APPENDIX II-9-1

UNIT 1 – Winding Instructions

For MICE Spectrometer Solenoid Magnets

Wang NMR, Inc.

550 North Canyons Parkway , Livermore, Ca. 94551

COIL WINDING INSTRUCTION- MICE MAGNET

COIL WINDING LOG

SUPERCONDUCTOR USAGE FOR :

PROJECT: MICE TRACKER MATCH1 MAGNET

DATE:
OPERATOR:

COIL # : MATCH 1 (UNIT #1)

NBTI CONDUCTOR

WIRE: 5 T at 868 A

PEAK FIELD : 4.43 T AT 214.2 A

LAYER TO LAYER INSULATION : 2.5 MIL FIBERGLASS

WINDING METHOD: WET WIND WITH STY width thick SP = 56.0499

retangular condutor : 1.6460 0.9960 (MM)

WINDING DIMENSION (IN CM): 0.167640 0.106426

TURN TO TURN 0.06600 INCH 0.16764 CM

LAYER TO LAYER : 0.04190 INCH 0.10643 CM

	Z1	Z2
Z(CM)	2.3416	22.4584
R(CM)	25.8000	30.2699
COIL DIA. (IN INCH):	**20.3150**	**23.8346**
	(I.D)	**(O.D.)** (JUNE 28, 06)

WNDING TENSION: 20 TO 25 LB.
120 TURN PER LAYER
42 LAYERS

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)	REMARK SHORT CHECKING
PREPARATION MEASUREMENT: COIL STARTING DIA. (IN INCH) :									_____		
				SPOOL BILLET #:		36680	33140	METER			
1	120	638.21	2.6327	641	20.3988	108699	108058				
2	120	640.85	2.6327	1282	20.4826	(LIST FT)	107418				
3	120	643.48	2.6327	1925	20.5664		106774				
4	120	646.11	2.6327	2571	20.6502		106128				
5	120	648.75	2.6327	3220	20.7340		105479				
6	120	651.38	2.6327	3871	20.8178		104828				
7	120	654.01	2.6327	4525	20.9016		104174				
8	120	656.64	2.6327	5182	20.9854		103517				
9	120	659.28	2.6327	5841	21.0692		102858				
10	120	661.91	2.6327	6503	21.1530		102196				
11	120	664.54	2.6327	7168	21.2368		101531				
12	120	667.17	2.6327	7835	21.3206		100864				
13	120	669.81	2.6327	8505	21.4044		100194				
14	120	672.44	2.6327	9177	21.4882		99522				
15	120	675.07	2.6327	9852	21.5720		98847				
16	120	677.70	2.6327	10530	21.6558		98169				
17	120	680.34	2.6327	11210	21.7396		97489				
18	120	682.97	2.6327	11893	21.8234		96806				

REMARK :

COIL WINDING INSTRUCTION- MICE MAGNET

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)	REMARK SHORT CHECKING
19	120	685.60	2.6327	12579	21.9072	96806	96120				
20	120	688.24	2.6327	13267	21.9910		95432				
21	120	690.87	2.6327	13958	22.0748		94741				
22	120	693.50	2.6327	14652	22.1586		94048				
23	120	696.13	2.6327	15348	22.2424		93352				
24	120	698.77	2.6327	16046	22.3262		92653				
25	120	701.40	2.6327	16748	22.4100		91951				
26	120	704.03	2.6327	17452	22.4938		91247				
27	120	706.66	2.6327	18158	22.5776		90541				
28	120	709.30	2.6327	18868	22.6614		89831				
29	120	711.93	2.6327	19580	22.7452		89119				
30	120	714.56	2.6327	20294	22.8290		88405				
31	120	717.19	2.6327	21011	22.9128		87688				
32	120	719.83	2.6327	21731	22.9966		86968				
33	120	722.46	2.6327	22454	23.0804		86245				
34	120	725.09	2.6327	23179	23.1642		85520				
35	120	727.73	2.6327	23907	23.2480		84793				
36	120	730.36	2.6327	24637	23.3318		84062				
37	120	732.99	2.6327	25370	23.4156		83329				
38	120	735.62	2.6327	26106	23.4994		82594				
39	120	738.26	2.6327	26844	23.5832		81855				
40	120	740.89	2.6327	27585	23.6670		81114				
41	120	743.52	2.6327	28328	23.7508		80371				
42	120	746.15	2.6327	29074	23.8346		79625				

(LEFTOVER FOOTAGE ESTIMATE 24256 METER)

LEAD OUT (lead wire both in and out reserved15 ft)

ACTUAL WINDING RAD.

