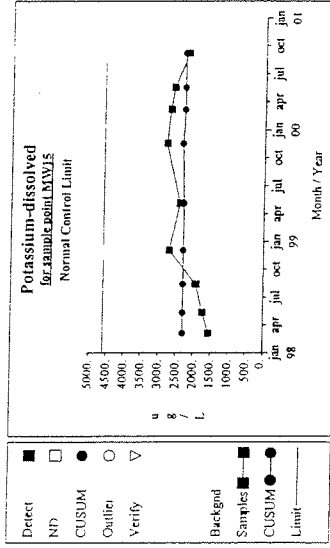
Graph 118



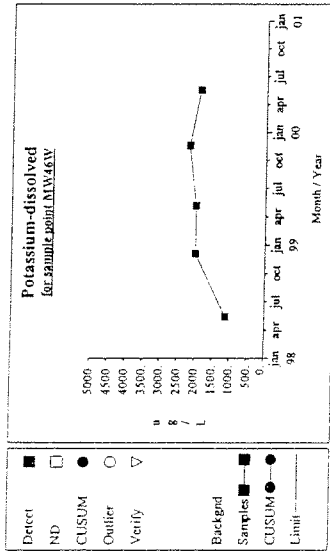
Graph 119



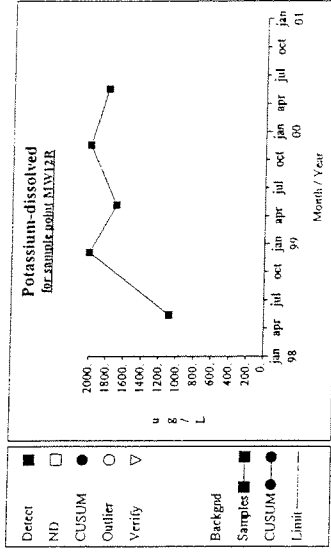
Graph 121



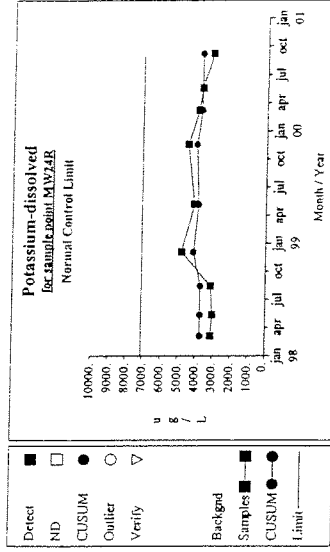
Graph 122



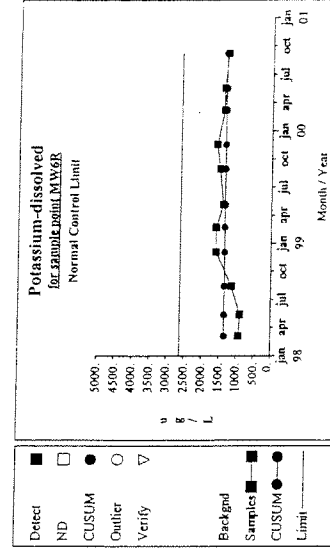
Graph 124



Graph 120

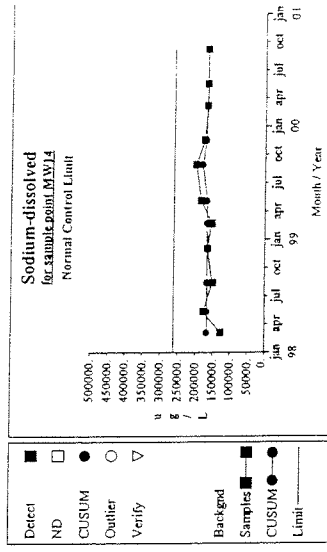
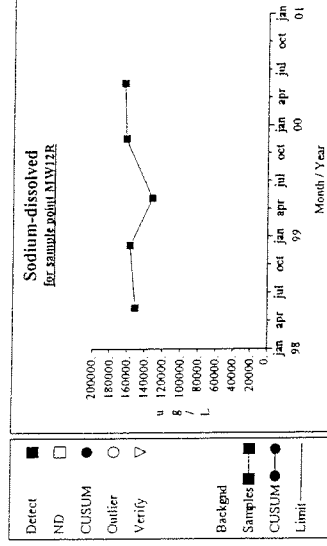
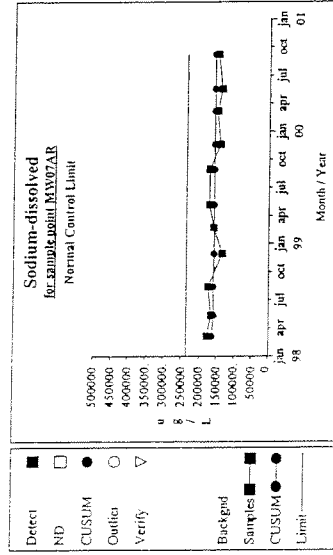
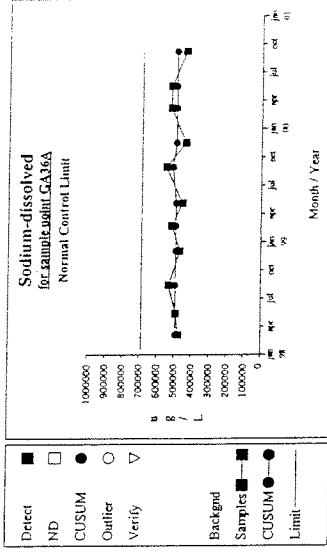
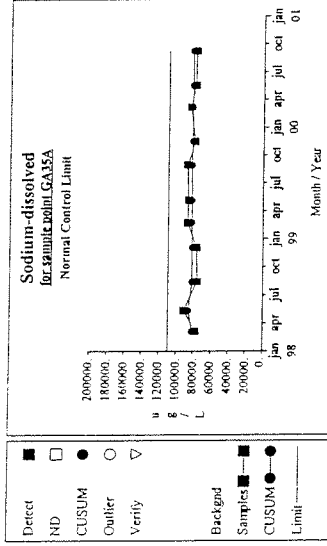
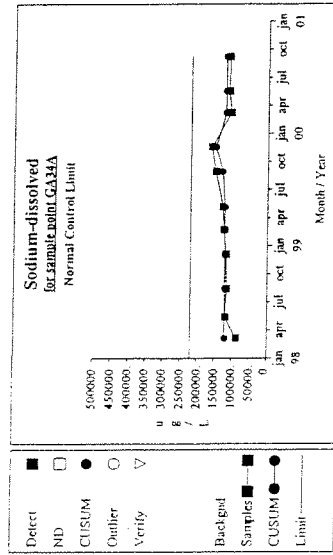
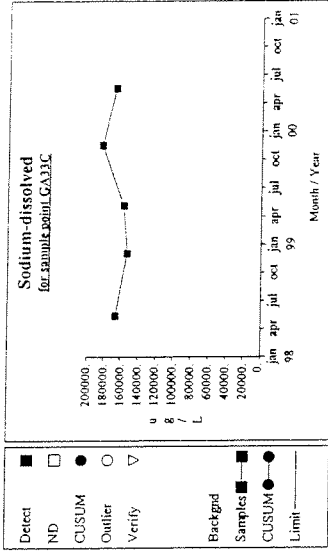
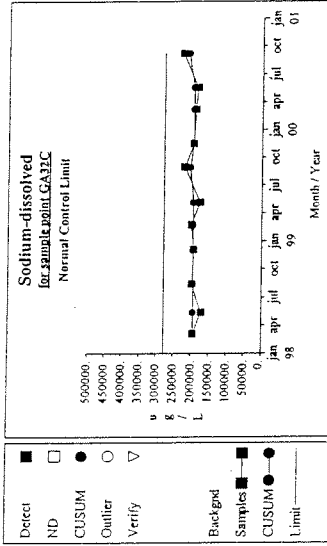
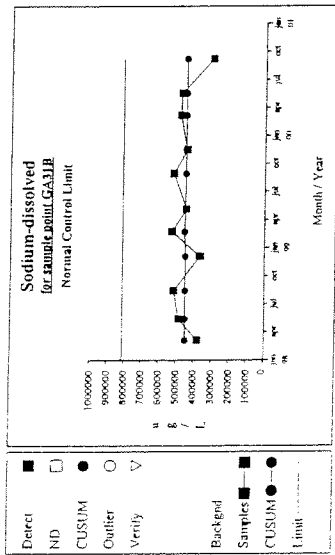


