

Appendix D
QC Logs

Area: ODDS
 Dataset: G858

Location i.d.: _____
 Survey Date: 04/25/06

QC Check by: JM
 Date: 05/11/06

Static Test

Sensor #1 (left)		Pre Survey			Post Survey			Metric
File Name	top	bottom	Vert. grad	top	bottom	Vert. grad		
Line #:	1.0			201.0				
Min:	48668.37	48669.77	0.34	48673.80	48672.58	-0.65		
Max:	48669.39	48670.88	2.40	48682.79	48683.33	0.82		
Mean:	48668.98	48670.3	0.66	48680.06	48680.03	-0.02	TBD	
Std:	0.25	0.28	0.24	1.38	1.63	0.13	TBD	

Comments: Higher standard deviation in post static survey due to initial spike in line

Static Spike Test

Sensor #1 (left)		Pre Survey			Post Survey			Metric
File Name	top	bottom	Vert. grad	top	bottom	Vert. grad		
Line #:	2.0			202.0				
Min:	48668.24	47944.29	-362.05	48679.81	47983.52	-347.66		
Max:	48668.64	47951.8	-359.37	48680.16	47986.47	-346.73		
Mean:	48668.44	47949.05	-360.30	48679.97	47985.26	-347.15	TBD	
Std:	0.1	0.18	0.74	0.07	0.73	0.27	TBD	

Comments: Statistics are based on a segment of the Static Spike Test

Cable Shake Test

Sensor #1 (left)		Pre Survey			Post Survey			Metric
File Name	top	bottom	Vert. grad	top	bottom	Vert. grad		
Line #:	3.0			203.0				
Min:	48668.82	48670.05	0.39	48678.61	48679.34	-0.01		
Max:	48669.79	48670.82	0.74	48679.86	48680.08	0.44		
Mean:	48669.37	48670.39	0.51	48679.26	48679.64	0.19	TBD	
Std:	0.17	0.18	0.08	0.34	0.18	0.10	TBD	

Comments:

Personnel Test

Sensor #1 (left)		Pre Survey			Post Survey			Metric
File Name	top	bottom	Vert. grad	top	bottom	Vert. grad		
Line #:	4.0			204.0				
Min:	48669	48670.29	0.15	48679.77	48679.87	-0.04		
Max:	48670.2	48670.86	0.77	48680.13	48680.21	0.17		
Mean:	48669.93	48670.56	0.31	48680	48680.01	0.01	TBD	
Std:	0.23	0.12	0.14	0.06	0.05	0.03	TBD	

Comments:

Area: ODDS
 Dataset: G858

Location i.d.: _____
 Survey Date: 04/25/06

QC Check by: JM
 Date: 05/11/06

Static Test

Sensor #2 (right)		Pre Survey			Post Survey			Metric
File Name	top	bottom	Vert. grad	top	bottom	Vert. grad		
Line #:	1.1			201.1				
Min:	48667.63	48669.8	190.20	48670.27	48665.72	-2.35		
Max:	48668.64	48671.15	191.77	48682.91	48686.02	2.46		
Mean:	48668.22	48670.59	191.13	48679.02	48680.09	0.54	TBD	
Std:	0.18	0.27	0.22	1.93	3.14	0.61	TBD	

Comments: Higher standard deviation in post static survey due to initial spike in line

Static Spike Test

Sensor #2 (right)		Pre Survey			Post Survey			Metric
File Name	top	bottom	Vert. grad	top	bottom	Vert. grad		

QC Check: CC
 Date: 5/22/2006

Area: Ft Ord
 Dataset: Mag
 Location ID: ODDS
 Survey Date: 4/25/2006

2-Line Repeat Data Test

Comments:
 Values calculated from
 vertical gradient.

		Pre Survey		Post Survey		Metric
		Latency Correction		Latency Correction		
Left Sensors	5	Line 5.0		3	Line 205.0	
Right Sensors	5	Line 5.1		3	Line 205.1	
		Anomaly Amplitude mV/nT	Distance Offset (ft)	Anomaly Amplitude mV/nT	Distance Offset (ft)	
Left Sensor bot	48601.69	0.36		48738.13	0.71	
Left Sensor top	48665.89	0.36		48682.5	0.71	
Left Vert Grad	-32.1	0.36		27.81	0.71	
Right Sensor bot	48740.46	1.15		48600.18	1.18	
Right Sensor top	48672.32	1.15		48673.63	1.18	
Right Vert Grad	34.07	1.15		-36.72	1.18	