Graph 123



Graph 126

Intra-Well Control Charts

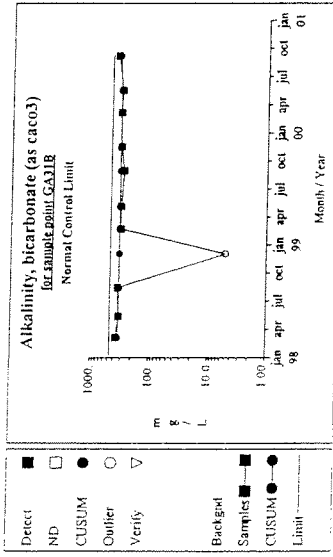


APPENDIX

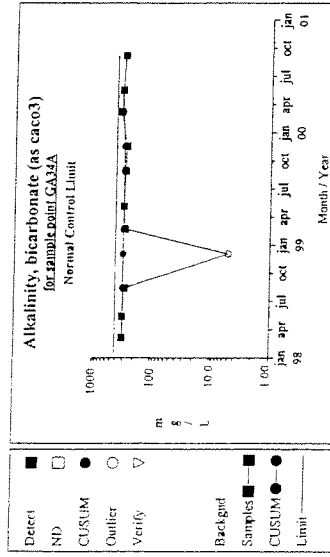
Site-Specific Results

Intra-Well Comparisons

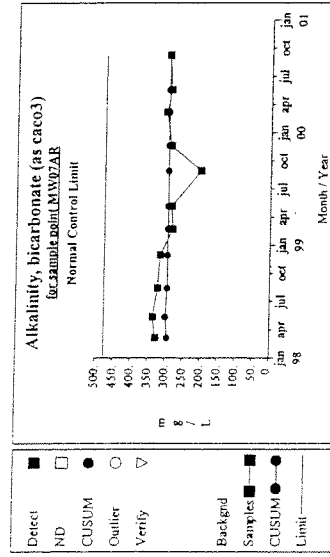
Intra-Well Control Charts



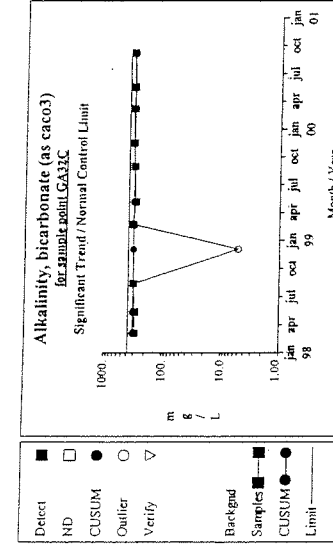
Graph 1



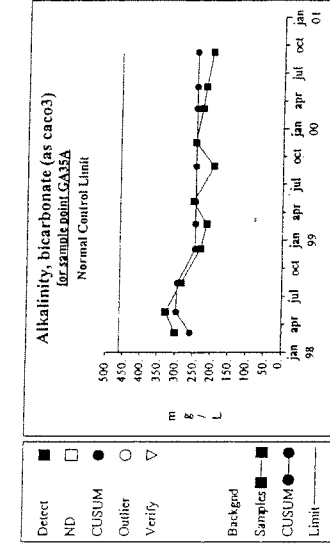
Graph 2



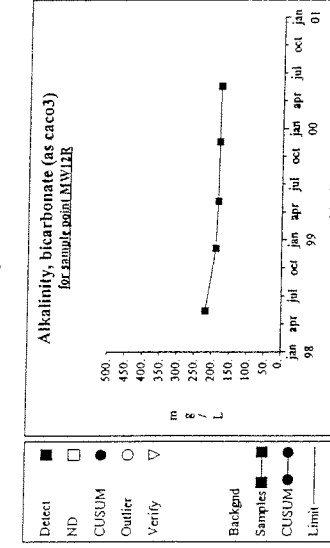
Graph 3



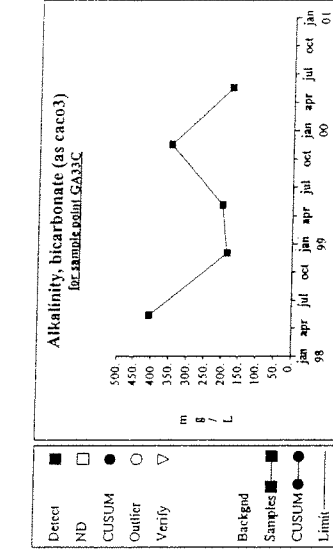
Graph 4



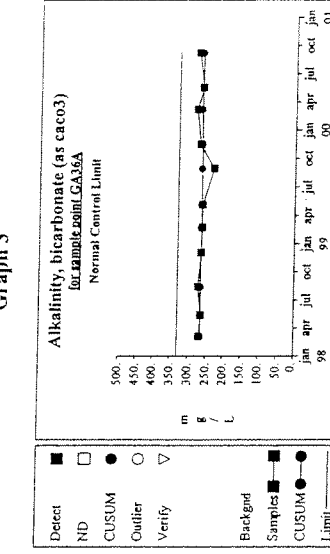
Graph 5



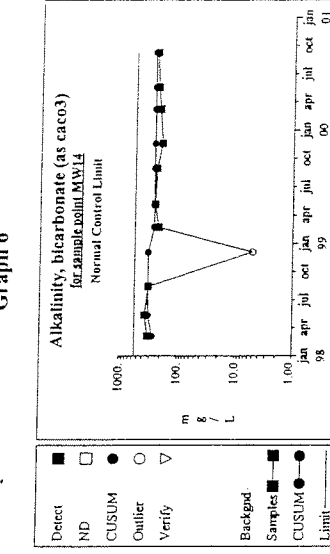
Graph 6



Graph 7

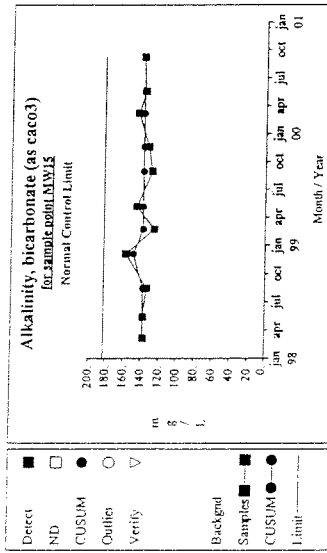


Graph 8

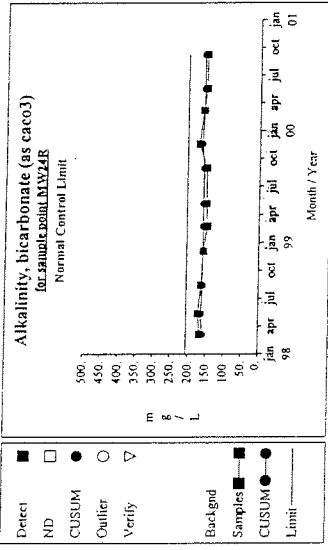


Graph 9

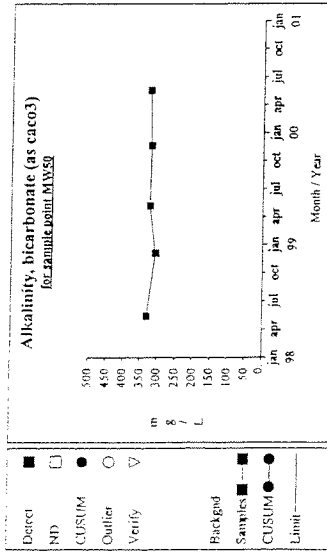
Intra-Well Control Charts



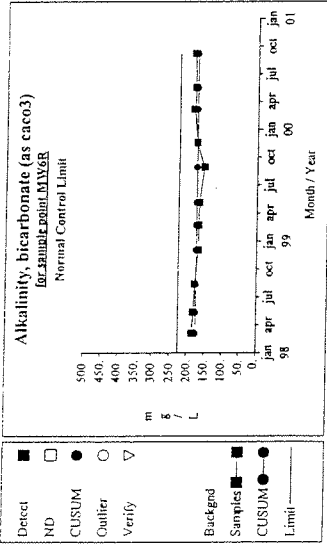
Graph 10



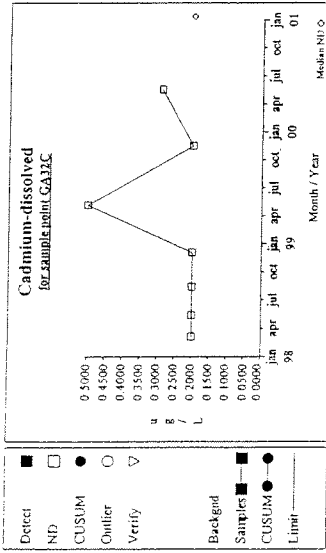
Graph 11



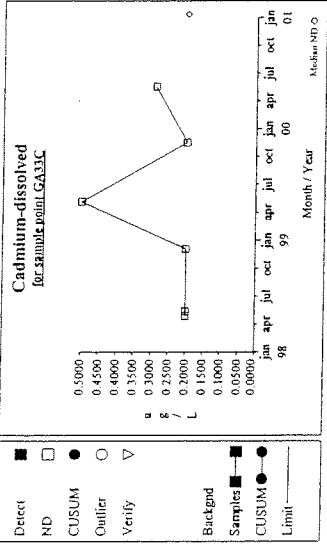
Graph 12



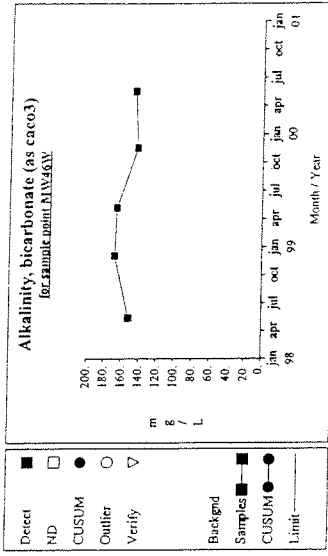
Graph 13



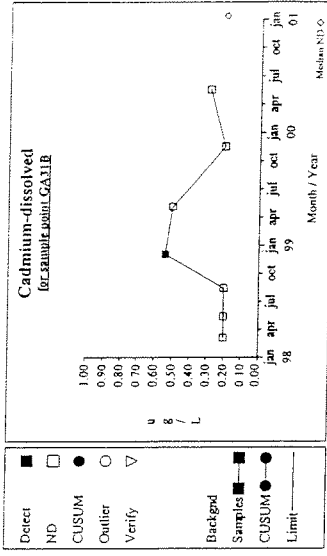
Graph 14



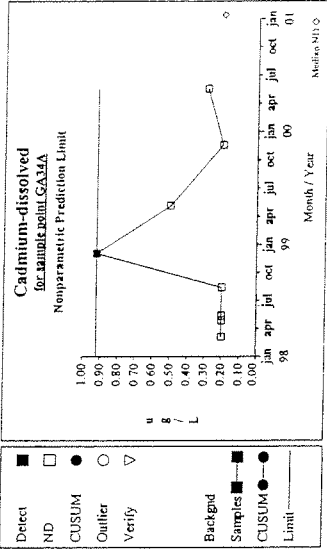
Graph 15



Graph 16

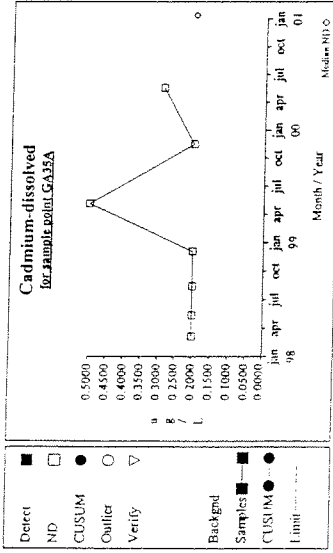


Graph 17

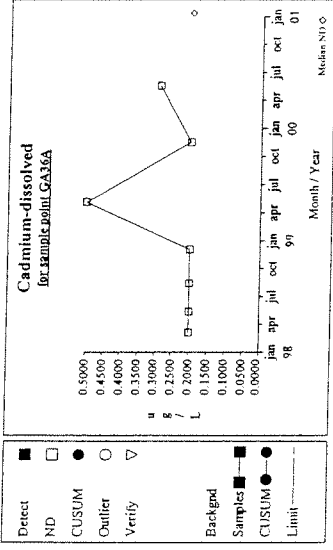


Graph 18

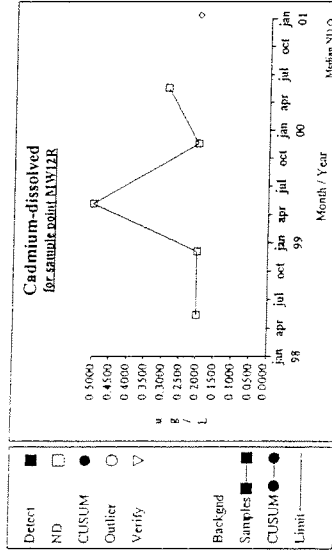
Intra-Well Control Charts



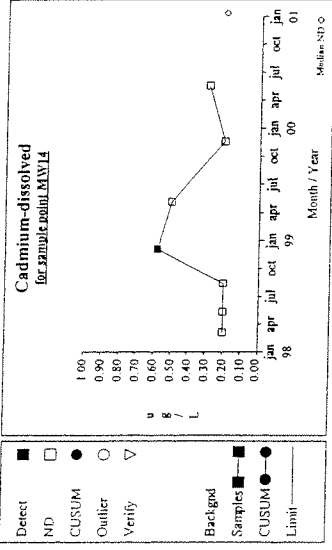
Graph 19



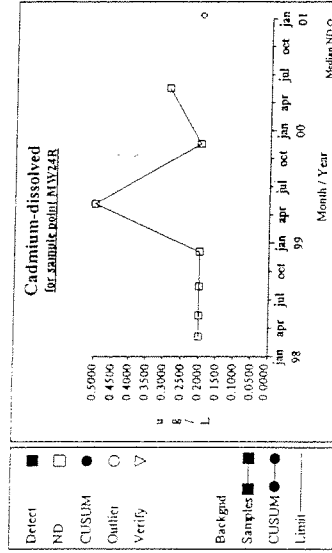
Graph 20



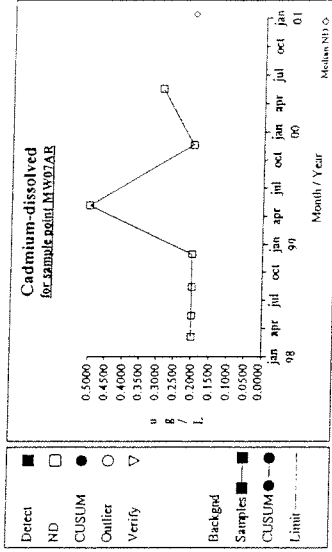
Graph 21



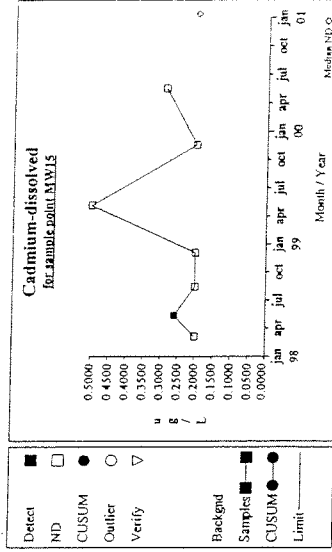
Graph 22



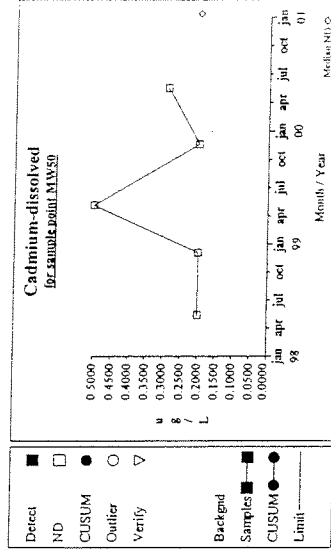
Graph 23



Graph 24

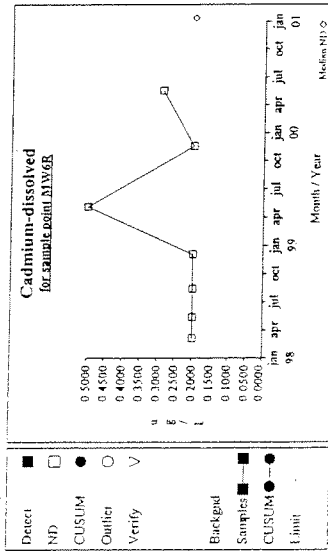


Graph 25

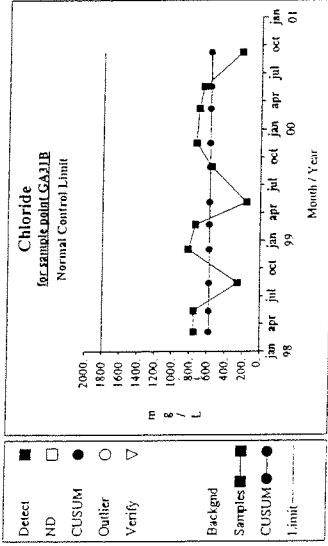


Graph 26

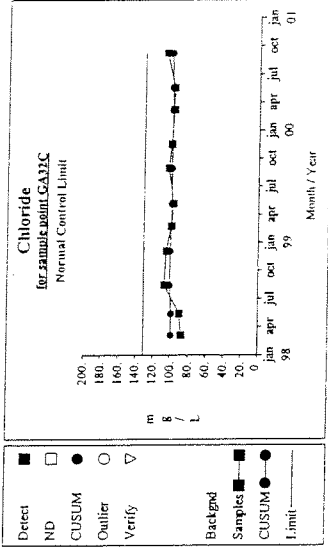
Intra-Well Control Charts



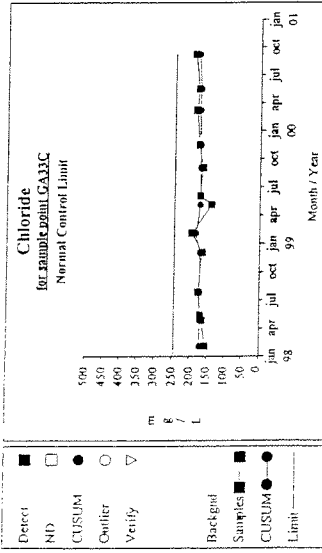
Graph 28



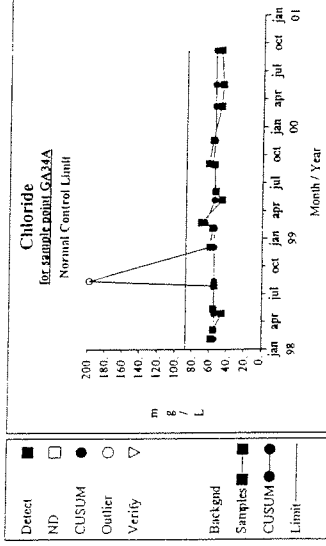
Graph 29



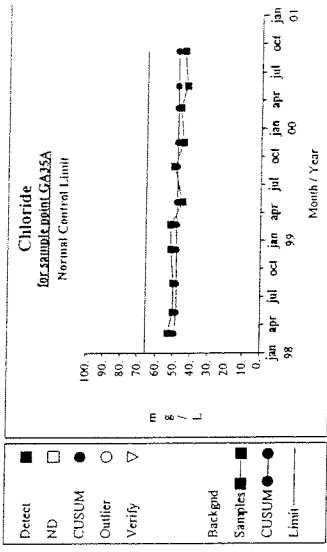
Graph 30



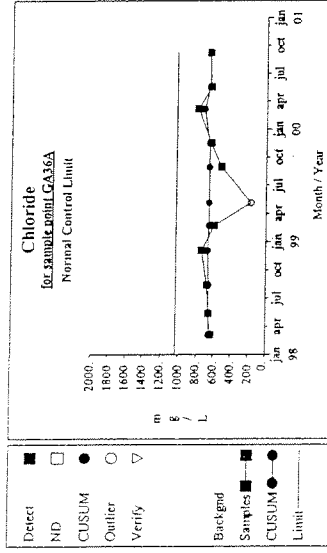
Graph 31



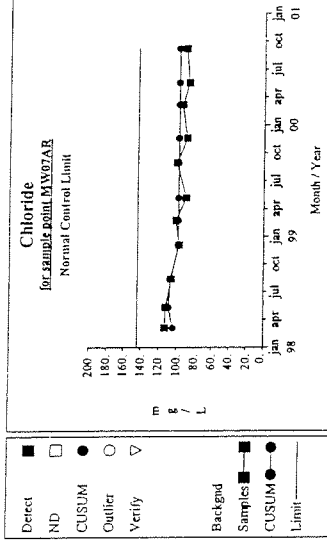
Graph 32



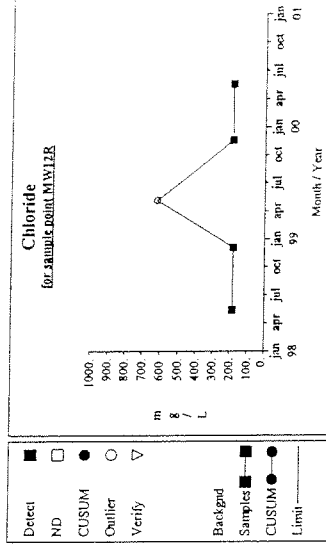
Graph 33



Graph 34



Graph 35



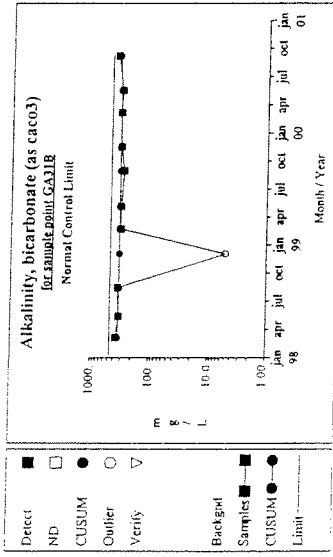
Graph 36

APPENDIX