Note: Right sensor did not go directly over the top of the hitch ball

QC Locations:
 5744536.2, 2114574.42
 5744534.2, 5744534.20

Known Location QC Points Detected

Comments:

Location ID		Location ID		Location ID		Metric
k1 - sw corner		k2 - nw corner		u2 - sw corner		
Easting	5744510.00	Easting	5744510.00	Easting	5744510.00	
Northing	2114990.00	Northing	2114960.00	Northing	2114600.00	
Anomaly Offset		Anomaly Offset		Anomaly Offset		
Dist. (ft)	0.75	Dist. (ft)	1.25	Dist. (ft)	1.25	<=2-ft
Direction	S	Direction	SE	Direction	S	

QC Locations:
 grid corners

Data Sampling

Comments:

Along Track / Across Track Sampling		Metric
Along Track (ft)	0.3	<=0.5-ft
Across Track (ft)	1.9	<=3-ft
Total Area Surveyed (acres)		
This Data Set	1.65	

Area: ODDS
 Dataset: G858

Location i.d.: _____
 Survey Date: 04/25/06

QC Check by: JM
 Date: 05/11/06

Static Test

Sensor #1 (left)		Pre Survey						Post Survey						Metric
File Name		mag_QC						mag_QC						
Line #:		2.1						202.2						
Min:	48724.57		49105.57		0.90		48731.2		49026.24		147.50			
Max:	48725.77		49111.59		1.50		48731.83		49028.93		148.30			
Mean:	48725.15		49108.65		1.19		48731.58		49027.34		147.81		TBD	
Std:	0.26		1.84		0.15		0.14		0.44		0.14		TBD	

Comments: Statistics are based on a segment of the Static Spike Test

Cable Shake Test

Sensor #2 (right)		Pre Survey			Post Survey			Metric
		top	bottom	Vert. grad	top	bottom	Vert. grad	
File Name		mag_QC			mag_QC			
Line #:		3.1			203.1			
Min:	48667.77		48670.35	1.00	48678.09		48680.06	0.64
Max:	48668.98		48671.16	1.37	48679.28		48680.63	1.03
Mean:	48668.52		48670.74	1.11	48678.62		48680.28	0.83
Std:	0.23		0.17	0.07	0.3		0.13	0.09

Comments:

Personnel Test

Sensor #2 (right)		Pre Survey			Post Survey			Metric
		top	bottom	Vert. grad	top	bottom	Vert. grad	
File Name		mag_QC			mag_QC			
Line #:		4.1			204.1			
Min:	48668.47		48670.39	0.74	48678.81		48680.23	0.61
Max:	48669.32		48671.18	1.32	48679.45		48680.78	0.80
Mean:	48669.02		48670.78	0.88	48679.12		48680.52	0.70
Std:	0.17		0.16	0.09	0.1		0.09	0.03

Comments:

QC Check by: JM
 Date: 05/08/06
 Grids Mapped: NA

SITE Ft Ord
 Area ODDS
 Survey Date: 04/27/06
 Julian Date 117

Static Test (levelled)**

Coil #1

	Pre Survey				Post Survey			
	CH 1	CH 2	CH 3	CH 4	CH 1	CH 2	CH 3	CH 4
File Name	EM61_QC				EM61_QC			
Line #:	L1				L201			
Min:	-2.04	-2.3	-1.27	-0.58	-2.07	-1.71	-0.85	-0.51
Max:	2.24	1.79	1.36	0.47	2.24	2.38	0.91	0.38
Mean:	0.06	-0.02	0.01	0	0	0	0	-0.01
Std:	0.56	0.41	0.26	0.15	0.65	0.41	0.24	0.13

Comments: **Levelling for all tests was obtained by subtracting the mean value from the channel value.

Coil #2

	Pre Survey				Post Survey			
	CH 1	CH 2	CH 3	CH 4	CH 1	CH 2	CH 3	CH 4
File Name	EM61_QC				EM61_QC			
Line #:	L1.1				L201.1			
Min:	-1.97	-1.35	-0.92	-0.72	-2.4	-1.24	-0.71	-0.43
Max:	2.29	1.36	1.11	0.5	1.89	1.89	0.84	0.33
Mean:	0.21	0.05	0	0	0	0	0	0
Std:	0.66	0.44	0.24	0.14	0.61	0.37	0.21	0.12