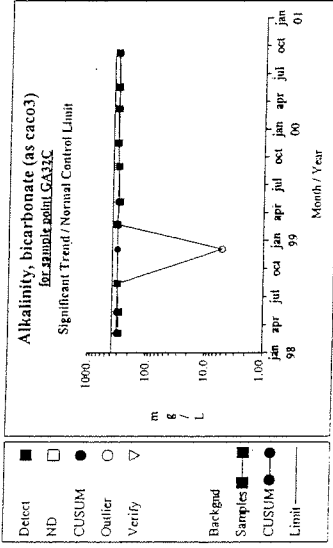
Site-Specific Results

Intra-Well Comparisons

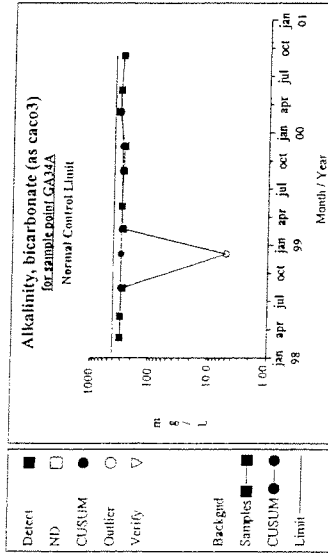
Intra-Well Control Charts



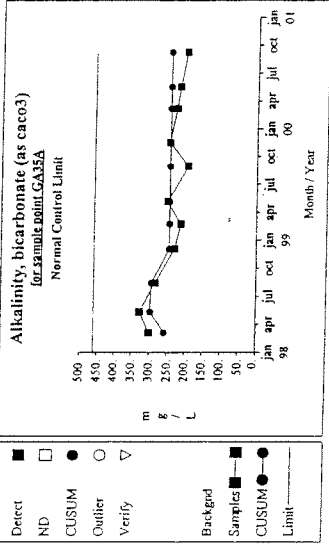
Graph 1



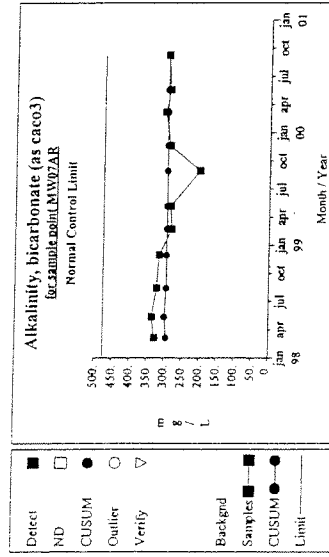
Graph 2



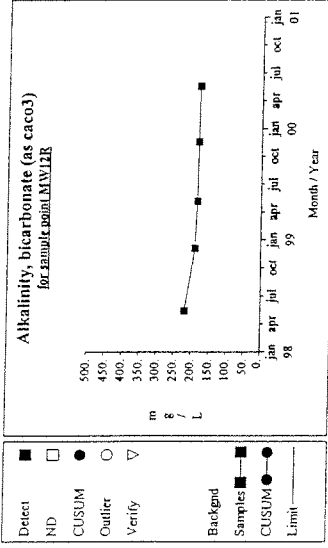
Graph 3



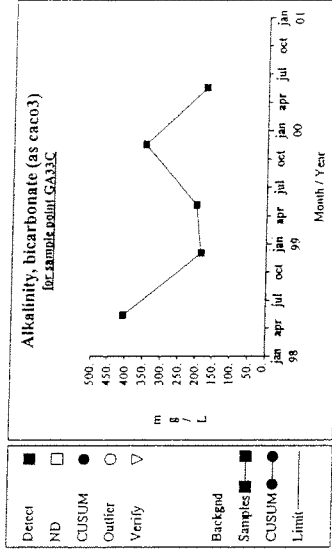
Graph 4



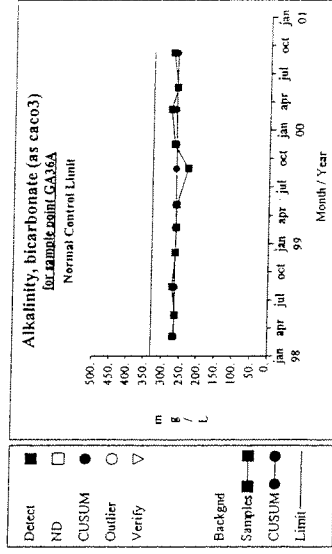
Graph 5



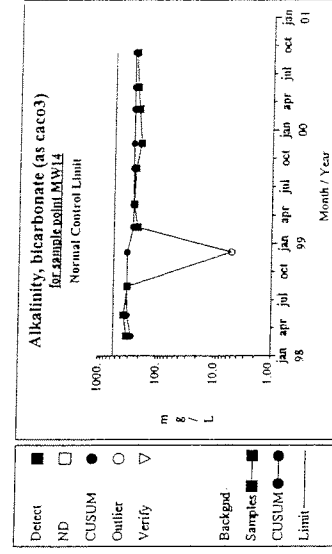
Graph 6



Graph 7

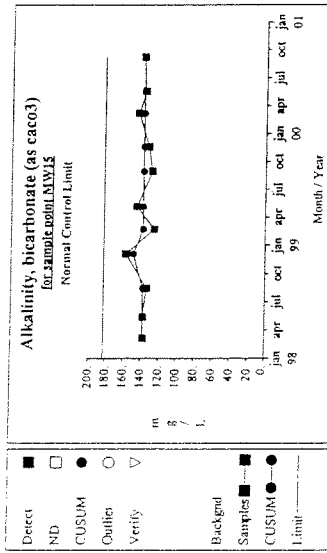


Graph 8

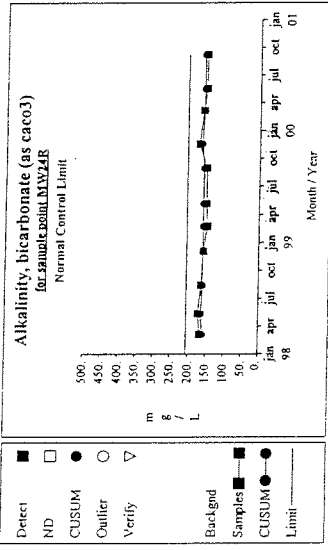


Graph 9

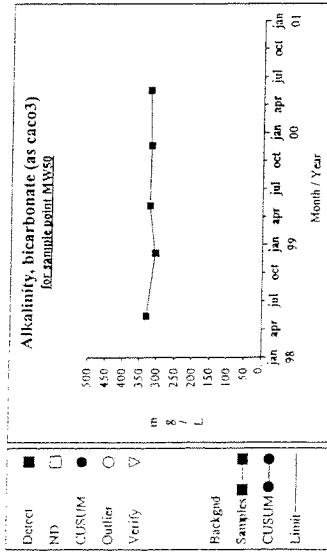
Intra-Well Control Charts



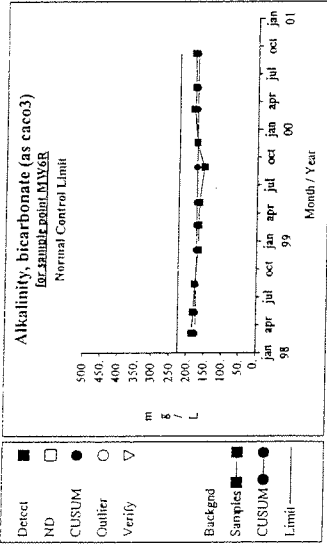
Graph 10



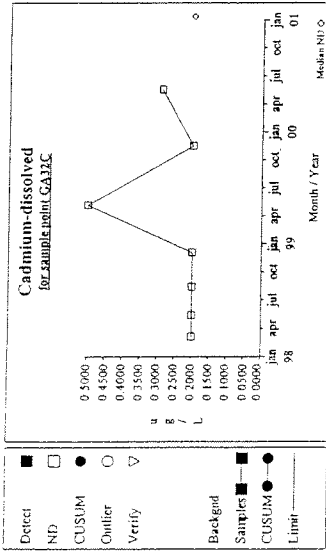
Graph 11



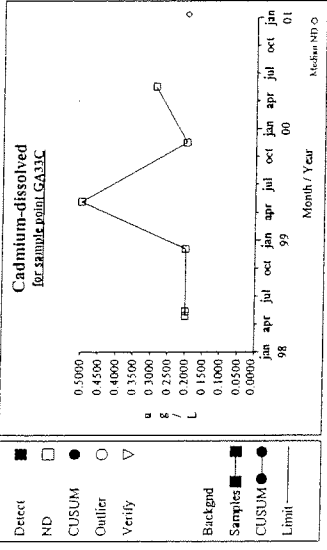
Graph 12



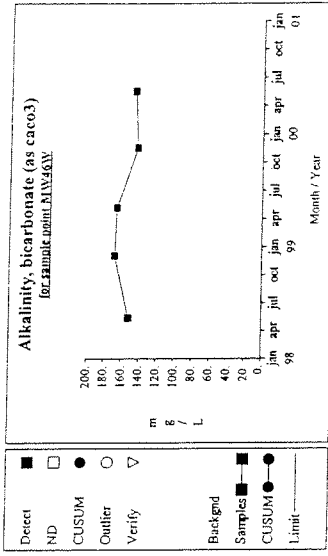
Graph 13



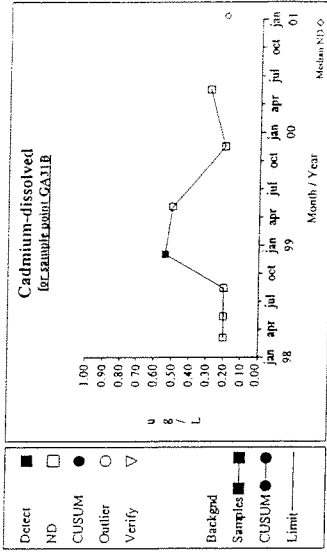
Graph 14



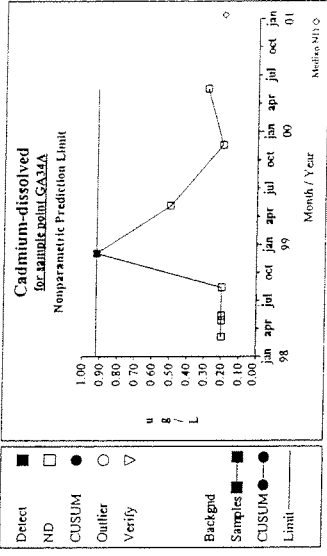
Graph 15



Graph 16

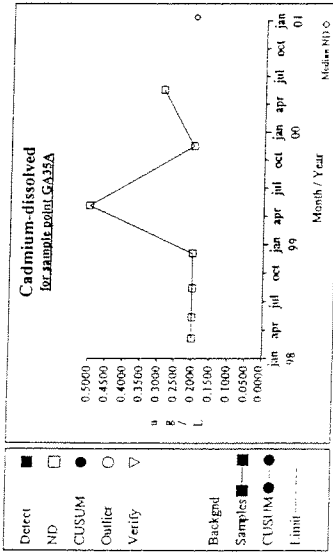


Graph 17

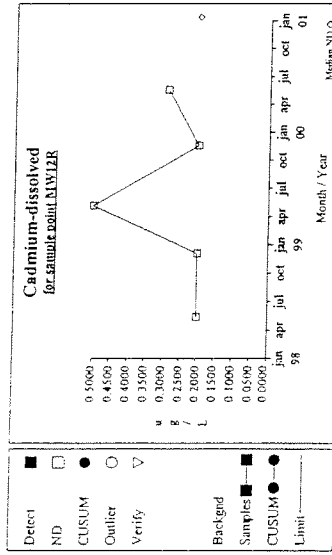


Graph 18

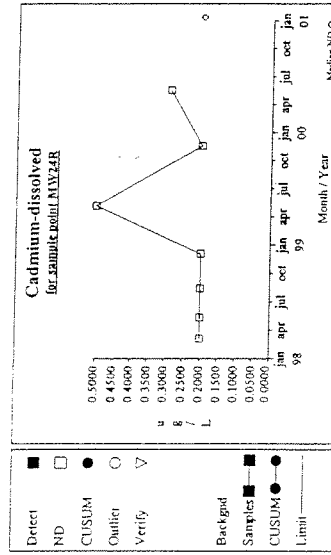
Intra-Well Control Charts



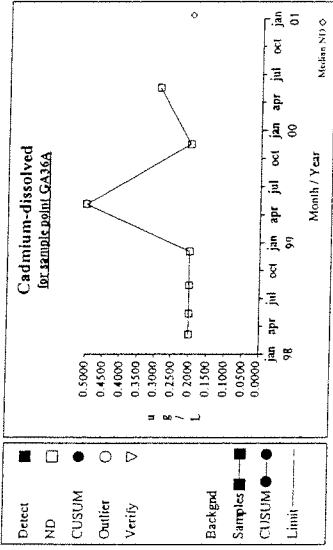
Graph 19



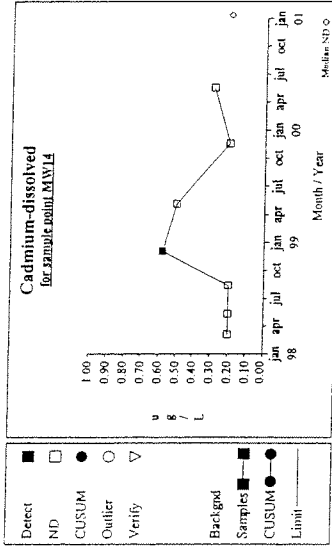
Graph 22



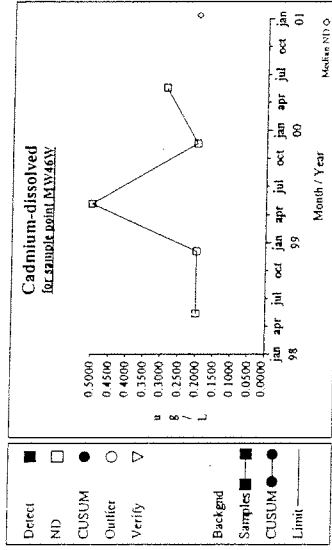
Graph 25



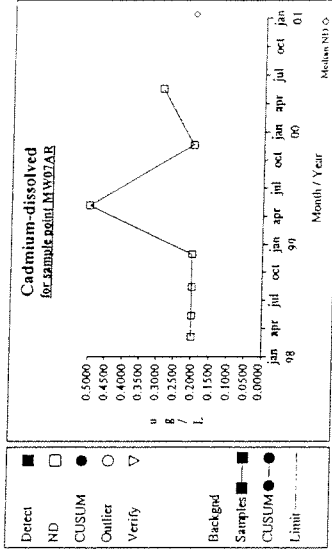
Graph 20



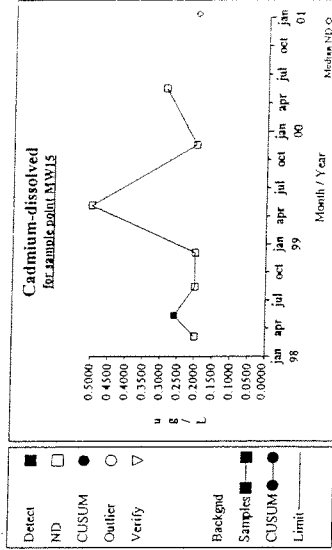
Graph 23



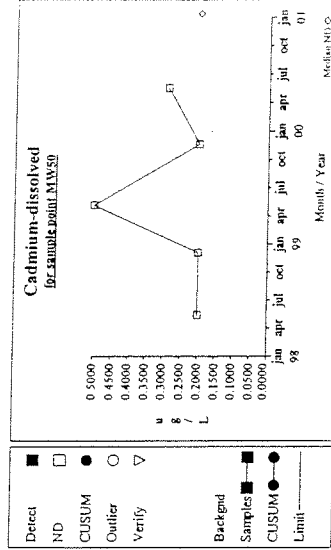
Graph 26



Graph 21

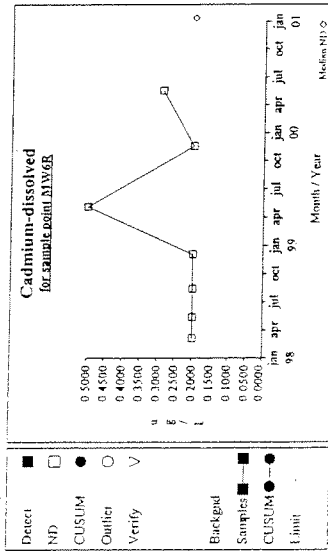


Graph 24

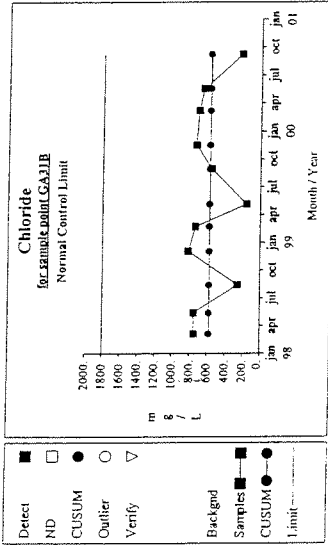


Graph 27

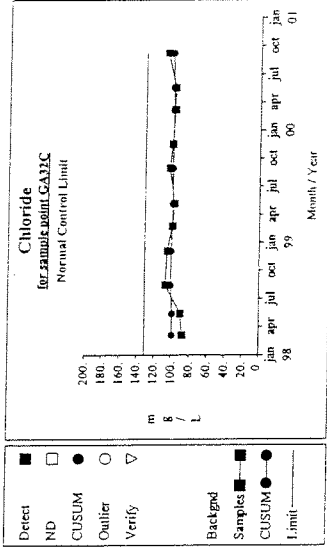
Intra-Well Control Charts



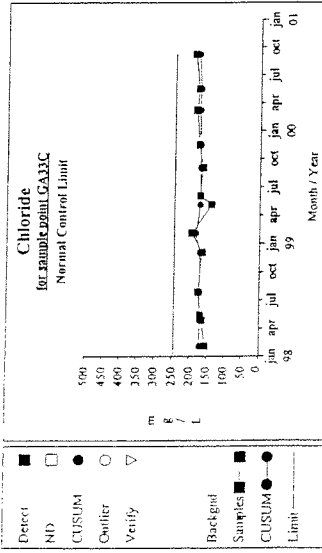
Graph 28



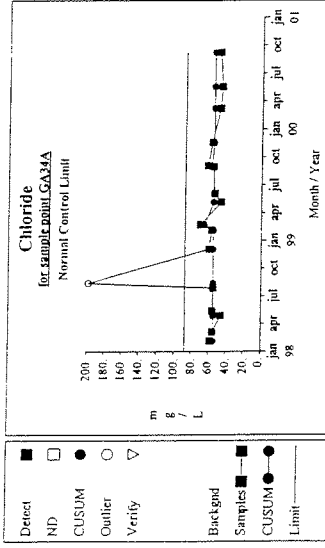
Graph 29



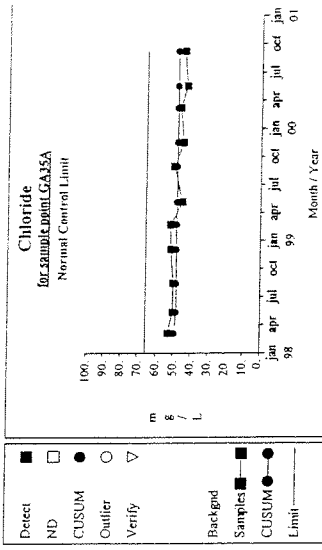
Graph 30



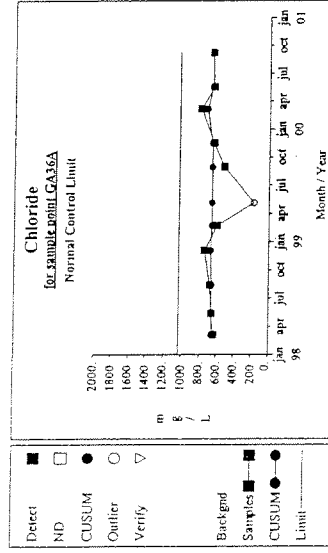
Graph 31



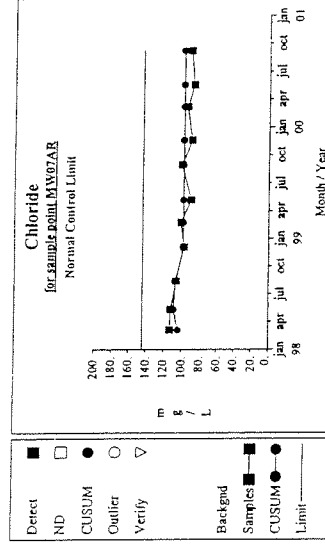
Graph 32



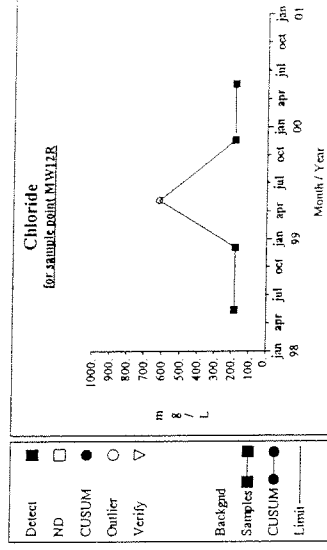
Graph 33



Graph 34

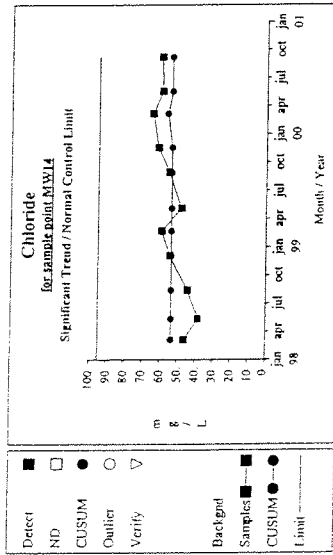


Graph 35

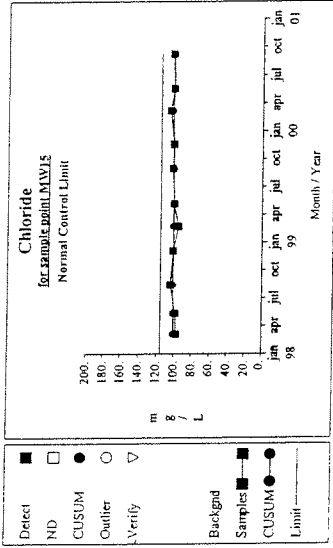


Graph 36

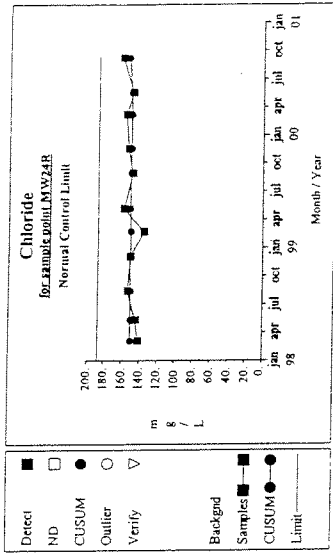
Intra-Well Control Charts



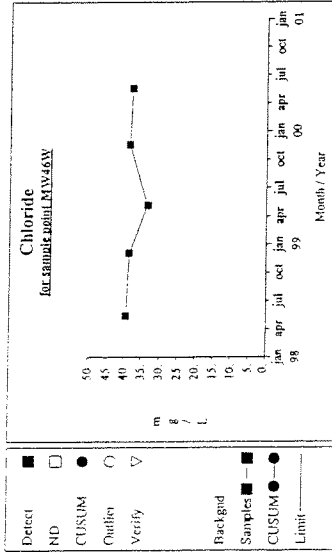
Graph 37



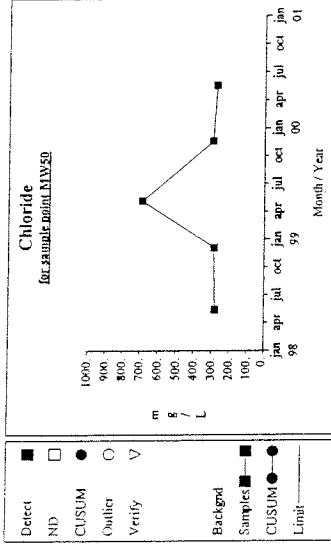
Graph 38



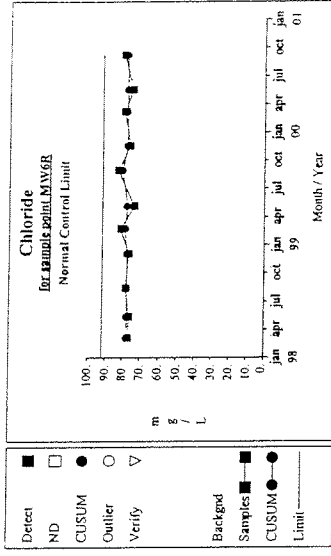
Graph 39



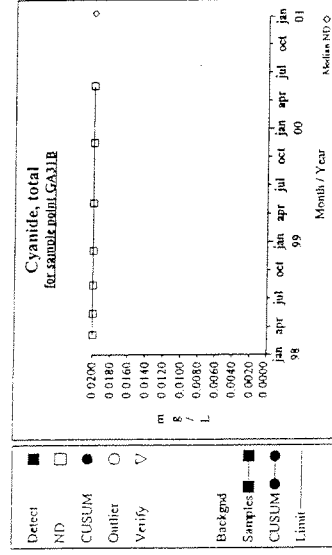
Graph 40



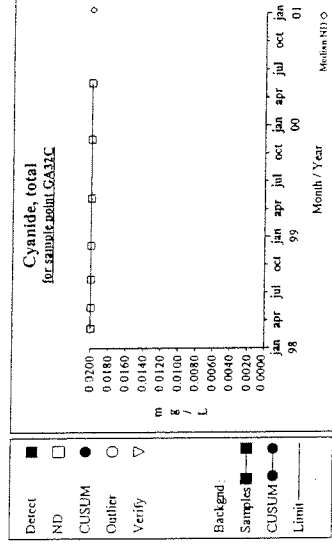
Graph 41



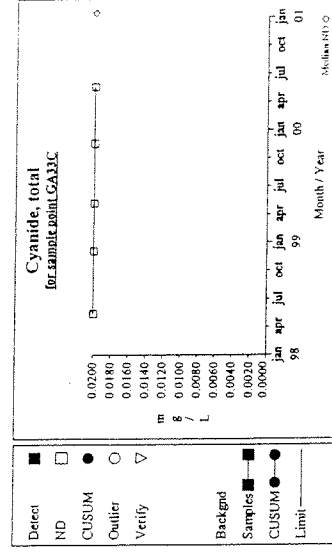
Graph 42



Graph 43

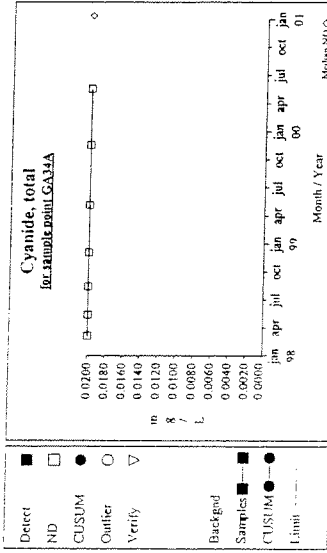


Graph 44

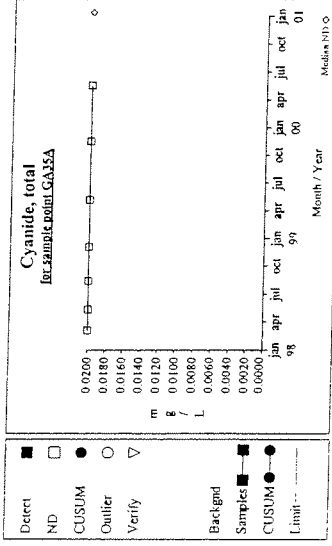


Graph 45

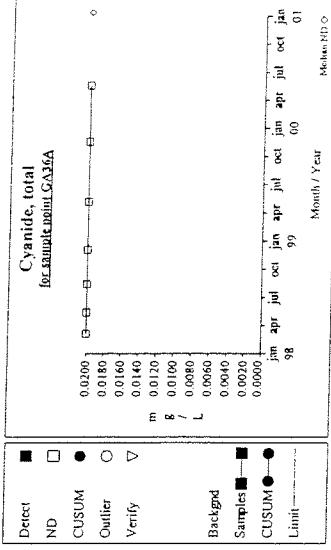
Intra-Well Control Charts



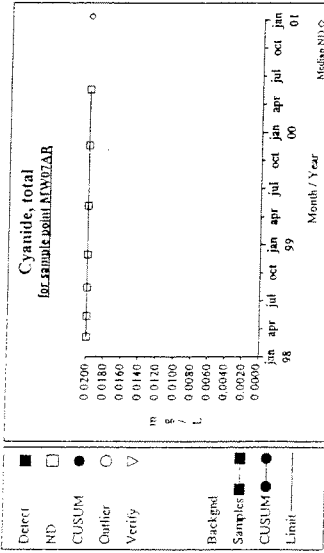
Graph 46



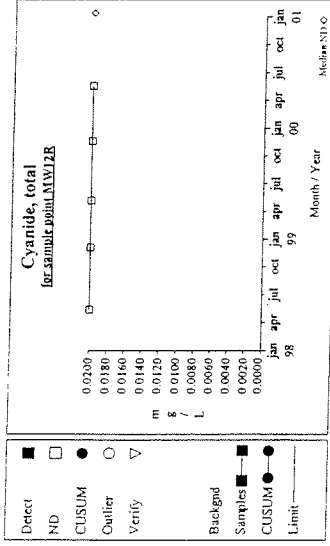
Graph 47



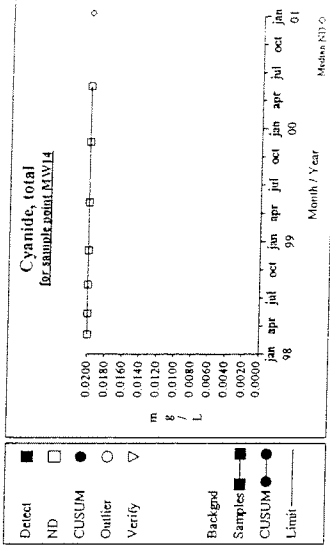
Graph 48



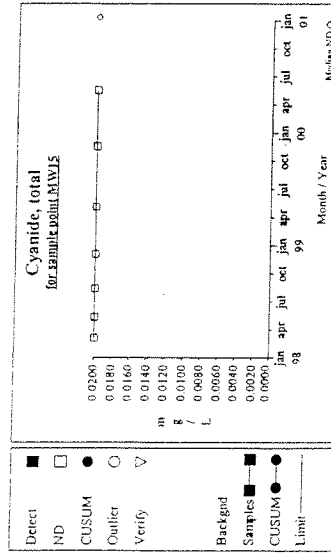
Graph 49



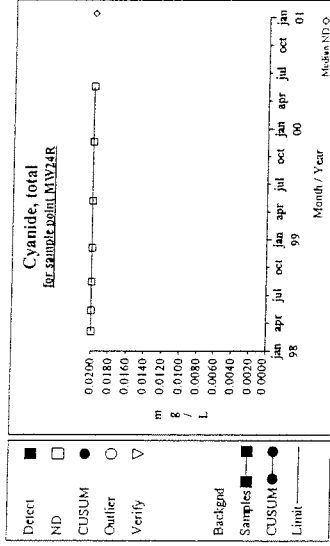
Graph 50



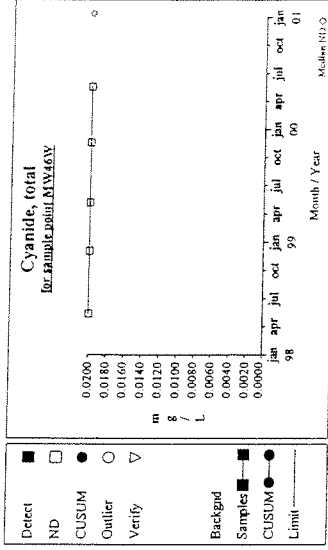
Graph 51



Graph 53

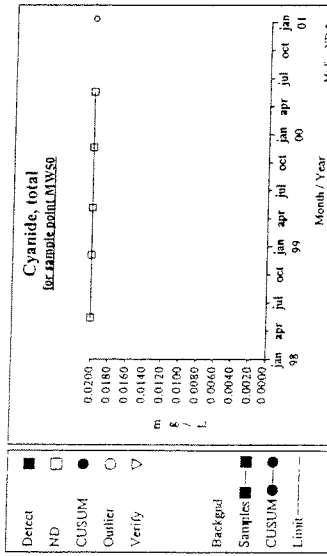


Graph 54

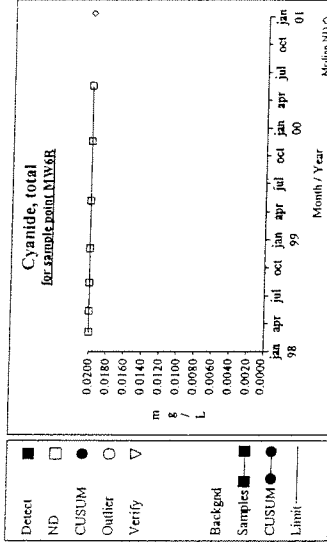


Graph 55

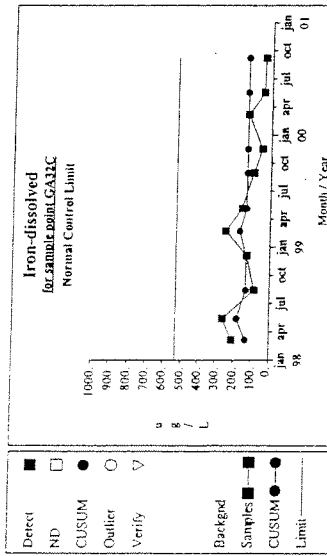
Intra-Well Control Charts



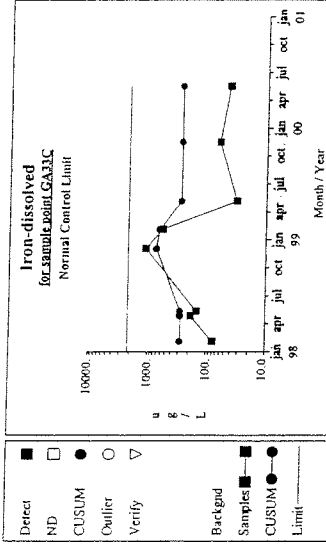
Graph 55



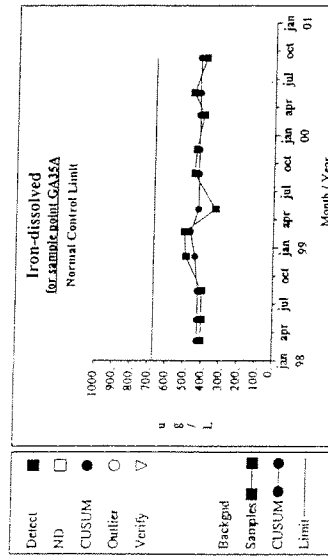
Graph 56



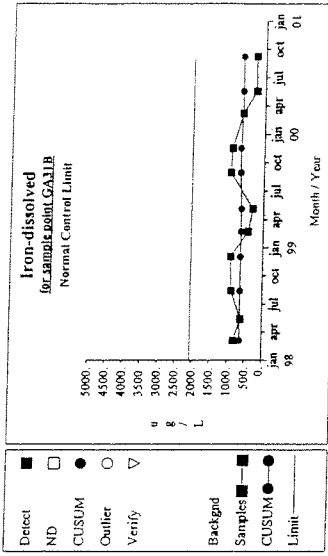
Graph 58



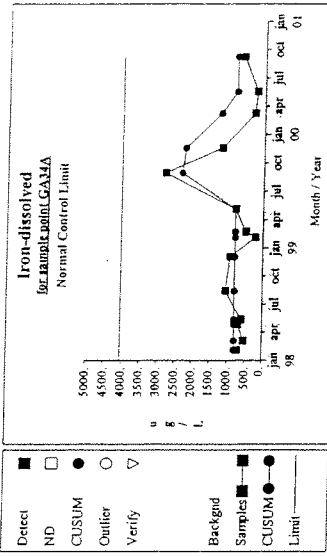
Graph 59



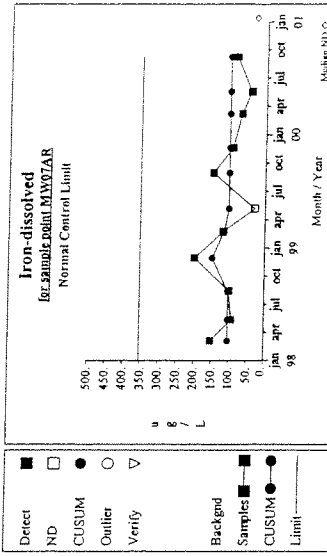
Graph 61



Graph 57

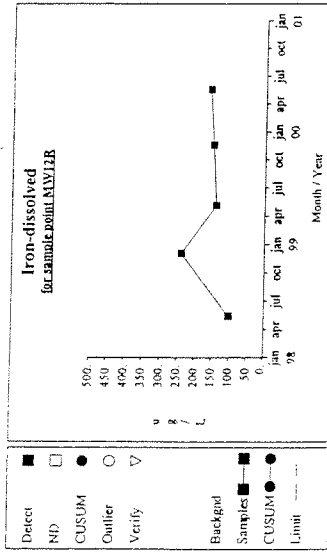


Graph 60

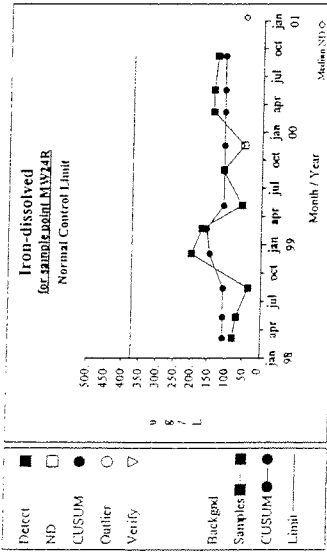


Graph 63

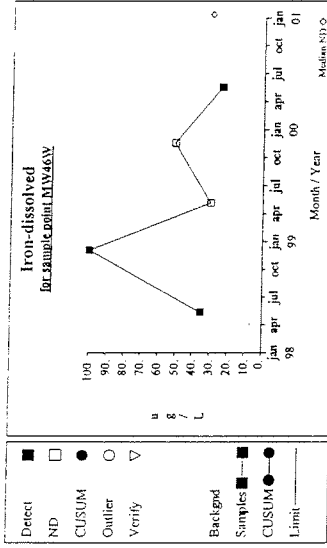
Intra-Well Control Charts



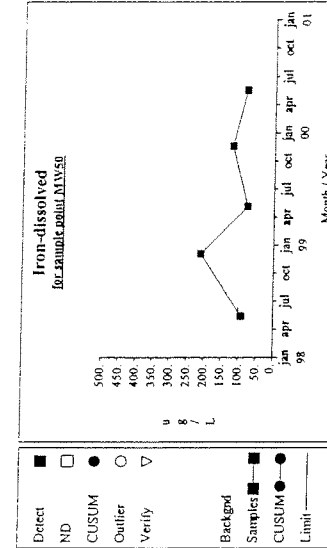
Graph 64



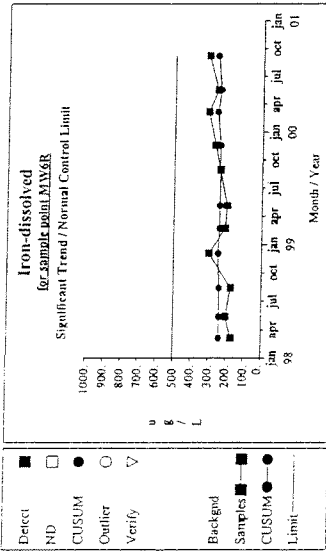
Graph 65



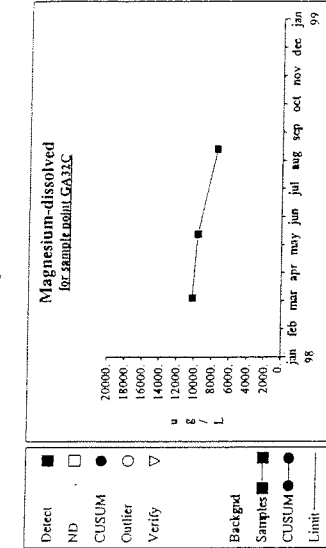
Graph 66



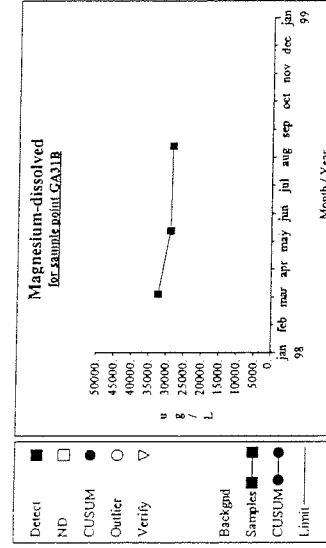
Graph 67



Graph 68



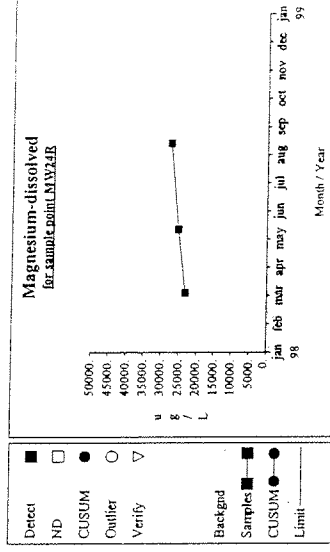
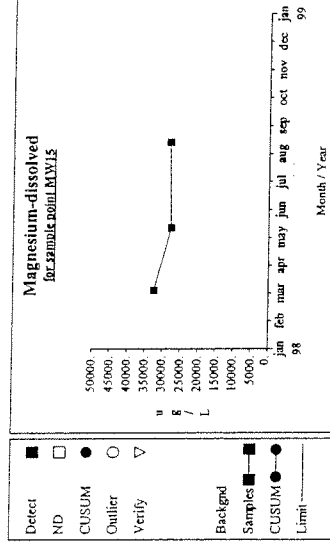
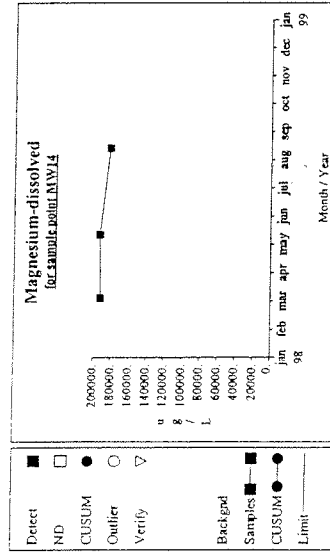
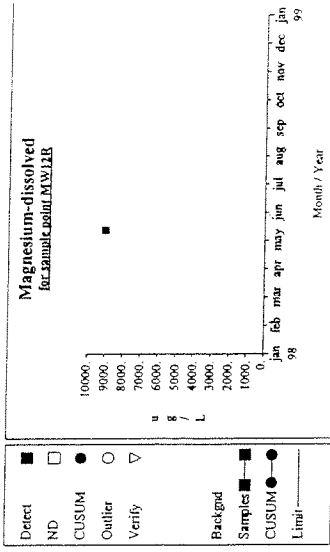
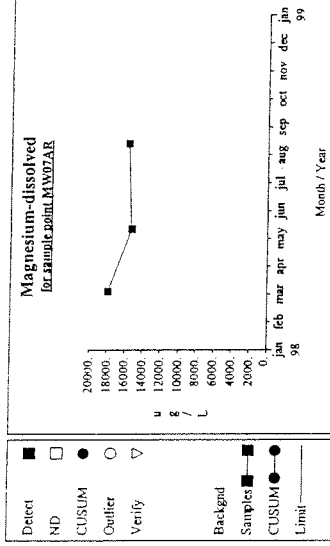
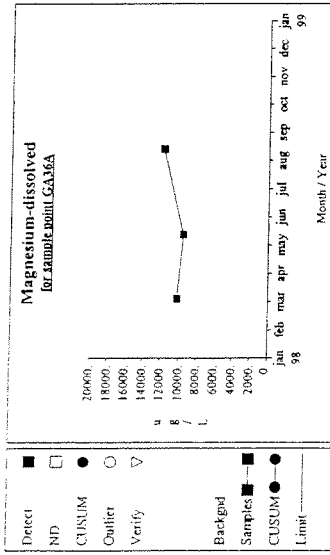
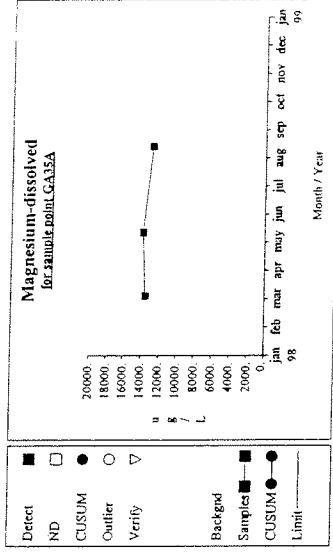
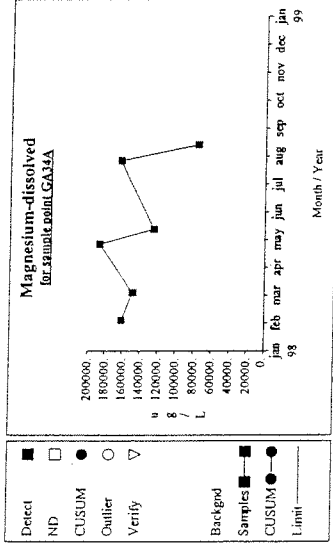
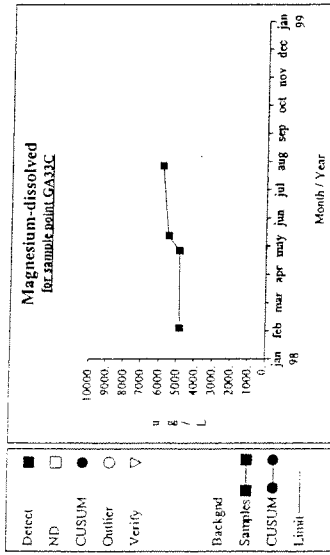
Graph 69