Comments: _____

Coil #3

	Pre Survey				Post Survey			
	CH 1	CH 2	CH 3	CH 4	CH 1	CH 2	CH 3	CH 4
File Name	EM61_QC				EM61_QC			
Line #:	L1.2				L201.2			
Min:	-4.12	-2.07	-0.97	-0.49	-1.55	-1.32	-0.83	-0.43
Max:	4.41	2.11	1.26	0.49	1.38	1.91	0.71	0.39
Mean:	-0.02	-0.01	0	0.05	-0.03	0	0	0
Std:	1.85	0.89	0.3	0.13	0.47	0.33	0.2	0.12

Comments: _____

QC Check by: JM
 Date: 05/08/06
 Grids Mapped: NA

SITE Ft Ord
 Area ODDS
 Survey Date: 04/27/06
 Julian Date 117

Static Test (levelled)**

Cable Shake (levelled)

Coil #1

	Pre Survey				Post Survey			
	CH 1	CH 2	CH 3	CH 4	CH 1	CH 2	CH 3	CH 4
File Name	EM61_QC				EM61_QC			
Line #:	L3				L203			
Min:	-1.92	-1.4	-0.94	-0.56	-1.45	-0.95	-0.75	-0.44
Max:	1.93	1.24	1.34	0.49	1.06	1.06	0.87	0.45
Mean:	-0.04	0	0	0	0.01	0	0	0
Std:	0.54	0.38	0.27	0.05	0.42	0.31	0.22	0.13

Comments: _____

Coil #2

Coil #2

	Pre Survey				Post Survey			
	CH 1	CH 2	CH 3	CH 4	CH 1	CH 2	CH 3	CH 4
File Name	EM61_QC				EM61_QC			
Line #:	L3.1				L203.1			
Min:	-2.62	-1.28	-0.72	-0.43	-1.61	-1.09	-0.63	-0.31
Max:	1.82	0.99	1.1	0.41	1.52	1.04	0.65	0.47
Mean:	0	-0.01	0.02	0	0	0	0	-0.01
Std:	0.64	0.35	0.24	0.13	0.53	0.3	0.19	0.12

Comments: _____

Coil #3

	Pre Survey				Post Survey			
	CH 1	CH 2	CH 3	CH 4	CH 1	CH 2	CH 3	CH 4
File Name	EM61_QC				EM61_QC			
Line #:	L3.2				L203.2			
Min:	-2.1	-1.23	-0.67	-0.56	-1.36	-0.81	-0.61	-0.36
Max:	1.45	1.1	1.2	0.33	1.2	1.03	0.75	0.46
Mean:	-0.02	0	0	0	0	0	0.01	0
Std:	0.59	0.38	0.23	0.13	0.42	0.28	0.2	0.11

Comments: _____

QC Check by: JM
 Date: 05/08/06
 Grids Mapped: NA

SITE Ft Ord
 Area ODDS
 Survey Date: 04/27/06
 Julian Date 117

Static Test (levelled)**

Personnel Test (levelled)

Coil #1

		Pre Survey				Post Survey			
		CH 1	CH 2	CH 3	CH 4	CH 1	CH 2	CH 3	CH 4
File Name		EM61_QC				EM61_QC			
Line #:		L4				L204			
Min:		-1.48	-1.12	-0.65	-0.54	-1.58	-1.51	-0.68	-0.48
Max:		1.39	1.52	1.35	0.42	1.33	1.34	0.82	0.41
Mean:		0	0	0.01	-0.01	-0.01	0	0	0
Std:		0.51	0.38	0.27	0.15	0.5	0.46	0.25	0.14

Comments: _____

Coil #2

Coil #2

		Pre Survey				Post Survey			
		CH 1	CH 2	CH 3	CH 4	CH 1	CH 2	CH 3	CH 4
File Name		EM61_QC				EM61_QC			
Line #:		L4.1				L204.1			
Min:		-1.52	-0.97	-0.61	-0.5	-1.88	-1.48	-0.62	-0.33
Max:		1.52	1.02	1.12	0.55	1.44	1.21	0.67	0.52
Mean:		0	0	0.01	0	0	0	0.01	0
Std:		0.52	0.34	0.23	0.14	0.54	0.39	0.22	0.13

Comments: _____

Coil #3

		Pre Survey				Post Survey			
		CH 1	CH 2	CH 3	CH 4	CH 1	CH 2	CH 3	CH 4
File Name		EM61_QC				EM61_QC			
Line #:		L4.2				L204.2			
Min:		-1.62	-0.95	-0.68	-0.52	-1.53	-1.22	-0.61	-0.4
Max:		1.76	1.21	1.11	0.56	1.64	1.43	0.57	0.41
Mean:		-0.01	0.01	0.01	0	-0.02	0	0	0
Std:		0.59	0.38	0.22	0.14	0.55	0.4	0.21	0.13