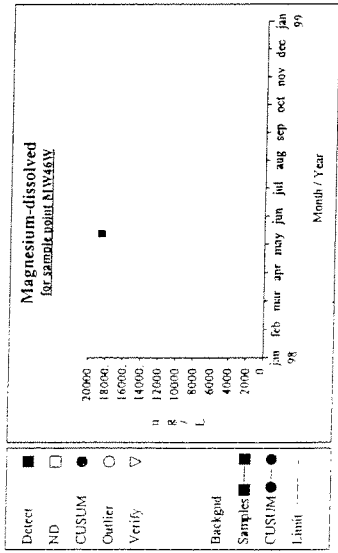
Graph 70

Graph 71

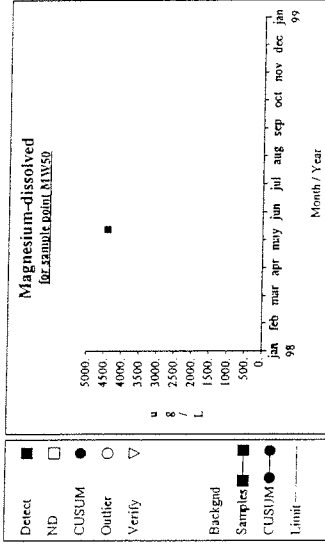
Intra-Well Control Charts



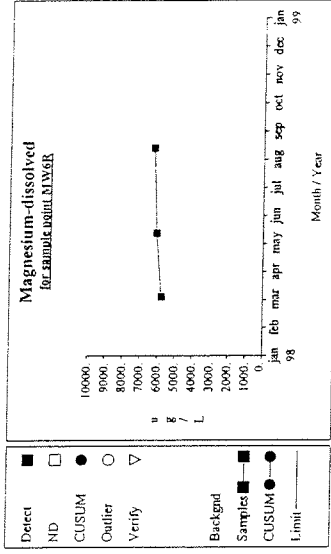
Intra-Well Control Charts



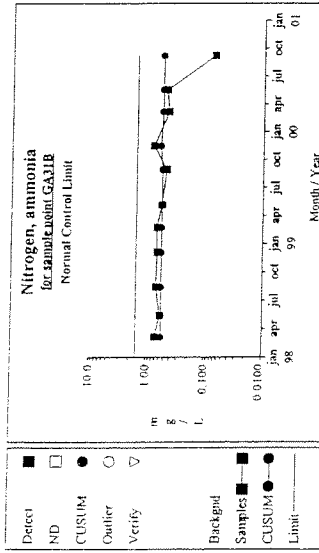
Graph 82



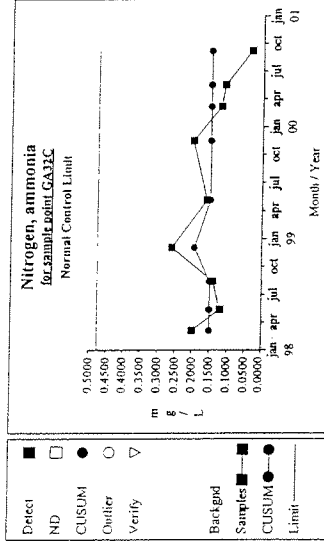
Graph 83



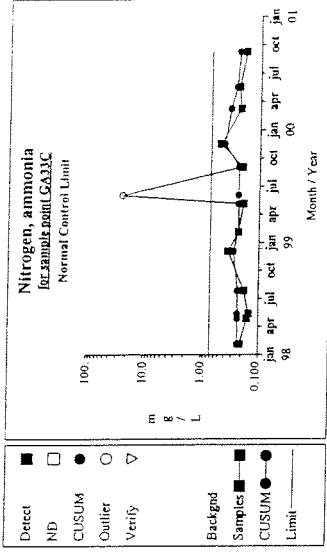
Graph 84



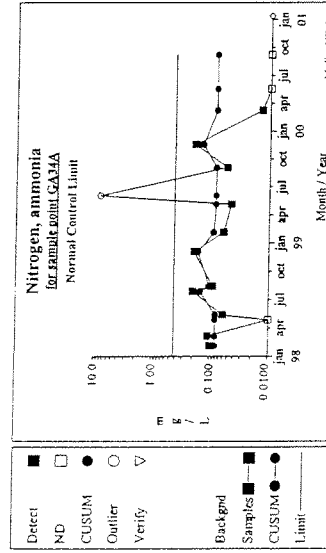
Graph 85



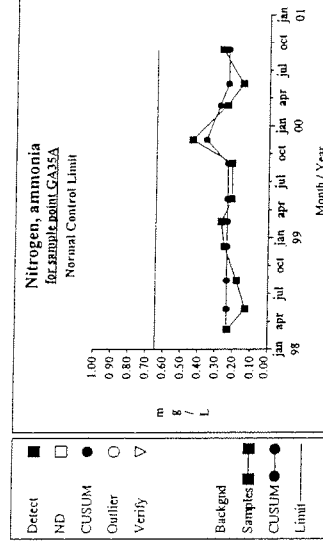
Graph 86



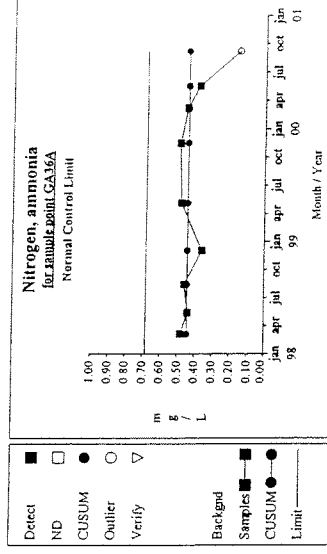
Graph 87



Graph 88

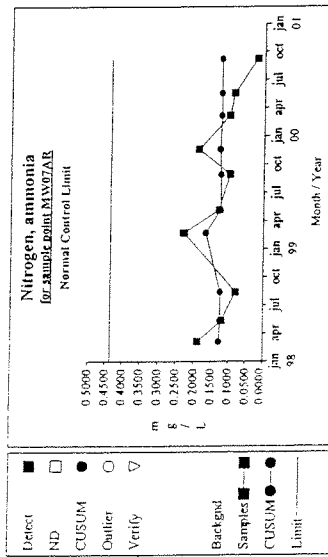


Graph 89

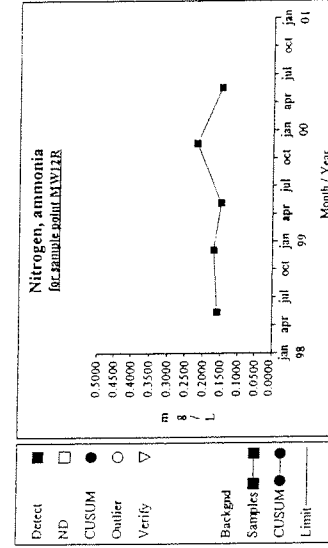


Graph 90

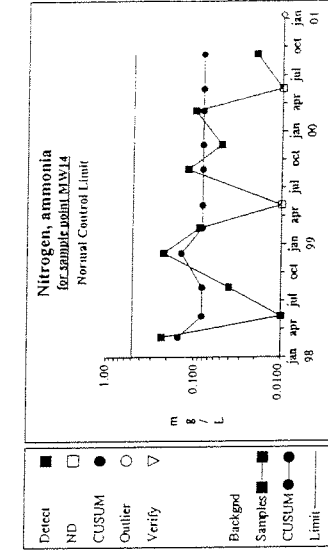
Intra-Well Control Charts



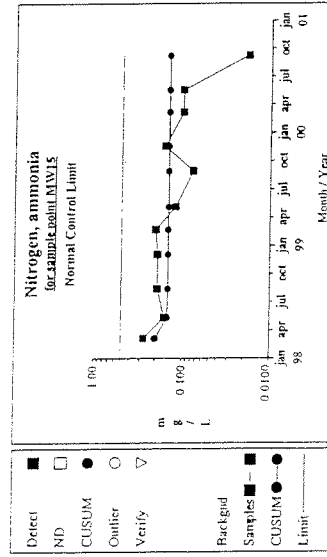
Graph 91



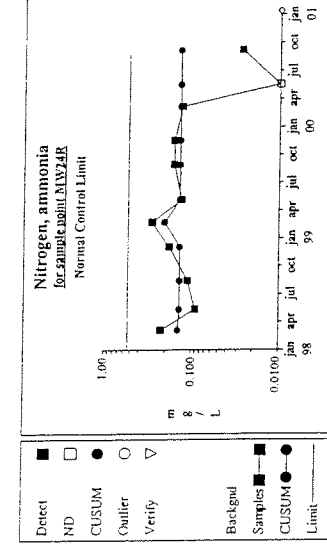
Graph 92



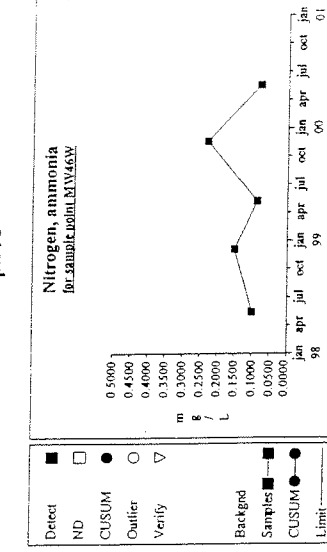
Graph 93



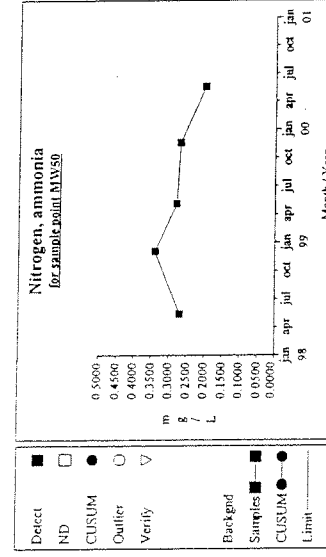
Graph 94



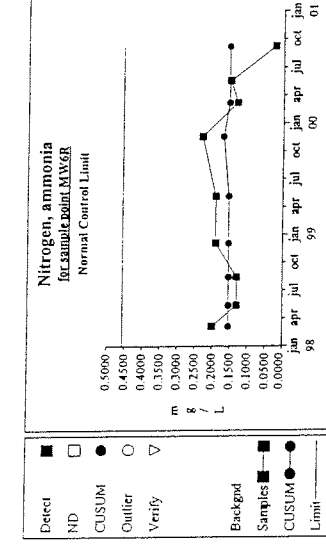
Graph 95



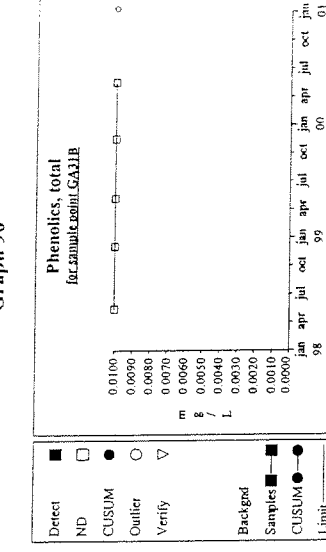
Graph 96



Graph 97

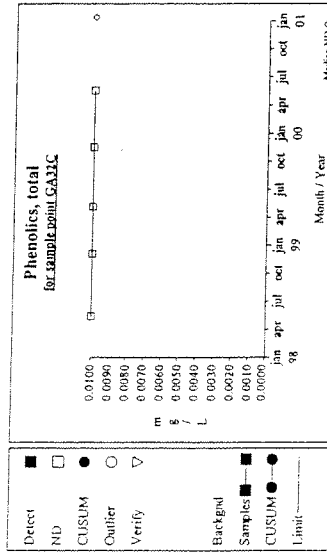


Graph 98

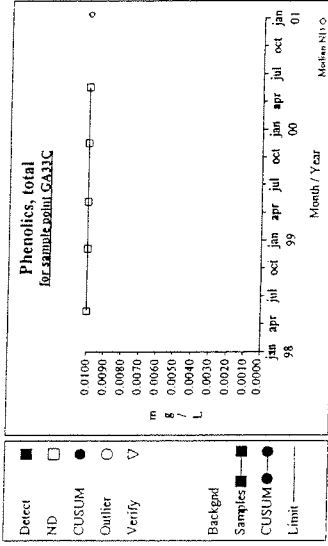


Graph 99

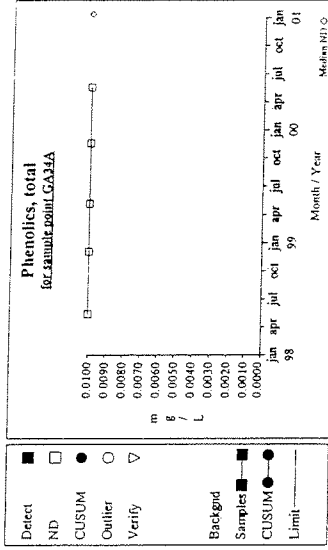
Intra-Well Control Charts



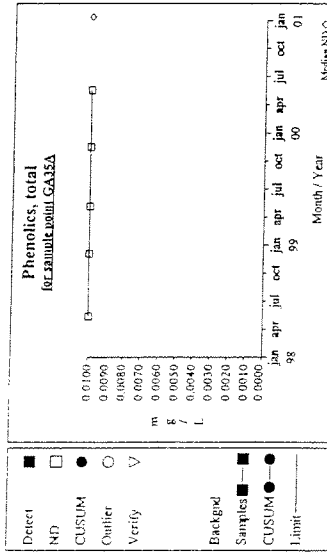
Graph 100



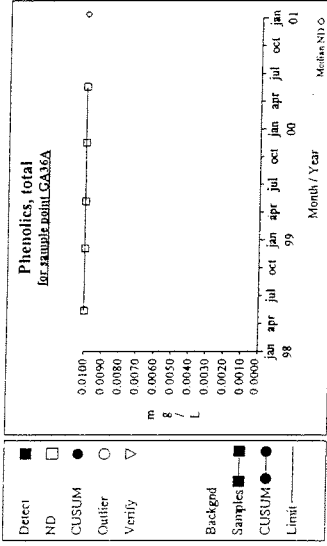
Graph 101



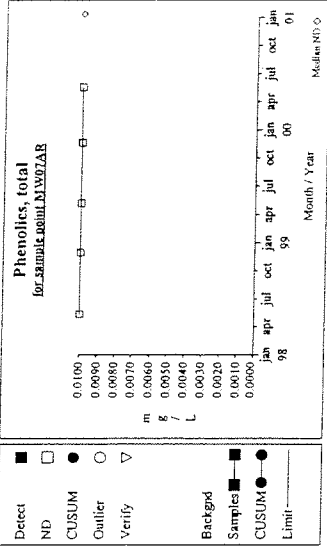
Graph 102



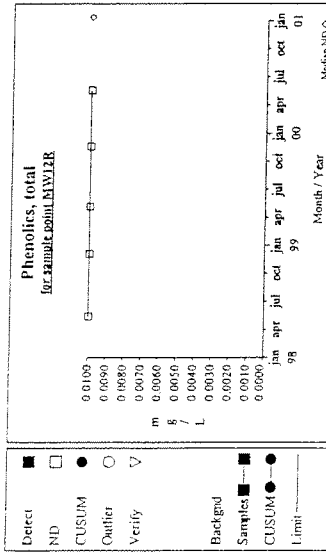
Graph 103



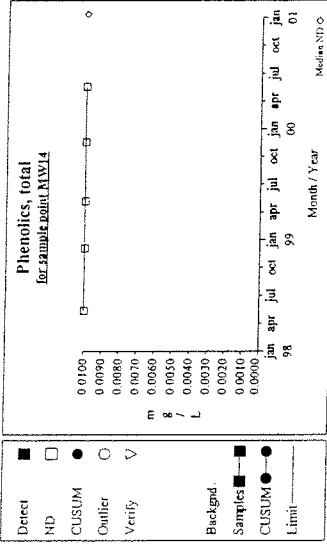
Graph 104



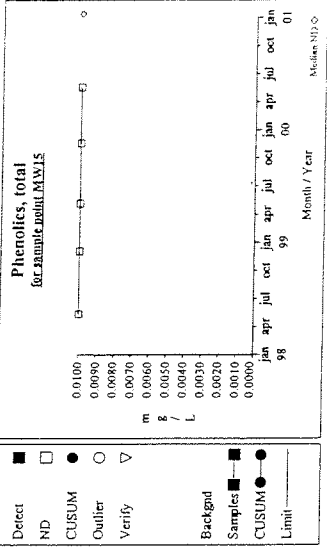
Graph 105



Graph 106

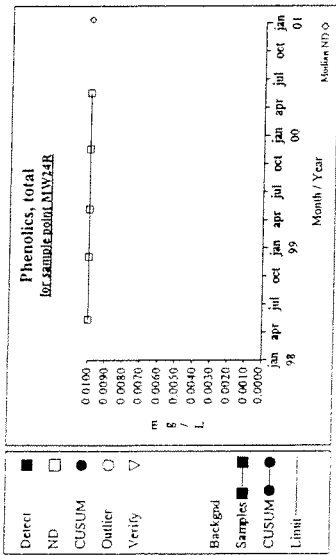


Graph 107

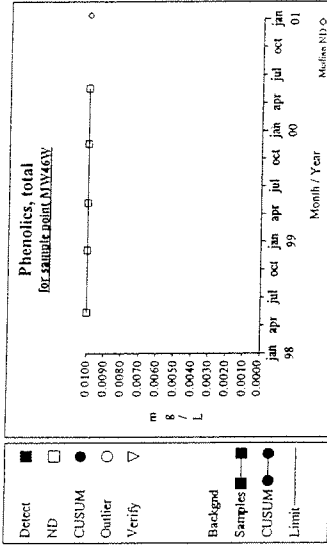


Graph 108

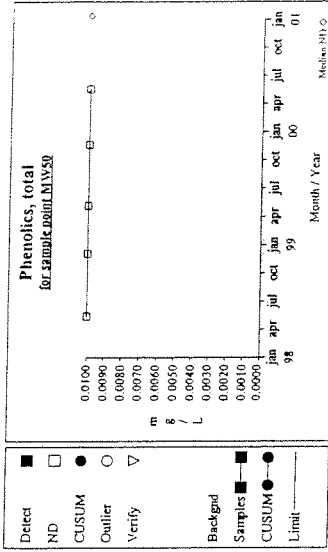
Intra-Well Control Charts



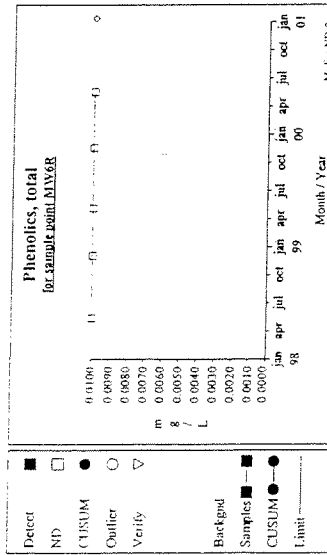
Graph 109



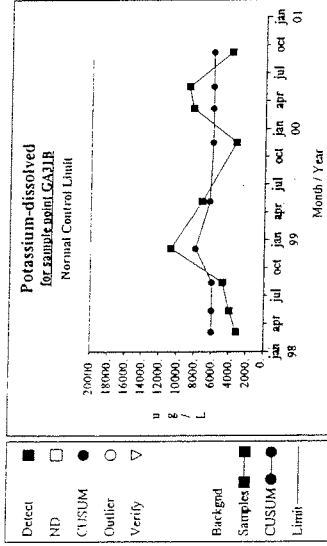
Graph 110



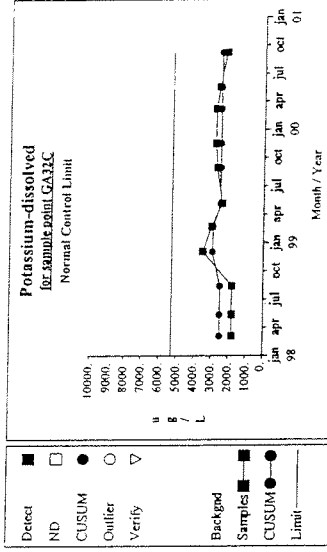
Graph 111



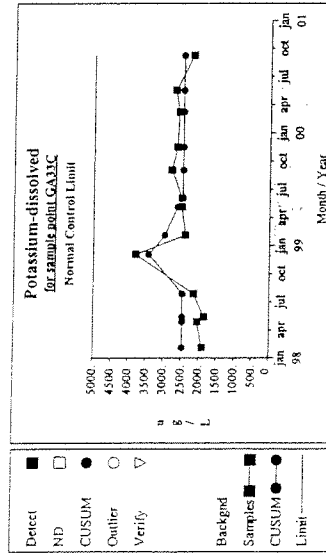
Graph 112



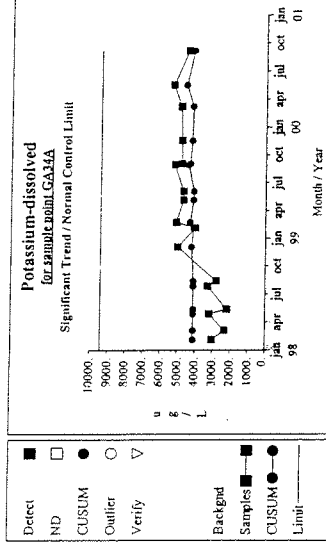
Graph 113



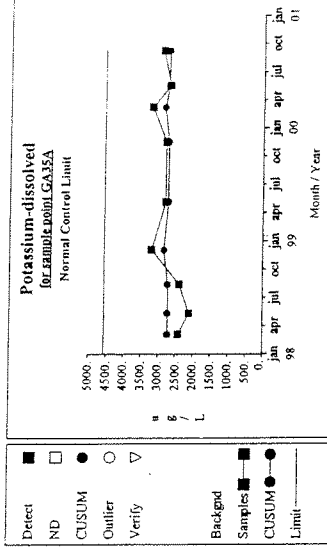
Graph 114



Graph 115

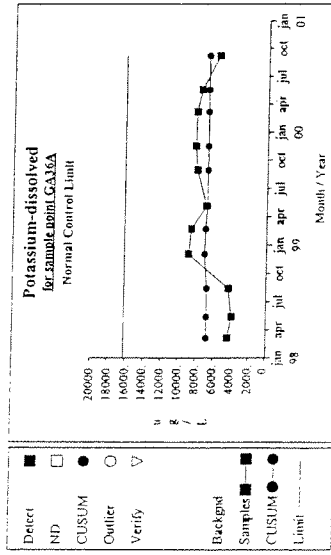


Graph 116

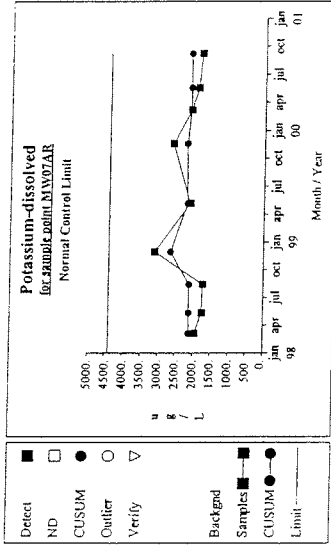


Graph 117

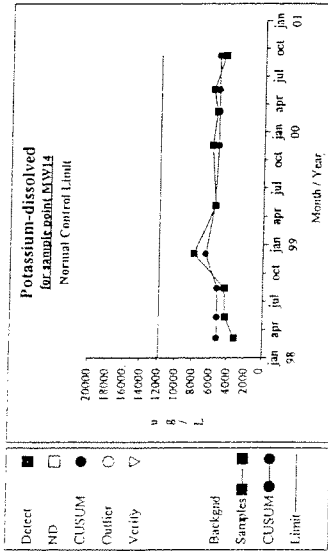
Intra-Well Control Charts



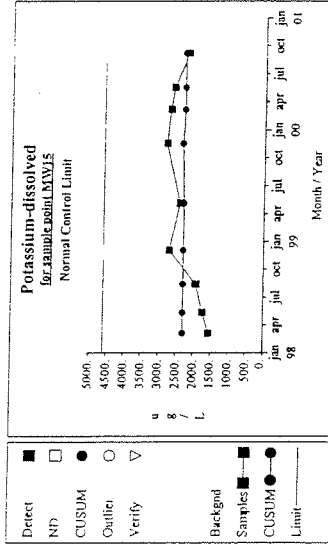
Graph 118



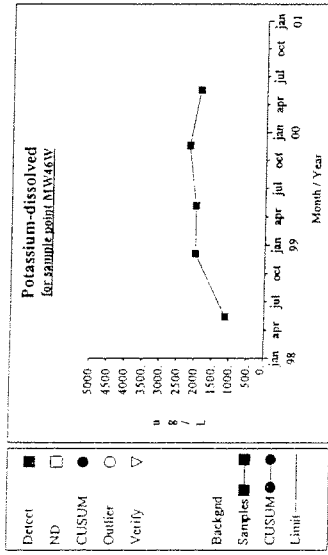
Graph 119



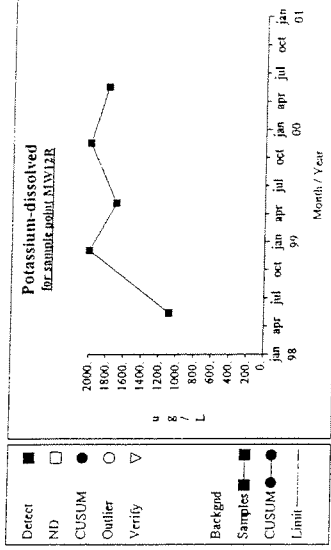
Graph 121



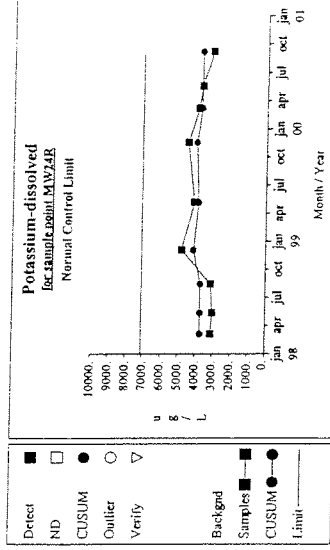
Graph 122



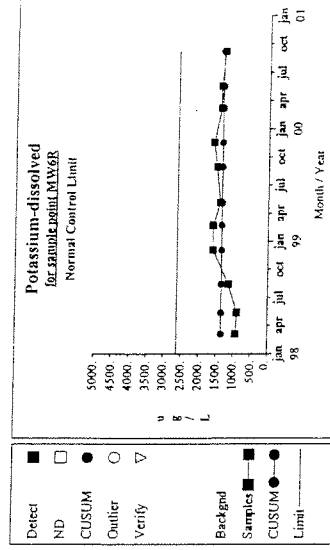
Graph 124



Graph 120

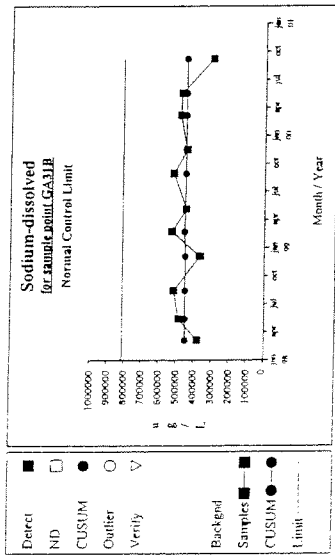


Graph 123

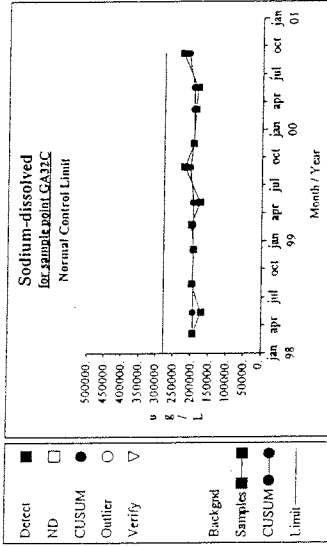


Graph 126

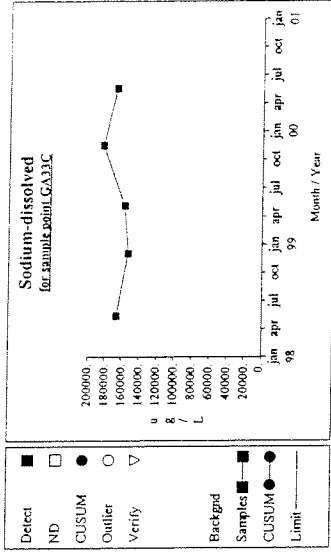
Intra-Well Control Charts



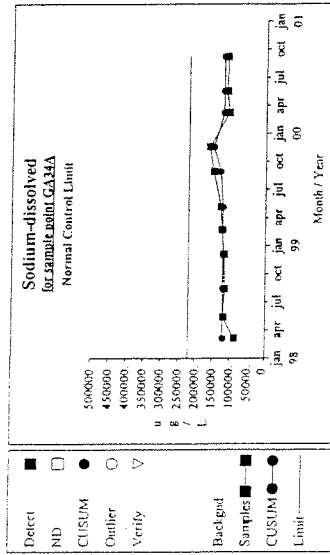
Graph 127



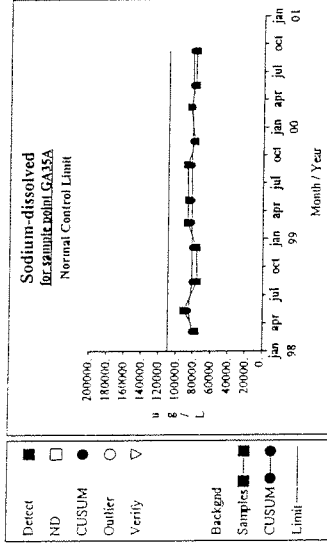
Graph 128



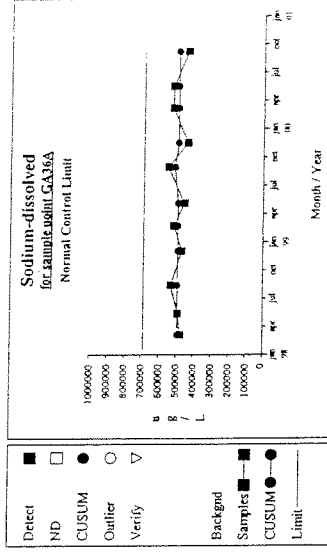
Graph 129



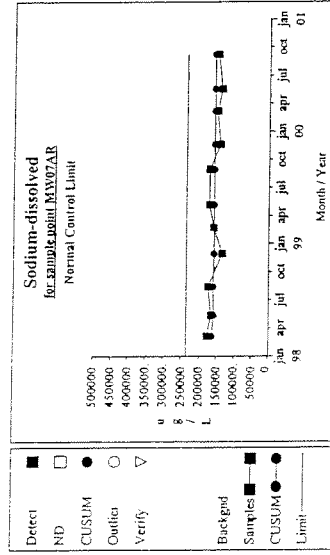
Graph 130



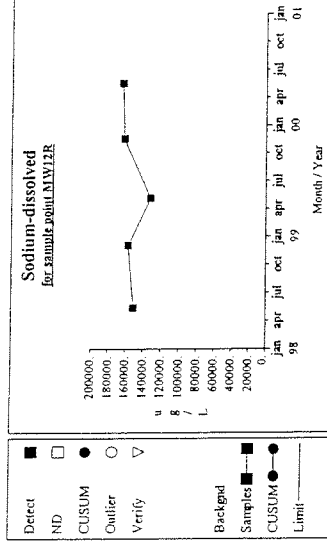
Graph 131



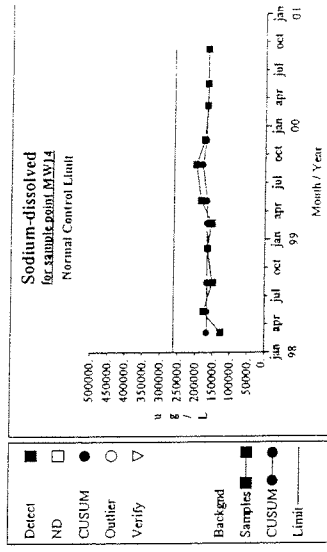
Graph 132



Graph 133

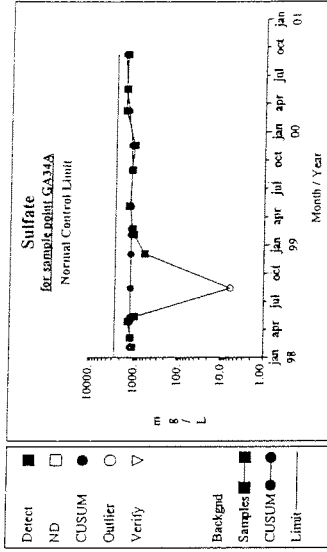
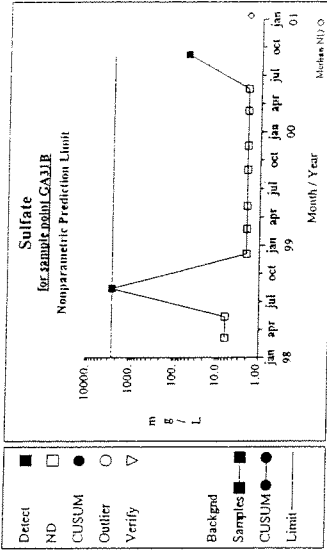
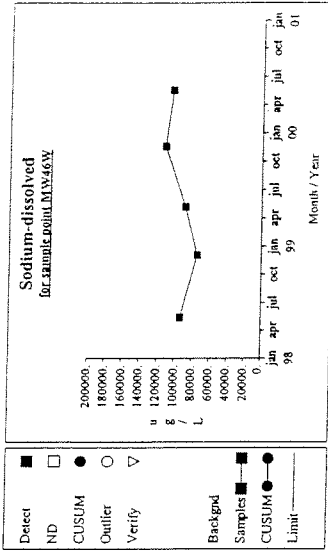
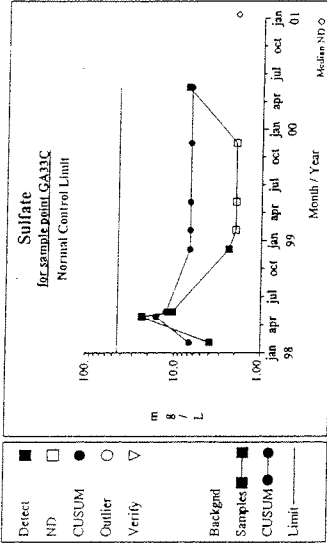
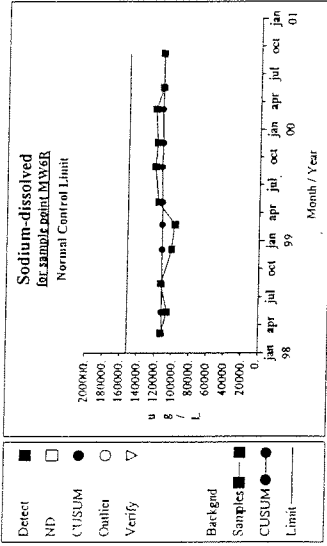
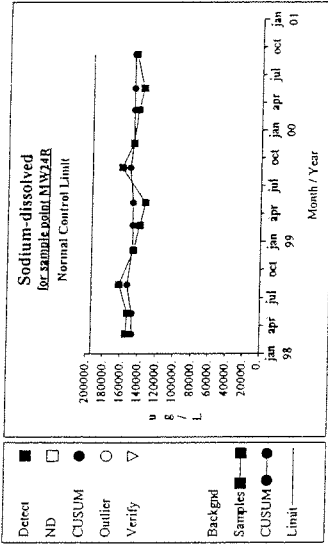
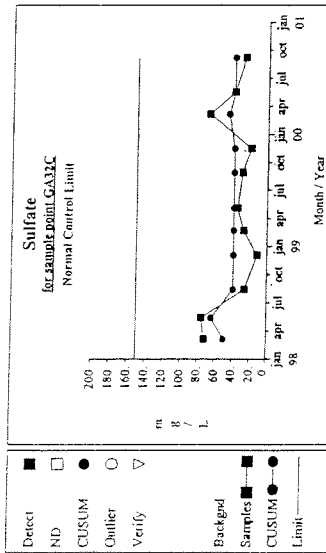
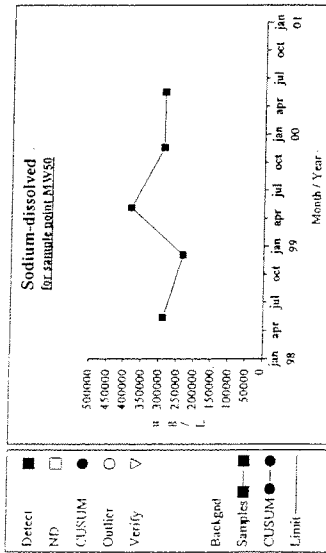
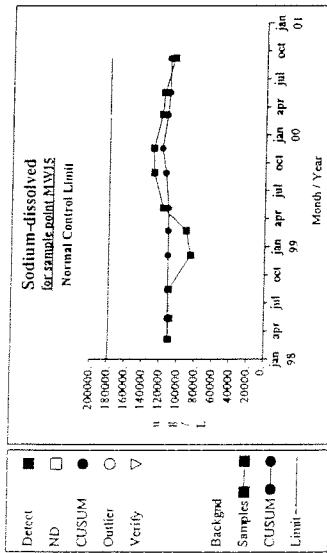


Graph 134

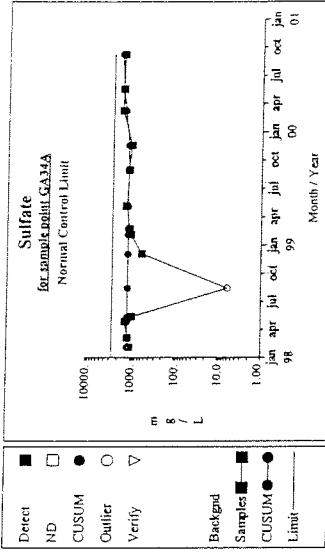
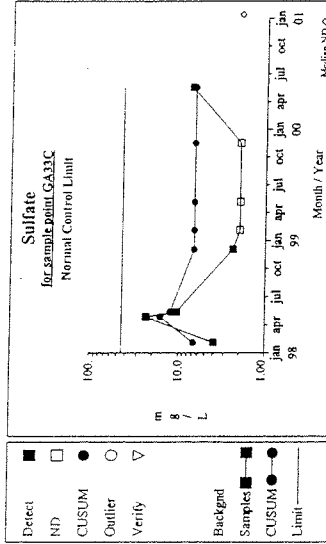
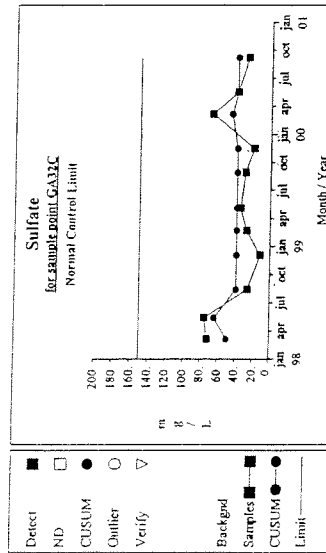
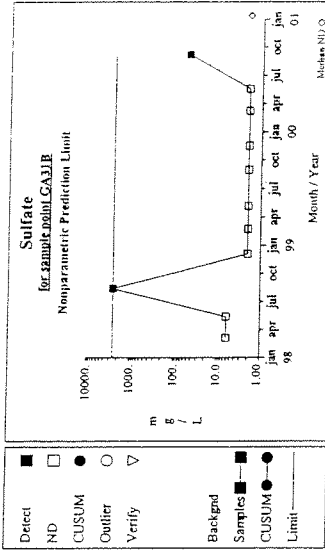
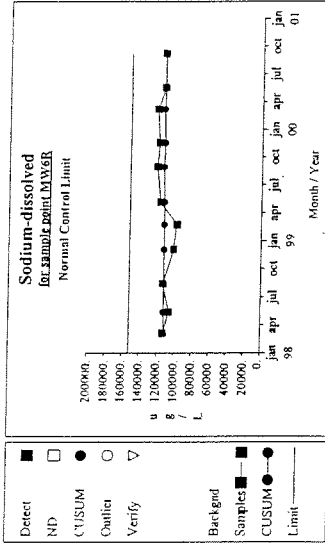
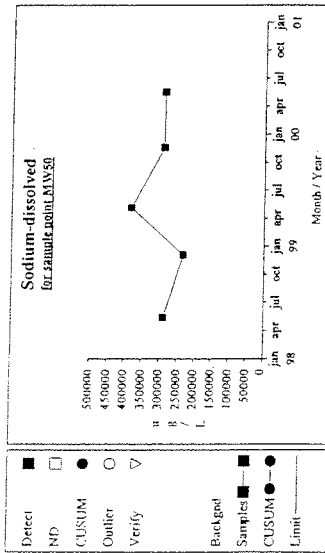
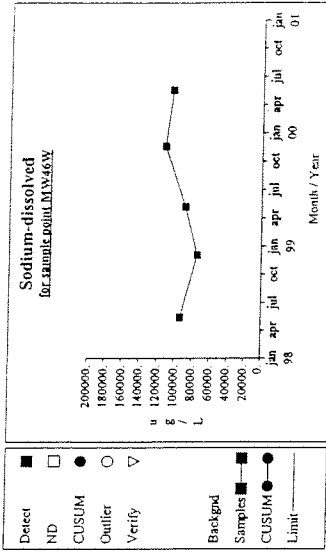
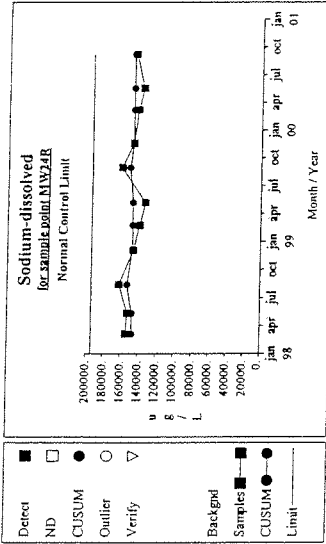
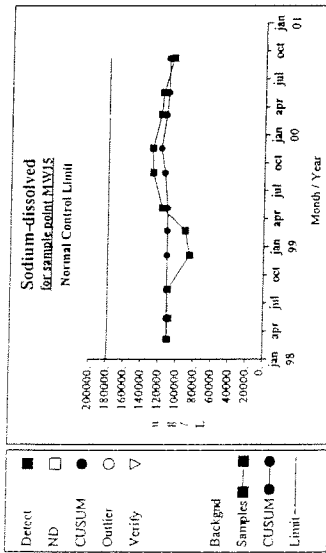


Graph 135

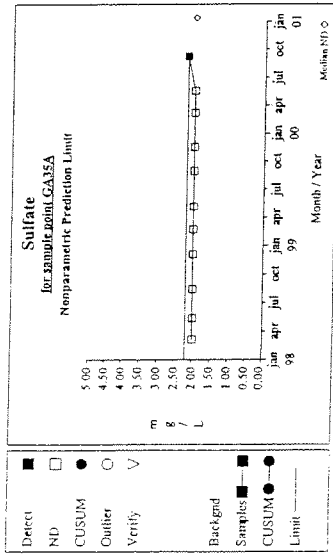
Intra-Well Control Charts



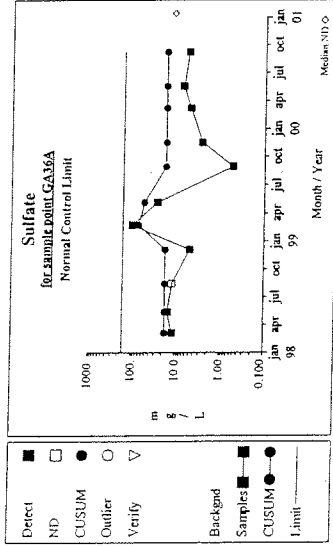
Intra-Well Control Charts



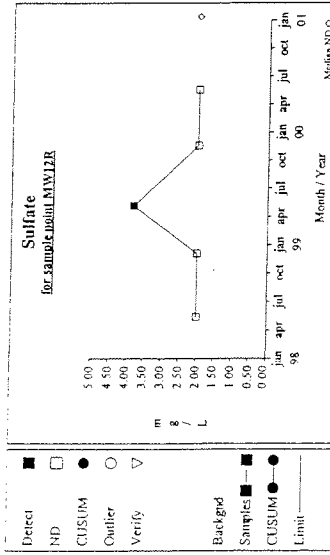
Intra-Well Control Charts



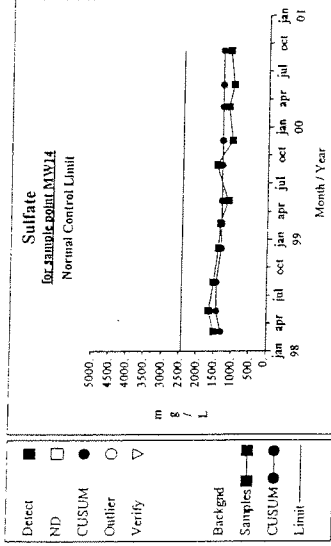
Graph 143



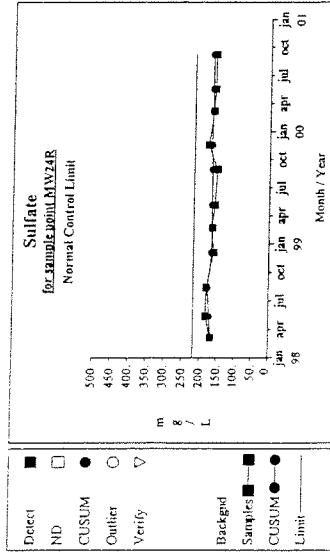
Graph 144



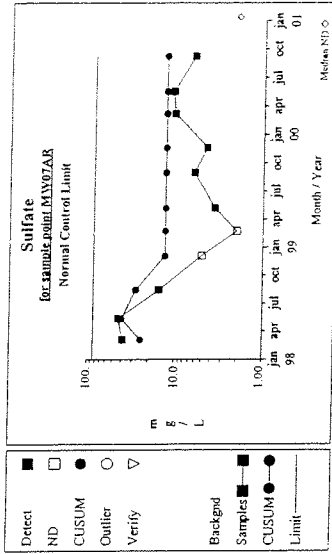
Graph 145



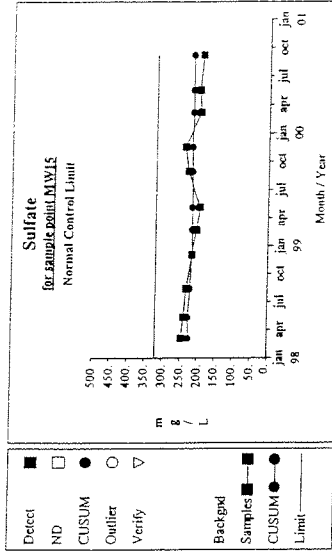
Graph 146



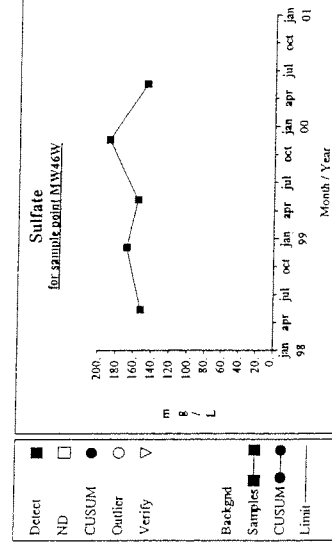
Graph 147



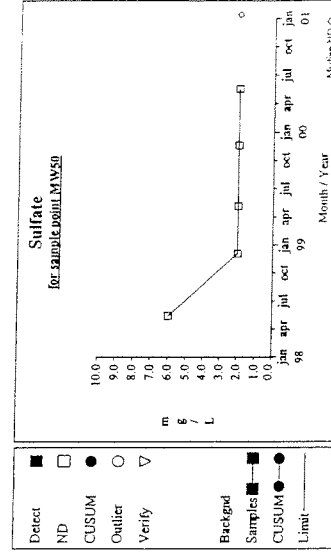
Graph 148



Graph 149



Graph 150

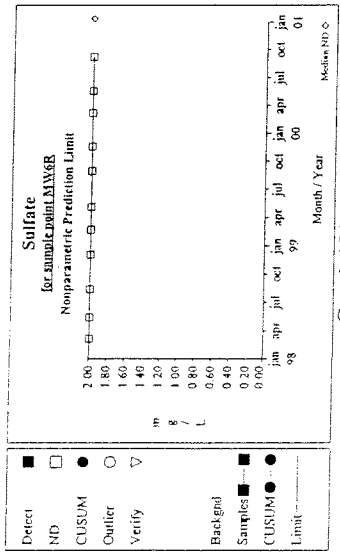


Graph 151

Woodland Meadows [north]

Analysis prepared on: 2/14/01

Intra-Well Control Charts



Graph 154

Prepared by: Robert D. Gibbons LTD.

Table 1

Summary Statistics and Intermediate Computations for Combined Shewhart-Cusum Control Charts

Constituent	Units	Well	N	Mean	SD	S(i-1)	S(i)
Alkalinity, bicarbonate (as cacO3)	mg/L	GA31B	10	325.0000	28.3039	325.0000	343.6961
Alkalinity, bicarbonate (as cacO3)	mg/L	GA32C	10	309.0000	14.4837	309.0000	315.5163
Alkalinity, bicarbonate (as cacO3)	mg/L	GA33C	5				
Alkalinity, bicarbonate (as cacO3)	mg/L	GA34A	10	305.3000	22.7159	333.2682	308.2524
Alkalinity, bicarbonate (as cacO3)	mg/L	GA35A	11	245.9091	42.6953	245.9091	245.9091
Alkalinity, bicarbonate (as cacO3)	mg/L	GA36A	11	265.0000	12.9615	265.0000	265.0000
Alkalinity, bicarbonate (as cacO3)	mg/L	MW07AR	11	294.4545	36.3686	294.4545	294.4545
Alkalinity, bicarbonate (as cacO3)	mg/L	MW12R	5				
Alkalinity, bicarbonate (as cacO3)	mg/L	MW14	10	257.0000	57.7677	257.0000	257.0000
Alkalinity, bicarbonate (as cacO3)	mg/L	MW15	11	138.4545	8.8246	138.4545	138.4545
Alkalinity, bicarbonate (as cacO3)	mg/L	MW24R	11	158.9091	9.1483	158.9091	158.9091
Alkalinity, bicarbonate (as cacO3)	mg/L	MW46W	5				
Alkalinity, bicarbonate (as cacO3)	mg/L	MW50	5				
Alkalinity, bicarbonate (as cacO3)	mg/L	MW6R	11	174.7273	9.9508	174.7273	174.7273
Cadmium-dissolved	ug/L	GA31B	7				
Cadmium-dissolved	ug/L	GA32C	7				
Cadmium-dissolved	ug/L	GA33C	6				
Cadmium-dissolved	ug/L	GA34A	8				
Cadmium-dissolved	ug/L	GA35A	7				
Cadmium-dissolved	ug/L	GA36A	7				
Cadmium-dissolved	ug/L	MW07AR	7				
Cadmium-dissolved	ug/L	MW12R	5				
Cadmium-dissolved	ug/L	MW14	7				
Cadmium-dissolved	ug/L	MW15	7				
Cadmium-dissolved	ug/L	MW24R	7				

* - Insufficient Data

** - Detection Frequency < 25%

*** - Zero Variance

Table 1

Summary Statistics and Intermediate Computations
for Combined Shewhart-Cusum Control Charts

Limit
466.5195
381.4185 *
418.8794
459.3857
329.8074
476.2974 *
545.8387
182.5773
204.6505 *
224.4812 *
0.9200**
*
*
*
*
*
*
*
*
*

* - Insufficient Data
** - Detection Frequency < 25%
*** - Zero Variance

Table 1

Summary Statistics and Intermediate Computations for Combined Shewhart-Cusum Control Charts

Constituent	Units	Well	N	Mean	SD	S(i-1)	S(i)
Cadmium-dissolved	ug/L	MW46W	5				
Cadmium-dissolved	ug/L	MW50	5				
Cadmium-dissolved	ug/L	MW6R	7				
Chloride	mg/L	GA31B	11	577.9091	243.7554	577.9091	577.9091
Chloride	mg/L	GA32C	11	99.0000	6.3227	99.0000	99.6773
Chloride	mg/L	GA33C	13	171.2308	14.7882	171.2308	176.9088
Chloride	mg/L	GA34A	16	54.2938	6.6579	54.2938	54.2938
Chloride	mg/L	GA35A	11	48.0636	3.5026	48.0636	48.0636
Chloride	mg/L	GA36A	10	656.9000	74.3333	656.9000	656.9000
Chloride	mg/L	MW07AR	11	98.2091	9.1190	98.2091	98.2091
Chloride	mg/L	MW12R	5				
Chloride	mg/L	MW14	11	53.7455	8.2469	53.7455	53.7455
Chloride	mg/L	MW15	11	100.5909	2.8703	100.5909	100.5909
Chloride	mg/L	MW24R	11	149.6364	7.5269	149.6364	152.4731
Chloride	mg/L	MW46W	5				
Chloride	mg/L	MW50	5				
Chloride	mg/L	MW6R	11	77.5636	2.8560	77.5636	77.5636
Cyanide, total	mg/L	GA31B	7				
Cyanide, total	mg/L	GA32C	7				
Cyanide, total	mg/L	GA33C	5				
Cyanide, total	mg/L	GA34A	7				
Cyanide, total	mg/L	GA35A	7				
Cyanide, total	mg/L	GA36A	7				
Cyanide, total	mg/L	MW07AR	7				
Cyanide, total	mg/L	MW12R	5				

* - Insufficient Data

** - Detection Frequency < 25%

*** - Zero Variance

Table 1

Summary Statistics and Intermediate Computations
for Combined Shewhart-Cusum Control Charts

Limit	*
1796.6860	*
130.6133	*
245.1720	*
87.5832	*
65.5769	*
1028.5663	*
143.8043	*
94.9798	*
114.9427	*
187.2710	*
91.8435	*

* - Insufficient Data
** - Detection Frequency < 25%
*** - Zero Variance

Table 1

Summary Statistics and Intermediate Computations for Combined Shewhart-Cusum Control Charts

Constituent	Units	Well	N	Mean	SD	S(i-1)	S(i)
Cyanide, total	mg/L	MW14	7				
Cyanide, total	mg/L	MW15	7				
Cyanide, total	mg/L	MW24R	7				
Cyanide, total	mg/L	MW46W	5				
Cyanide, total	mg/L	MW50	5				
Cyanide, total	mg/L	MW6R	7				
Iron-dissolved	ug/L	GA31B	11	644.3636	283.0301	644.3636	644.3636
Iron-dissolved	ug/L	GA32C	11	133.0364	79.5910	133.0364	133.0364
Iron-dissolved	ug/L	GA33C	8	277.3875	375.6841	277.3875	277.3875
Iron-dissolved	ug/L	GA34A	14	799.8571	645.7612	799.8571	799.8571
Iron-dissolved	ug/L	GA35A	11	424.1818	49.3818	424.1818	424.1818
Iron-dissolved	ug/L	GA36A	10	144.5900	41.6007	168.3993	144.5900
Iron-dissolved	ug/L	MW07AR	11	103.6273	49.9124	103.6273	103.6273
Iron-dissolved	ug/L	MW12R	5				
Iron-dissolved	ug/L	MW14	11	195.1818	214.8659	195.1818	195.1818
Iron-dissolved	ug/L	MW15	11	115.2727	62.1484	115.2727	115.2727
Iron-dissolved	ug/L	MW24R	11	107.7182	52.9762	107.7182	107.7182
Iron-dissolved	ug/L	MW46W	5				
Iron-dissolved	ug/L	MW50	5				
Iron-dissolved	ug/L	MW6R	11	241.1818	52.0246	241.1818	257.9754
Magnesium-dissolved	ug/L	GA31B	3				
Magnesium-dissolved	ug/L	GA32C	3				
Magnesium-dissolved	ug/L	GA33C	4				
Magnesium-dissolved	ug/L	GA34A	6				
Magnesium-dissolved	ug/L	GA35A	3				

* - Insufficient Data

** - Detection Frequency < 25%

*** - Zero Variance

Table 1

**Summary Statistics and Intermediate Computations
for Combined Shewhart-Cusum Control Charts**

Limit	*	*	*	*	*	*
2059.5143						
530.9916						
2155.8082						
4028.6631						
671.0909						
352.5933						
353.1893						*
1269.5114						
426.0145						
372.5992						*
						*
501.3050						*
	*	*	*	*	*	*
	*	*	*	*	*	*
	*	*	*	*	*	*
	*	*	*	*	*	*
	*	*	*	*	*	*

* - Insufficient Data
 ** - Detection Frequency < 25%
 *** - Zero Variance

Table 1
Summary Statistics and Intermediate Computations
for Combined Shewhart-Cusum Control Charts