Comments: _____

QC Check by: JM
 Date: 05/08/06
 Grids Mapped: NA

SITE Ft Ord
 Area ODDS
 Survey Date: 04/27/06
 Julian Date 117

Static Test (levelled)**

Static Spike Test (levelled)

No Do coil spike responses show any trend from previous day(s)?
 Yes Do coil spike responses show correct 1->2->3 sequencing?

Coil #1

	Pre Survey				Post Survey			
	CH 1	CH 2	CH3	CH4	CH 1	CH 2	CH3	CH4
File Name	EM61_QC				EM61_QC			
Line #:	L2				L202			
Min:	593.86	202.86	28.9	0.52	584.48	197.26	27.6	0.58
Max:	600.52	206.81	30.41	1.39	589.01	200.55	28.82	1.21
Mean:	596.79	204.8	29.67	0.99	586.92	199.46	28.23	0.9
Std:	0.97	0.53	0.25	0.15	0.82	0.44	0.22	0.12

Comments: Statistics are based on a segment of the Static Spike Test

Coil #2

	Pre Survey				Post Survey			
	CH 1	CH 2	CH3	CH4	CH 1	CH 2	CH3	CH4
File Name	EM61_QC				EM61_QC			
Line #:	L2.1				L202.1			
Min:	415.17	141.15	18.28	0.06	413.15	139.36	19.08	0.24
Max:	419.15	143.16	21.26	1.72	415.4	141.13	20.49	0.9
Mean:	416.58	142.32	20.52	0.62	414.32	140.38	20.01	0.59
Std:	0.49	0.34	0.26	0.15	0.38	0.28	0.18	0.11

Comments: Statistics are based on a segment of the Static Spike Test

Coil #3

	Pre Survey				Post Survey			
	CH 1	CH 2	CH3	CH4	CH 1	CH 2	CH3	CH4
File Name	EM61_QC				EM61_QC			
Line #:	L2.2				L202.2			
Min:	429.05	145.05	20.42	0.18	411.61	138.13	19.28	0.32
Max:	433.37	147.43	21.83	1.07	414.2	140.07	20.31	0.96
Mean:	431.01	146.24	21.08	0.57	412.83	138.97	19.85	0.6
Std:	0.8	0.45	0.23	0.12	0.43	0.31	0.19	0.12

Comments: Statistics are based on a segment of the Static Spike Test

QC Check: JM
 Date: 5/10/2006

Area.: Ft Ord
 Dataset: EM61MK2
 Location ID: ODDS
 Survey Date: 4/27/2006

2-Line Repeat Data Test

Comments:

Pre Survey			Post Survey			Metric
Latency Correction			Latency Correction			TBD
Sensor #1	5	Line 5.0		5	Line 205.0	
Sensor #2	5	Line 5.1		5	Line 205.1	
Sensor #3	5	Line 5.2		5	Line 205.2	
Anomaly Amplitude mV/nT	Distance Offset (ft)		Anomaly Amplitude mV/nT	Distance Offset (ft)		
Sensor #1	643.05	1	609.61	1.25		TBD
Sensor #2	78.9	1.7	85.4	2.10		TBD
Sensor #3	615.99	1.25	591.06	1.30		TBD

QC Locations:
 5744792.38, 2115011.48
 5744793.76, 2115013.63
 5744791.23, 2115009.50

Known Location QC Points Detected

Comments:

Location ID		Location ID		Location ID		Metric
k1 - sw corner		k2 - nw corner		u2 - sw corner		
Easting	5744510.00	Easting	5744510.00	Easting	5744510.00	
Northing	2114990.00	Northing	2114960.00	Northing	2114600.00	
Anomaly Offset		Anomaly Offset		Anomaly Offset		
Dist. (ft)	0.20	Dist. (ft)	0.25	Dist. (ft)	0.75	<=2-ft
Direction	E	Direction	S	Direction	ENE	

QC Locations:
 grid corners

Data Sampling

Comments:

Along Track / Across Track Sampling		Metric
Along Track (ft)	0.3	<=0.5-ft
Across Track (ft)	1.9	<=3-ft
Total Area Surveyed (acres)		
This Data Set	1.65	