Constituent	Units	Well	N	Mean	SD	S(i-1)	S(i)
Magnesium-dissolved	ug/L	GA36A	3				
Magnesium-dissolved	ug/L	MW07AR	3				
Magnesium-dissolved	ug/L	MW12R	1				
Magnesium-dissolved	ug/L	MW14	3				
Magnesium-dissolved	ug/L	MW15	3				
Magnesium-dissolved	ug/L	MW24R	3				
Magnesium-dissolved	ug/L	MW46W	1				
Magnesium-dissolved	ug/L	MW50	1				
Magnesium-dissolved	ug/L	MW6R	3				
Nitrogen, ammonia	mg/L	GA31B	11	0.5555	0.1950	0.5555	0.5555
Nitrogen, ammonia	mg/L	GA32C	9	0.1493	0.0653	0.1493	0.1493
Nitrogen, ammonia	mg/L	GA33C	12	0.2325	0.0947	0.2619	0.2325
Nitrogen, ammonia	mg/L	GA34A	14	0.0816	0.0689	0.0816	0.0816
Nitrogen, ammonia	mg/L	GA35A	11	0.2345	0.0820	0.2345	0.2345
Nitrogen, ammonia	mg/L	GA36A	8	0.4425	0.0480	0.4425	0.4425
Nitrogen, ammonia	mg/L	MW07AR	10	0.1248	0.0623	0.1248	0.1248
Nitrogen, ammonia	mg/L	MW12R	5				
Nitrogen, ammonia	mg/L	MW14	11	0.0816	0.0806	0.0816	0.0816
Nitrogen, ammonia	mg/L	MW15	11	0.1440	0.0698	0.1440	0.1440
Nitrogen, ammonia	mg/L	MW24R	11	0.1361	0.0784	0.1361	0.1361
Nitrogen, ammonia	mg/L	MW46W	5				
Nitrogen, ammonia	mg/L	MW50	5				
Nitrogen, ammonia	mg/L	MW6R	9	0.1526	0.0606	0.1526	0.1526
Phenolics, total	mg/L	GA31B	5				
Phenolics, total	mg/L	GA32C	5				

* - Insufficient Data

** - Detection Frequency < 25%

*** - Zero Variance

Table 1

Summary Statistics and Intermediate Computations
for Combined Shewhart-Cusum Control Charts

Limit
*
*
*
*
*
*
*
*
*
1.5304
0.4760
0.7061
0.4262
0.6446
0.6827
0.4361
*
0.4845
0.4929
0.5282
*
*
0.4555
*
*

* - Insufficient Data
** - Detection Frequency < 25%
*** - Zero Variance

Table 1
Summary Statistics and Intermediate Computations
for Combined Shewhart-Cusum Control Charts

Constituent	Units	Well	N	Mean	SD	S(i-1)	S(i)
Phenolics, total	mg/L	GA33C	5				
Phenolics, total	mg/L	GA34A	5				
Phenolics, total	mg/L	GA35A	5				
Phenolics, total	mg/L	GA36A	5				
Phenolics, total	mg/L	MW07AR	5				
Phenolics, total	mg/L	MW12R	5				
Phenolics, total	mg/L	MW14	5				
Phenolics, total	mg/L	MW15	5				
Phenolics, total	mg/L	MW24R	5				
Phenolics, total	mg/L	MW46W	5				
Phenolics, total	mg/L	MW50	5				
Phenolics, total	mg/L	MW6R	5				
Potassium-dissolved	ug/L	GA31B	9	6008.8889	2787.0300	6012.9700	6008.8889
Potassium-dissolved	ug/L	GA32C	11	2487.2727	557.2090	2487.2727	2487.2727
Potassium-dissolved	ug/L	GA33C	13	2468.4615	504.6591	2468.4615	2468.4615
Potassium-dissolved	ug/L	GA34A	17	4100.5882	1060.7749	4569.7412	4123.5718
Potassium-dissolved	ug/L	GA35A	9	2724.4444	366.9506	2724.4444	2724.4444
Potassium-dissolved	ug/L	GA36A	11	6767.2727	1884.9992	6767.2727	6767.2727
Potassium-dissolved	ug/L	MW07AR	9	2111.1111	458.0514	2111.1111	2111.1111
Potassium-dissolved	ug/L	MW12R	5				
Potassium-dissolved	ug/L	MW14	9	5204.4444	1336.5264	5204.4444	5204.4444
Potassium-dissolved	ug/L	MW15	9	2291.1111	459.9306	2291.1111	2291.1111
Potassium-dissolved	ug/L	MW24R	9	3703.3333	669.1786	3703.3333	3703.3333
Potassium-dissolved	ug/L	MW46W	5				
Potassium-dissolved	ug/L	MW50	5				

* - Insufficient Data

** - Detection Frequency < 25%

*** - Zero Variance

Table 1

Summary Statistics and Intermediate Computations
for Combined Shewhart-Cusum Control Charts

Limit
*
*
*
*
*
*
*
*
*
*
*
*
*
*
*
19944.0388
5273.3175
4991.7569
9404.4627
4559.1977
16192.2685
4401.3683
*
11887.0764
4590.7639
7049.2263
*
*

* - Insufficient Data
 ** - Detection Frequency < 25%
 *** - Zero Variance

Table 1

**Summary Statistics and Intermediate Computations
for Combined Shewhart-Cusum Control Charts**

Constituent	Units	Well	N	Mean	SD	S(i-1)	S(i)
Sulfate	mg/L	MW24R	11	166.1818	10.3326	166.1818	166.1818
Sulfate	mg/L	MW46W	5				
Sulfate	mg/L	MW50	5				
Sulfate	mg/L	MW6R	11				

* - Insufficient Data

** - Detection Frequency < 25%

*** - Zero Variance

Table 1

**Summary Statistics and Intermediate Computations
for Combined Shewhart-Cusum Control Charts**

Limit
217.8451 *
2.0000**

* - Insufficient Data

** - Detection Frequency < 25%

*** - Zero Variance

Table 1

Summary Statistics and Intermediate Computations for Combined Shewhart-Cusum Control Charts

Constituent	Units	Well	N	Mean	SD	S(i-1)	S(i)
Potassium-dissolved	ug/L	MW6R	11	1341.8182	255.2183	1341.8182	1341.8182
Sodium-dissolved	ug/L	GA31B	11	448636.3636	72382.6951	448636.3636	448636.3636
Sodium-dissolved	ug/L	GA32C	11	195090.9091	16603.9426	195090.9091	209396.0574
Sodium-dissolved	ug/L	GA33C	5				
Sodium-dissolved	ug/L	GA34A	11	120972.7273	20004.7040	120972.7273	120972.7273
Sodium-dissolved	ug/L	GA35A	11	81690.9091	5486.2473	81690.9091	81690.9091
Sodium-dissolved	ug/L	GA36A	11	491090.9091	39141.9329	491090.9091	491090.9091
Sodium-dissolved	ug/L	MW07AR	11	157818.1818	15734.1551	157818.1818	157818.1818
Sodium-dissolved	ug/L	MW12R	5				
Sodium-dissolved	ug/L	MW14	11	167454.5455	18827.4461	167454.5455	167454.5455
Sodium-dissolved	ug/L	MW15	11	111000.0000	13603.3084	111000.0000	111000.0000
Sodium-dissolved	ug/L	MW24R	11	146909.0909	9375.0152	146909.0909	146909.0909
Sodium-dissolved	ug/L	MW46W	5				
Sodium-dissolved	ug/L	MW50	5				
Sodium-dissolved	ug/L	MW6R	11	112218.1818	7807.9214	112218.1818	112218.1818
Sulfate	mg/L	GA31B	11				
Sulfate	mg/L	GA32C	11	39.2364	22.1624	39.2364	39.2364
Sulfate	mg/L	GA33C	8	6.6875	7.4597	6.6875	6.6875
Sulfate	mg/L	GA34A	13	1189.6923	291.7246	1592.7208	1714.2351
Sulfate	mg/L	GA35A	11				
Sulfate	mg/L	GA36A	11	17.3755	28.1487	17.3755	17.3755
Sulfate	mg/L	MW07AR	11	12.9182	14.2961	12.9182	12.9182
Sulfate	mg/L	MW12R	5				
Sulfate	mg/L	MW14	11	1292.1818	226.7518	1292.1818	1292.1818
Sulfate	mg/L	MW15	11	216.6364	20.4952	216.6364	216.6364

* - Insufficient Data

** - Detection Frequency < 25%

*** - Zero Variance

Table 1

**Summary Statistics and Intermediate Computations
for Combined Shewhart-Cusum Control Charts**

Limit
2617.9095
810549.8390
278110.6220 *
220996.2472
109122.1454
686800.5735
236488.9573 *
261591.7760
179016.5421
193784.1667 *
151257.7887 *
2470.0000**
150.0482
43.9859
2648.3152
2.2000**
158.1189
84.3985 *
2425.9407
319.1125

* - Insufficient Data

** - Detection Frequency < 25%

*** - Zero Variance

Table 1

**Summary Statistics and Intermediate Computations
for Combined Shewhart-Cusum Control Charts**

Constituent	Units	Well	N	Mean	SD	S(i-1)	S(i)
Sulfate	mg/L	MW24R	11	166.1818	10.3326	166.1818	166.1818
Sulfate	mg/L	MW46W	5				
Sulfate	mg/L	MW50	5				
Sulfate	mg/L	MW6R	11				

* - Insufficient Data

** - Defection Frequency < 25%

*** - Zero Variance

Table 1

Summary Statistics and Intermediate Computations
for Combined Shewhart-Cusum Control Charts

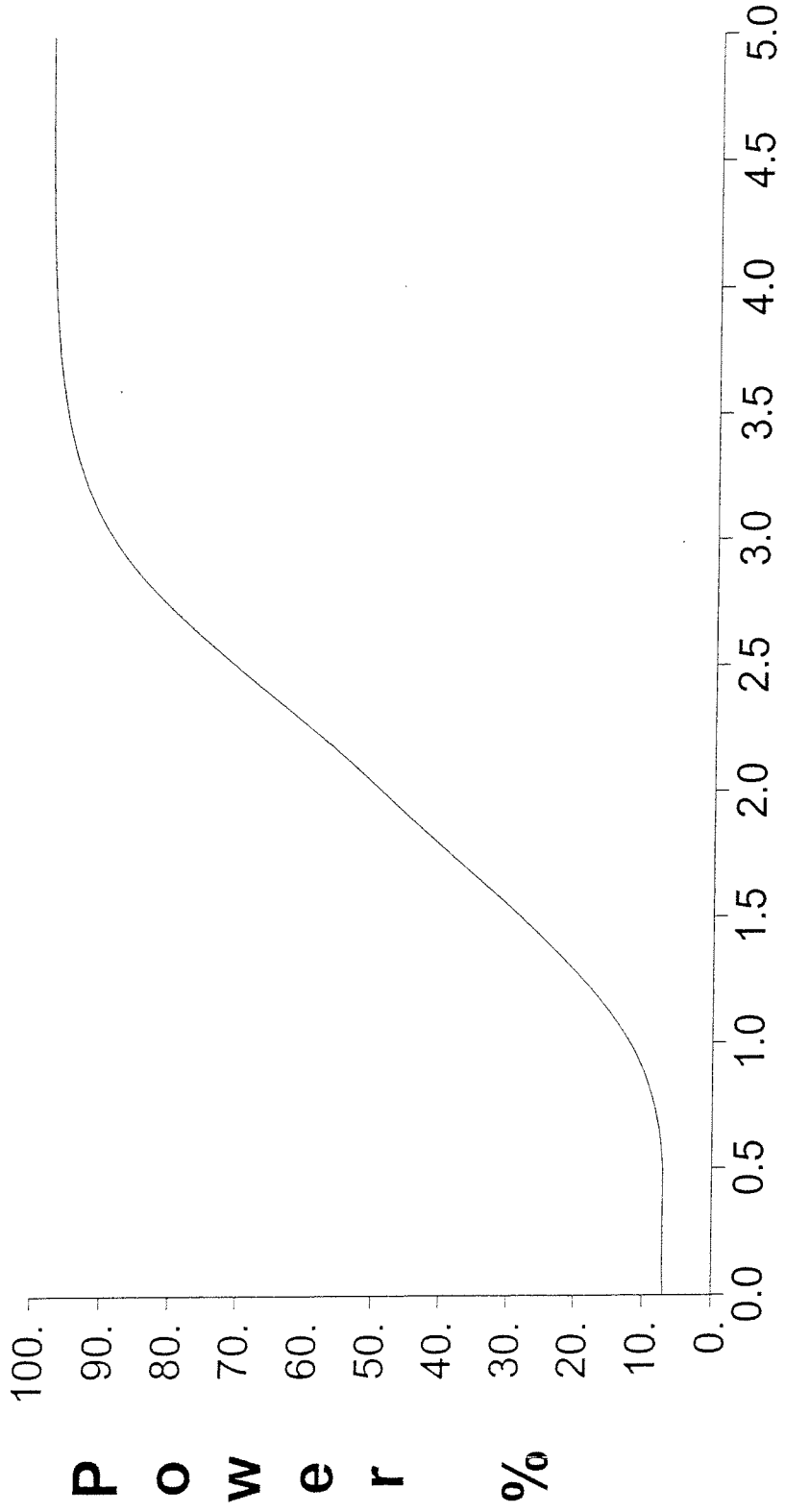
Limit
217.8451 *
2.0000**

* - Insufficient Data

** - Detection Frequency < 25%

*** - Zero Variance

False Positive and False Negative Rates for Current Intra-Well Control Charts Monitoring Program



S. D. Units

Table 1
Historical Volatile Organic Compound Detections

Constituent	Units	Well	Date	Result	Limit
Acetone	ug/L	GA31B	4/21/1993	21.0000	6.0000
Acetone	ug/L	GA31B	9/23/1993	44.0000	6.0000
Benzene	ug/L	GA31B	6/04/1987	4.4700	4.4000
Methylene chloride	ug/L	GA31B	2/04/1986	4.3600	2.8000
Methylene chloride	ug/L	GA31B	5/24/1986	2.8600	2.8000
Methylene chloride	ug/L	GA31B	3/22/1988	12.4000	2.8000
Methylene chloride	ug/L	GA31B	6/30/1988	4.9500	2.8000
Methylene chloride	ug/L	GA31B	3/14/1989	4.1800	2.8000
2-butanone	ug/L	GA32C	2/04/1986	24.0000	10.0000
Benzene	ug/L	GA32C	6/04/1987	12.2000	4.4000
Methylene chloride	ug/L	GA32C	2/04/1986	45.9000	2.8000
Methylene chloride	ug/L	GA32C	9/03/1987	3.9200	2.8000
Methylene chloride	ug/L	GA32C	12/04/1987	5.7400	2.8000
Methylene chloride	ug/L	GA32C	3/22/1988	4.0000	2.8000
Benzene	ug/L	GA33C	6/04/1987	49.1000	4.4000
Methylene chloride	ug/L	GA33C	5/23/1986	6.3700	2.8000
Methylene chloride	ug/L	GA33C	6/04/1987	2.8400	2.8000
Methylene chloride	ug/L	GA33C	9/03/1987	7.1300	2.8000
Methylene chloride	ug/L	GA33C	3/22/1988	5.4000	2.8000
Methylene chloride	ug/L	GA33C	6/30/1988	3.6000	2.8000
Methylene chloride	ug/L	GA33C	9/01/1988	3.4000	2.8000
Toluene	ug/L	GA33C	6/04/1987	6.4300	6.0000
Benzene	ug/L	GA34A	2/05/1986	6.6900	4.4000
Benzene	ug/L	GA34A	6/04/1987	46.7000	4.4000
Bis(2-ethylhexyl)phthalate	ug/L	GA34A	12/14/1994	4900.0000	720.0000
Methylene chloride	ug/L	GA34A	6/04/1987	5.2900	2.8000
Methylene chloride	ug/L	GA34A	9/04/1987	711.0000	2.8000
Methylene chloride	ug/L	GA34A	3/22/1988	17.6000	2.8000

Detections are shown for constituents selected in the VOC list and all selected wells
The Limit column refers to the laboratory reporting limit

Table 1
Historical Volatile Organic Compound Detections

Constituent	Units	Well	Date	Result	Limit
Methylene chloride	ug/L	GA34A	6/30/1988	3.9900	2.8000
Methylene chloride	ug/L	GA34A	9/01/1988	3.2900	2.8000
Toluene	ug/L	GA34A	2/05/1986	8.2700	6.0000
Toluene	ug/L	GA34A	6/04/1987	13.1000	6.0000
Trichlorofluoromethane	ug/L	GA34A	9/04/1987	12.3000	10.0000
Benzene	ug/L	GA35A	6/04/1987	40.6000	4.4000
Methylene chloride	ug/L	GA35A	12/04/1987	6.9700	2.8000
Methylene chloride	ug/L	GA35A	3/22/1988	22.0000	2.8000
Methylene chloride	ug/L	GA35A	9/01/1988	3.3700	2.8000
Methylene chloride	ug/L	GA35A	3/14/1989	3.8800	2.8000
Toluene	ug/L	GA35A	6/04/1987	17.8000	6.0000
Methylene chloride	ug/L	GA36A	6/04/1987	10.3000	2.8000
Methylene chloride	ug/L	GA36A	9/04/1987	7.0200	2.8000
Methylene chloride	ug/L	GA36A	3/22/1988	13.6000	2.8000
Methylene chloride	ug/L	GA36A	3/14/1989	4.0200	2.8000
Toluene	ug/L	GA36A	2/05/1986	6.7400	6.0000
Methylene chloride	ug/L	MW07AR	7/12/1989	33.7000	2.8000
Methylene chloride	ug/L	MW12R	7/13/1989	7.4900	2.8000
Methylene chloride	ug/L	MW14	9/03/1986	4.0000	2.8000
Methylene chloride	ug/L	MW14	9/01/1987	3.7900	2.8000
Methylene chloride	ug/L	MW14	8/30/1988	13.0000	2.8000
Methylene chloride	ug/L	MW14	7/13/1989	7.4500	2.8000
Methylene chloride	ug/L	MW15	7/12/1989	8.5400	2.8000
Methylene chloride	ug/L	MW24R	7/13/1989	6.5700	2.8000
Methylene chloride	ug/L	MW46W	5/24/1986	15.2000	2.8000
Methylene chloride	ug/L	MW46W	6/03/1987	17.8000	2.8000
Methylene chloride	ug/L	MW46W	3/22/1988	4.6000	2.8000
Methylene chloride	ug/L	MW6R	7/13/1989	7.4900	2.8000

Detections are shown for constituents selected in the VOC list and all selected wells
The Limit column refers to the laboratory reporting limit

Appendix D.1

**Updated Statistical Background
May 2004**

Table 1

Summary Statistics and Intermediate Computations for Combined Shewhart-Cusum Control Charts

Constituent	Units	Well	N	Mean	SD	S(i-1)	S(i)
Alkalinity, bicarbonate (as cacO3)	mg/L	GA31B	23	327.9130	38.9999	327.9130	363.7501
Alkalinity, bicarbonate (as cacO3)	mg/L	GA32C	23	315.4783	18.0224	315.4783	541.4832
Alkalinity, bicarbonate (as cacO3)	mg/L	GA33C	12	245.4167	135.9054	245.4167	245.4167
Alkalinity, bicarbonate (as cacO3)	mg/L	GA34A	23	316.6087	29.6184	316.6087	388.7862
Alkalinity, bicarbonate (as cacO3)	mg/L	GA35A	24	243.8333	37.3708	284.9719	333.1104
Alkalinity, bicarbonate (as cacO3)	mg/L	GA36A	24	265.4583	21.3785	265.4583	407.9661
Alkalinity, bicarbonate (as cacO3)	mg/L	MW07AR	24	301.9167	36.6973	301.9167	422.4771
Alkalinity, bicarbonate (as cacO3)	mg/L	MW12R	12	195.5000	49.0723	195.5000	226.1958
Alkalinity, bicarbonate (as cacO3)	mg/L	MW14	23	269.1739	47.8327	269.1739	399.1255
Alkalinity, bicarbonate (as cacO3)	mg/L	MW15	24	138.9583	10.9046	138.9583	201.8215
Alkalinity, bicarbonate (as cacO3)	mg/L	MW24R	24	158.0417	16.9948	158.0417	158.0417
Alkalinity, bicarbonate (as cacO3)	mg/L	MW46W	12	149.7500	12.2038	149.7500	153.8472
Alkalinity, bicarbonate (as cacO3)	mg/L	MW50	12	313.5000	44.2811	318.7892	409.0783
Alkalinity, bicarbonate (as cacO3)	mg/L	MW6R	24	181.9583	24.1490	181.9583	189.8883
Chloride	mg/L	GA31B	24	600.8333	189.1670	600.8333	600.8333
Chloride	mg/L	GA32C	24	100.4333	6.1384	100.4333	103.3962
Chloride	mg/L	GA33C	27	173.6667	11.1295	173.6667	177.6529
Chloride	mg/L	GA34A	33	51.4939	13.7415	51.4939	51.4939
Chloride	mg/L	GA35A	24	47.7417	8.6856	47.7417	47.7417
Chloride	mg/L	GA36A	23	581.1739	161.2217	581.1739	581.1739
Chloride	mg/L	MW07AR	24	102.7792	26.3882	102.7792	102.7792
Chloride	mg/L	MW12R	11	196.0000	27.2470	203.6942	196.0000
Chloride	mg/L	MW14	24	52.0333	7.5010	52.0333	52.0333
Chloride	mg/L	MW15	24	99.3417	6.5204	110.1097	106.8777
Chloride	mg/L	MW24R	24	149.6667	6.8947	149.6667	149.6667
Chloride	mg/L	MW46W	12	38.4250	1.9170	38.4250	38.4250
Chloride	mg/L	MW50	12	298.0000	130.0028	298.0000	298.0000
Chloride	mg/L	MW6R	23	76.6652	3.6461	85.1654	82.1656

Table 1

**Summary Statistics and Intermediate Computations
for Combined Shewhart-Cusum Control Charts**

Constituent	Limit
Alkalinity, bicarbonate (as cacO3)	522.9125
Alkalinity, bicarbonate (as cacO3)	405.5902
Alkalinity, bicarbonate (as cacO3)	924.9434
Alkalinity, bicarbonate (as cacO3)	464.7006
Alkalinity, bicarbonate (as cacO3)	430.6875
Alkalinity, bicarbonate (as cacO3)	372.3510
Alkalinity, bicarbonate (as cacO3)	485.4029
Alkalinity, bicarbonate (as cacO3)	440.8615
Alkalinity, bicarbonate (as cacO3)	508.3375
Alkalinity, bicarbonate (as cacO3)	193.4815
Alkalinity, bicarbonate (as cacO3)	243.0158
Alkalinity, bicarbonate (as cacO3)	210.7688
Alkalinity, bicarbonate (as cacO3)	534.9056
Alkalinity, bicarbonate (as cacO3)	302.7031
Chloride	1546.6682
Chloride	131.1252
Chloride	229.3141
Chloride	120.2013
Chloride	91.1695
Chloride	1387.2822
Chloride	234.7203
Chloride	332.2351
Chloride	89.5383
Chloride	131.9437
Chloride	184.1399
Chloride	48.0098
Chloride	948.0140
Chloride	94.8958

Table 1

Summary Statistics and Intermediate Computations for Combined Shewhart-Cusum Control Charts

Constituent	Units	Well	N	Mean	SD	S(i-1)	S(i)
Cyanide, total	mg/L	GA31B	16				
Cyanide, total	mg/L	GA32C	16				
Cyanide, total	mg/L	GA33C	12				
Cyanide, total	mg/L	GA34A	16				
Cyanide, total	mg/L	GA35A	16				
Cyanide, total	mg/L	GA36A	16				
Cyanide, total	mg/L	MW07AR	16				
Cyanide, total	mg/L	MW12R	12				
Cyanide, total	mg/L	MW14	16				
Cyanide, total	mg/L	MW15	16				
Cyanide, total	mg/L	MW24R	16				
Cyanide, total	mg/L	MW46W	12				
Cyanide, total	mg/L	MW50	12				
Cyanide, total	mg/L	MW6R	16				
Iron-dissolved	ug/L	GA31B	24	771.3333	327.8247	954.1315	771.3333
Iron-dissolved	ug/L	GA32C	24	100.3375	84.7860	246.4105	145.4835
Iron-dissolved	ug/L	GA33C	19	244.0316	370.1361	244.0316	244.0316
Iron-dissolved	ug/L	GA34A	29	860.5517	650.9345	860.5517	860.5517
Iron-dissolved	ug/L	GA35A	22	431.5000	144.3022	1191.7734	431.5000
Iron-dissolved	ug/L	GA36A	21	146.7095	52.2838	146.7095	146.7095
Iron-dissolved	ug/L	MW07AR	24	349.0792	480.9911	349.0792	349.0792
Iron-dissolved	ug/L	MW12R	12	137.1000	87.0600	137.1000	137.1000
Iron-dissolved	ug/L	MW14	24	167.9167	175.8490	167.9167	167.9167
Iron-dissolved	ug/L	MW15	24	99.4250	72.6959	99.4250	99.4250
Iron-dissolved	ug/L	MW24R	23	106.4870	57.2501	106.4870	106.4870
Iron-dissolved	ug/L	MW46W	11	38.9182	24.6336	38.9182	38.9182
Iron-dissolved	ug/L	MW50	12	116.6250	55.8240	116.6250	116.6250
Iron-dissolved	ug/L	MW6R	24	250.2917	69.1466	319.5334	417.3817

Table 1

Summary Statistics and Intermediate Computations for Combined Shewhart-Cusum Control Charts

Constituent	Units	Well	N	Mean	SD	S(i-1)	S(i)
Nitrogen, ammonia	mg/L	GA31B	24	0.5363	0.2042	0.5363	0.5569
Nitrogen, ammonia	mg/L	GA32C	16	0.1348	0.0707	0.1370	0.1348
Nitrogen, ammonia	mg/L	GA33C	27	0.1881	0.0924	0.1881	0.1881
Nitrogen, ammonia	mg/L	GA34A	29	0.0722	0.0649	0.1213	0.1504
Nitrogen, ammonia	mg/L	GA35A	24	0.1933	0.0914	0.5414	0.8096
Nitrogen, ammonia	mg/L	GA36A	15	0.4213	0.0989	0.4213	0.4213
Nitrogen, ammonia	mg/L	MW07AR	23	0.1134	0.0870	0.1134	0.1134
Nitrogen, ammonia	mg/L	MW12R	12	0.1652	0.0921	0.2266	0.2323
Nitrogen, ammonia	mg/L	MW14	24	0.0932	0.0796	0.0932	0.1503
Nitrogen, ammonia	mg/L	MW15	24	0.1240	0.0797	0.1240	0.1402
Nitrogen, ammonia	mg/L	MW24R	24	0.1436	0.0864	0.1436	0.1436
Nitrogen, ammonia	mg/L	MW46W	12	0.1033	0.0606	0.1033	0.1033
Nitrogen, ammonia	mg/L	MW50	12	0.2234	0.1107	0.2234	0.2270
Nitrogen, ammonia	mg/L	MW6R	16	0.1363	0.0589	0.1363	0.1558
Phenolics, total	mg/L	GA31B	12				
Phenolics, total	mg/L	GA32C	12				
Phenolics, total	mg/L	GA33C	12				
Phenolics, total	mg/L	GA34A	12				
Phenolics, total	mg/L	GA35A	11				
Phenolics, total	mg/L	GA36A	12				
Phenolics, total	mg/L	MW07AR	12				
Phenolics, total	mg/L	MW12R	12				
Phenolics, total	mg/L	MW14	12				
Phenolics, total	mg/L	MW15	12				
Phenolics, total	mg/L	MW24R	12				
Phenolics, total	mg/L	MW46W	12				
Phenolics, total	mg/L	MW50	12				
Phenolics, total	mg/L	MW6R	12				

Table 1

**Summary Statistics and Intermediate Computations
for Combined Shewhart-Cusum Control Charts**

Constituent	Limit
Nitrogen, ammonia	1.5572
Nitrogen, ammonia	0.4881
Nitrogen, ammonia	0.6501
Nitrogen, ammonia	0.3968
Nitrogen, ammonia	0.6504
Nitrogen, ammonia	0.9159
Nitrogen, ammonia	0.5483
Nitrogen, ammonia	0.6259
Nitrogen, ammonia	0.4912
Nitrogen, ammonia	0.5224
Nitrogen, ammonia	0.5756
Nitrogen, ammonia	0.4062
Nitrogen, ammonia	0.7768
Nitrogen, ammonia	0.4310
Phenolics, total	0.0100**
Phenolics, total	0.0100**
Phenolics, total	0.0100**
Phenolics, total	0.0100**
Phenolics, total	0.0150**
Phenolics, total	0.0100**
Phenolics, total	0.0100**
Phenolics, total	0.0100**
Phenolics, total	0.0110**
Phenolics, total	0.0100**
Phenolics, total	0.0100**
Phenolics, total	0.0100**
Phenolics, total	0.0100**
Phenolics, total	0.0100**
Phenolics, total	0.0100**

Table 1

Summary Statistics and Intermediate Computations for Combined Shewhart-Cusum Control Charts

Constituent	Units	Well	N	Mean	SD	S(i-1)	S(i)
Potassium-dissolved	ug/L	GA31B	22	5270.0000	2013.4902	5270.0000	5270.0000
Potassium-dissolved	ug/L	GA32C	24	2179.5833	541.4833	2408.1917	2179.5833
Potassium-dissolved	ug/L	GA33C	28	2406.0714	788.8686	2406.0714	2406.0714
Potassium-dissolved	ug/L	GA34A	34	3826.4706	876.7014	3826.4706	3826.4706
Potassium-dissolved	ug/L	GA35A	22	2632.7273	362.6382	2632.7273	2632.7273
Potassium-dissolved	ug/L	GA36A	23	5969.5652	1788.7082	5969.5652	5969.5652
Potassium-dissolved	ug/L	MW07AR	22	1985.4545	507.0524	1985.4545	1985.4545
Potassium-dissolved	ug/L	MW12R	11	1525.4545	371.3856	1525.4545	1525.4545
Potassium-dissolved	ug/L	MW14	22	4777.2727	1124.5367	4777.2727	4777.2727
Potassium-dissolved	ug/L	MW15	22	2145.4545	395.6156	2145.4545	2145.4545
Potassium-dissolved	ug/L	MW24R	22	3412.7273	726.1915	3412.7273	3412.7273
Potassium-dissolved	ug/L	MW46W	12	1785.8333	364.2791	1785.8333	1785.8333
Potassium-dissolved	ug/L	MW50	12	6171.6667	2373.2557	6171.6667	6171.6667
Potassium-dissolved	ug/L	MW6R	24	1367.9167	463.0333	1367.9167	1367.9167
Sodium-dissolved	ug/L	GA31B	20	449900.0000	65195.1726	449900.0000	449900.0000
Sodium-dissolved	ug/L	GA32C	24	192166.6667	15043.8971	192166.6667	202717.0772
Sodium-dissolved	ug/L	GA33C	12	166333.3333	11918.9180	166333.3333	166333.3333
Sodium-dissolved	ug/L	GA34A	24	116291.6667	17138.1323	116291.6667	116291.6667
Sodium-dissolved	ug/L	GA35A	20	80835.0000	5934.0476	80835.0000	80835.0000
Sodium-dissolved	ug/L	GA36A	23	480217.3913	38522.6693	480217.3913	501107.9980
Sodium-dissolved	ug/L	MW07AR	20	160400.0000	19312.9354	160400.0000	160400.0000
Sodium-dissolved	ug/L	MW12R	12	171000.0000	48386.6999	171000.0000	171000.0000
Sodium-dissolved	ug/L	MW14	20	165700.0000	15393.4367	165700.0000	165700.0000
Sodium-dissolved	ug/L	MW15	20	109300.0000	10414.3120	109300.0000	109300.0000
Sodium-dissolved	ug/L	MW24R	20	146950.0000	9116.0645	146950.0000	146950.0000
Sodium-dissolved	ug/L	MW46W	12	96383.3333	9216.1748	96383.3333	96383.3333
Sodium-dissolved	ug/L	MW50	12	289583.3333	54675.0040	289583.3333	289583.3333
Sodium-dissolved	ug/L	MW6R	23	108256.5217	8297.1970	108256.5217	108256.5217

Table 1

Summary Statistics and Intermediate Computations for Combined Shewhart-Cusum Control Charts

Constituent	Limit
Potassium-dissolved	15337.4511
Potassium-dissolved	4886.9998
Potassium-dissolved	6350.4143
Potassium-dissolved	8209.9776
Potassium-dissolved	4445.9185
Potassium-dissolved	14913.1063
Potassium-dissolved	4520.7167
Potassium-dissolved	3382.3826
Potassium-dissolved	10399.9560
Potassium-dissolved	4123.5325
Potassium-dissolved	7043.6848
Potassium-dissolved	3607.2287
Potassium-dissolved	18037.9450
Potassium-dissolved	3683.0831
Sodium-dissolved	775875.8628
Sodium-dissolved	267386.1523
Sodium-dissolved	225927.9233
Sodium-dissolved	201982.3283
Sodium-dissolved	110505.2381
Sodium-dissolved	672830.7376
Sodium-dissolved	256964.6770
Sodium-dissolved	412933.4995
Sodium-dissolved	242667.1837
Sodium-dissolved	161371.5601
Sodium-dissolved	192530.3224
Sodium-dissolved	142464.2076
Sodium-dissolved	562958.3533
Sodium-dissolved	149742.5068

Table 1

**Summary Statistics and Intermediate Computations
for Combined Shewhart-Cusum Control Charts**

Constituent	Units	Well	N	Mean	SD	S(i-1)	S(i)
Sulfate	mg/L	GA31B	24				
Sulfate	mg/L	GA32C	24	35.4542	20.8304	229.5692	35.4542
Sulfate	mg/L	GA33C	19	7.6632	9.8780	24.8047	9.7330
Sulfate	mg/L	GA34A	30	1043.3333	324.1251	1043.3333	1043.3333
Sulfate	mg/L	GA35A	22	2.5591	1.3380	15.4088	4.8088
Sulfate	mg/L	GA36A	24	14.0429	21.5238	174.8571	29.7571
Sulfate	mg/L	MW07AR	24	44.1125	89.6051	44.1125	44.1125
Sulfate	mg/L	MW12R	12				
Sulfate	mg/L	MW14	23	1290.6087	196.0180	1290.6087	1290.6087
Sulfate	mg/L	MW15	24	212.5833	38.3269	212.5833	212.5833
Sulfate	mg/L	MW24R	24	168.8750	17.6002	173.7999	169.7247
Sulfate	mg/L	MW46W	12	180.9167	29.1562	190.1329	180.9167
Sulfate	mg/L	MW50	12				
Sulfate	mg/L	MW6R	24				

* - Insufficient Data
 ** - Detection Frequency < 25%
 *** - Zero Variance

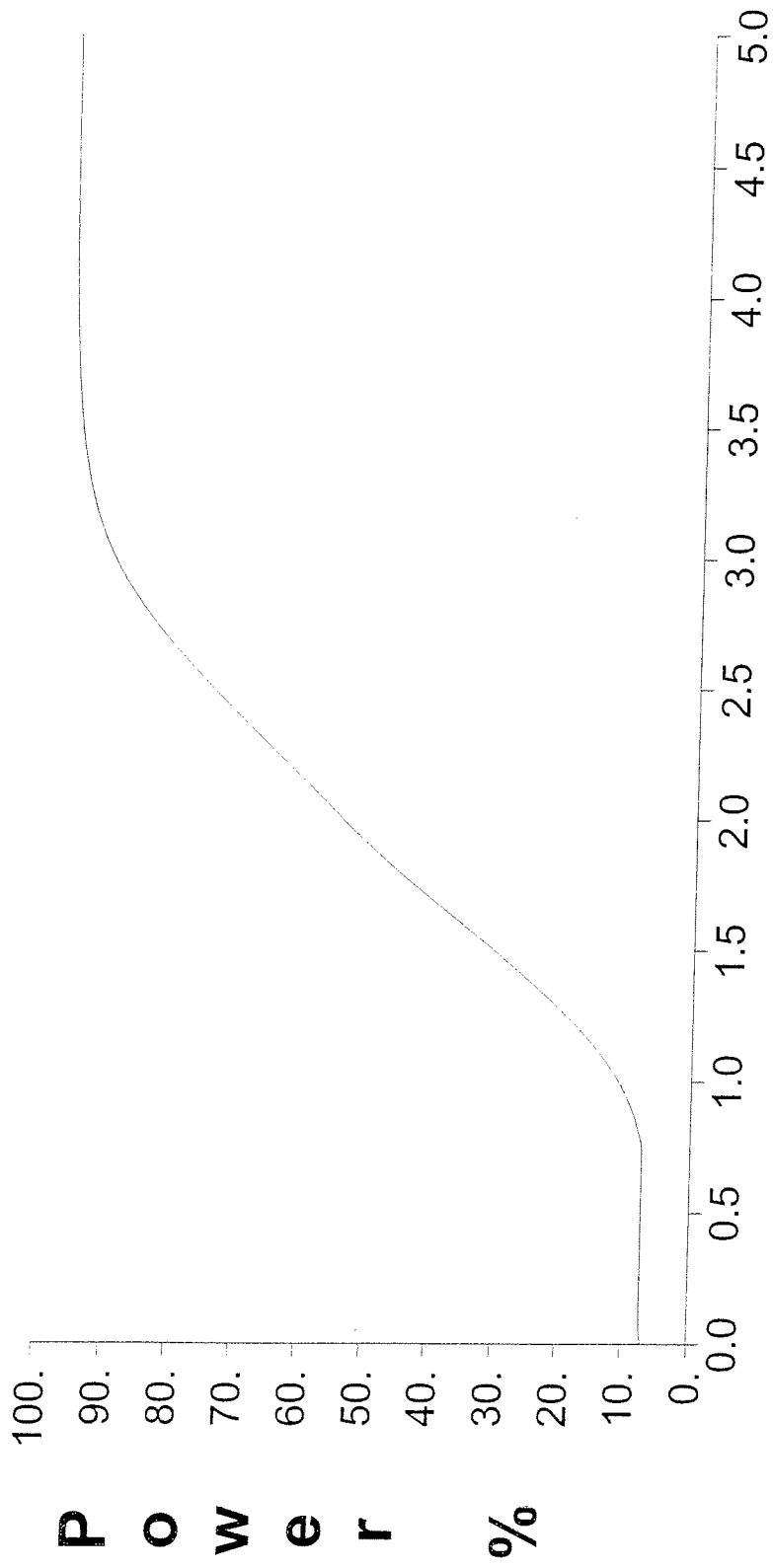
Table 1

**Summary Statistics and Intermediate Computations
for Combined Shewhart-Cusum Control Charts**

Constituent	Limit
Sulfate	2470.0000**
Sulfate	139.6063
Sulfate	57.0534
Sulfate	2663.9587
Sulfate	9.2489
Sulfate	121.6620
Sulfate	492.1379
Sulfate	3.8000**
Sulfate	2270.6988
Sulfate	404.2177
Sulfate	256.8759
Sulfate	326.6976
Sulfate	2.9000**
Sulfate	2.0000**

* - Insufficient Data
 ** - Detection Frequency < 25%
 *** - Zero Variance

False Positive and False Negative Rates for Current Intra-Well Control Charts Monitoring Program



S. D. Units

Table 1
Historical Volatile Organic Compound Detections

Constituent	Units	Well	Date	Result	Limit
Acetone	ug/L	GA31B	4/21/1993	21.0000	6.0000
Acetone	ug/L	GA31B	9/23/1993	44.0000	6.0000
Benzene	ug/L	GA31B	6/04/1987	4.4700	4.4000
Methylene chloride	ug/L	GA31B	2/04/1986	4.3600	2.8000
Methylene chloride	ug/L	GA31B	5/24/1986	2.8600	2.8000
Methylene chloride	ug/L	GA31B	3/22/1988	12.4000	2.8000
Methylene chloride	ug/L	GA31B	6/30/1988	4.9500	2.8000
Methylene chloride	ug/L	GA31B	3/14/1989	4.1800	2.8000
2-butanone	ug/L	GA32C	2/04/1986	24.0000	10.0000
Benzene	ug/L	GA32C	6/04/1987	12.2000	4.4000
Carbon disulfide	ug/L	GA32C	3/01/2002	3.0000	1.0000
Methylene chloride	ug/L	GA32C	2/04/1986	45.9000	2.8000
Methylene chloride	ug/L	GA32C	9/03/1987	3.9200	2.8000
Methylene chloride	ug/L	GA32C	12/04/1987	5.7400	2.8000
Methylene chloride	ug/L	GA32C	3/22/1988	4.0000	2.8000
Benzene	ug/L	GA33C	6/04/1987	49.1000	4.4000
Methylene chloride	ug/L	GA33C	5/23/1986	6.3700	2.8000
Methylene chloride	ug/L	GA33C	6/04/1987	2.8400	2.8000
Methylene chloride	ug/L	GA33C	9/03/1987	7.1300	2.8000
Methylene chloride	ug/L	GA33C	3/22/1988	5.4000	2.8000
Methylene chloride	ug/L	GA33C	6/30/1988	3.6000	2.8000
Methylene chloride	ug/L	GA33C	9/01/1988	3.4000	2.8000
Toluene	ug/L	GA33C	6/04/1987	6.4300	6.0000
Benzene	ug/L	GA34A	2/05/1986	6.6900	4.4000
Benzene	ug/L	GA34A	6/04/1987	46.7000	4.4000
Bis(2-ethylhexyl)phthalate	ug/L	GA34A	12/14/1994	4900.0000	720.0000
Methylene chloride	ug/L	GA34A	6/04/1987	5.2900	2.8000
Methylene chloride	ug/L	GA34A	9/04/1987	711.0000	2.8000
Methylene chloride	ug/L	GA34A	3/22/1988	17.6000	2.8000

Table 1
Historical Volatile Organic Compound Detections

Constituent	Units	Well	Date	Result	Limit
Methylene chloride	ug/L	GA34A	6/30/1988	3.9900	2.8000
Methylene chloride	ug/L	GA34A	9/01/1988	3.2900	2.8000
Toluene	ug/L	GA34A	2/05/1986	8.2700	6.0000
Toluene	ug/L	GA34A	6/04/1987	13.1000	6.0000
Trichlorofluoromethane	ug/L	GA34A	9/04/1987	12.3000	10.0000
Benzene	ug/L	GA35A	6/04/1987	40.6000	4.4000
Di-n-butylphthalate	ug/L	GA35A	5/30/2003	10.0000	10.0000
Di-n-butylphthalate	ug/L	GA35A	5/30/2003	10.0000	10.0000
Methylene chloride	ug/L	GA35A	12/04/1987	6.9700	2.8000
Methylene chloride	ug/L	GA35A	3/22/1988	22.0000	2.8000
Methylene chloride	ug/L	GA35A	9/01/1988	3.3700	2.8000
Methylene chloride	ug/L	GA35A	3/14/1989	3.8800	2.8000
Toluene	ug/L	GA35A	6/04/1987	17.8000	6.0000
Methylene chloride	ug/L	GA36A	6/04/1987	10.3000	2.8000
Methylene chloride	ug/L	GA36A	9/04/1987	7.0200	2.8000
Methylene chloride	ug/L	GA36A	3/22/1988	13.6000	2.8000
Methylene chloride	ug/L	GA36A	3/14/1989	4.0200	2.8000
Toluene	ug/L	GA36A	2/05/1986	6.7400	6.0000
Methylene chloride	ug/L	MW07AR	7/12/1989	33.7000	2.8000
Methylene chloride	ug/L	MW12R	7/13/1989	7.4900	2.8000
Methylene chloride	ug/L	MW14	9/03/1986	4.0000	2.8000
Methylene chloride	ug/L	MW14	9/01/1987	3.7900	2.8000
Methylene chloride	ug/L	MW14	8/30/1988	13.0000	2.8000
Methylene chloride	ug/L	MW14	7/13/1989	7.4500	2.8000
Methylene chloride	ug/L	MW15	7/12/1989	8.5400	2.8000
Methylene chloride	ug/L	MW24R	7/13/1989	6.5700	2.8000
Methylene chloride	ug/L	MW46W	5/24/1986	15.2000	2.8000
Methylene chloride	ug/L	MW46W	6/03/1987	17.8000	2.8000
Methylene chloride	ug/L	MW46W	3/22/1988	4.6000	2.8000

Table 1

Historical Volatile Organic Compound Detections

Constituent	Units	Well	Date	Result	Limit
Methylene chloride	ug/L	MW6R	8/30/1988	12.4000	2.8000
Methylene chloride	ug/L	MW6R	7/13/1989	7.4900	2.8000

Detections are shown for constituents selected in the VOC list and all selected wells
The Limit column refers to the laboratory reporting limit

Established in 1960, Golder Associates is a global, employee-owned organization that helps clients find sustainable solutions to the challenges of finite resources, energy and water supply and management, waste management, urbanization, and climate change. We provide a wide range of independent consulting, design, and construction services in our specialist areas of earth, environment, and energy. By building strong relationships and meeting the needs of clients, our people have created one of the most trusted professional services organizations in the world.

Africa	+ 27 11 254 4800
Asia	+ 852 2562 3658
Australasia	+ 61 3 8862 3500
Europe	+ 356 21 42 30 20
North America	+ 1 800 275 3281
South America	+ 56 2 2616 2000

solutions@golder.com
www.golder.com

Golder Associates Inc.
27200 Haggerty Rd, Suite B-12
Farmington Hills, MI 48331 USA
Tel: (248) 295-0135
Fax: (248) 295-0133



Engineering Earth's Development, Preserving Earth's Integrity

Golder, Golder Associates and the GA globe design are trademarks of Golder Associates Corporation