I.D.=

FINISH OUTER RADIAL.= **30.2699 CM**

TOTAL TURNS = **5040**

DESIGN TURNS **30.2699**

CHECKING FINAL O.D. (IN INCHES)=

COIL WINDING INSTRUCTION- MICE MAGNET

COIL WINDING LOG

SUPERCONDUCTOR USAGE FOR :

PROJECT: MICE MATCH2 MAGNET

DATE:
OPERATOR:

COIL # : MATCH 2 (unit #1)

NBTI CONDUCTOR

WIRE: 5 T at 872 A

PEAK FIELD : 4.01T AT 251.8 A

LAYER TO LAYER INSULATION : 2.5 MIL FIBERGLASS

WINDING METHOD: WET WIND WITH STY width thick SP = 56.0499

retangular condutor : 1.6460 0.9960 (MM)

CONDUCTOR DIMENSION (IN CM): 0.167640 0.106426

TURN TO TURN 0.06600 INCH 0.16764 CM

LAYER TO LAYER : 0.04190 INCH 0.10643 CM

	Z1	Z2	
Z(CM)	46.4254	66.3746	
R(CM)	25.8000	28.7799	
COIL DIA. (IN INCH):	**20.3150**	**22.6613**	
	(I.D)	**(O.D.)**	(JUNE 28, 06)

WNDING TENSION: 20 TO 25 LB.
119 TURN PER LAYER
28 LAYERS

REMARK :

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)	REMARK SHORT CHECKING
PREPARATION MEASUREMENT: COIL STARTING DIA. (IN INCH) :									_____		
				SPOOL BILLET #:		**36679**	**6683**	**METER**	(LEFTOVER FROM UNIT#1 CENTER COIL)		
1	119	632.90	2.6107	636	20.3988	21920	21285				
2	119	635.51	2.6107	1271	20.4826	(LIST FT)	20649				
3	119	638.12	2.6107	1909	20.5664		20011				
4	119	640.73	2.6107	2550	20.6502		19370				
5	119	643.34	2.6107	3193	20.7340		18727				
6	119	645.95	2.6107	3839	20.8178		18081				
7	119	648.56	2.6107	4488	20.9016		17433				
8	119	651.17	2.6107	5139	20.9854		16781				
9	119	653.78	2.6107	5793	21.0692		16128				
10	119	656.39	2.6107	6449	21.1530		15471				
11	119	659.00	2.6107	7108	21.2368		14812				
12	119	661.62	2.6107	7770	21.3206		14151				
13	119	664.23	2.6107	8434	21.4044		13486				
14	119	666.84	2.6107	9101	21.4882		12819				
15	119	669.45	2.6107	9770	21.5720		12150				
16	119	672.06	2.6107	10442	21.6558		11478				
17	119	674.67	2.6107	11117	21.7396		10803				
18	119	677.28	2.6107	11794	21.8234		10126				

COIL WINDING INSTRUCTION- MICE MAGNET

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)	REMARK SHORT CHECKING
19	119	679.89	2.6107	12474	21.9072	10126	9446				
20	119	682.50	2.6107	13157	21.9910		8764				
21	119	685.11	2.6107	13842	22.0748		8079				
22	119	687.72	2.6107	14529	22.1586		7391				
23	119	690.33	2.6107	15220	22.2424		6700				
24	119	692.94	2.6107	15913	22.3262		6008				
25	119	695.56	2.6107	16608	22.4100		5312				
26	119	698.17	2.6107	17306	22.4938		4614				
27	119	700.78	2.6107	18007	22.5776		3913				
28	119	703.39	2.6107	18711	22.6614		3210		(THE END, STORAGE)		
			LEAD OUT								
									ACTUAL WINDING RAD.		
									I.D.=		
									CHECKING FINAL O.D. (IN INCHES)=		

FINISH OUTER RADIAL.= 28.7799 CM

TOTAL TURNS = 3332

DESIGN TURNS 28.7799

COIL WINDING INSTRUCTION- MICE MAGNET

COIL WINDING LOG

SUPERCONDUCTOR USAGE FOR :

PROJECT: MICE CENTRE MAGNET

DATE:
OPERATOR:

COIL # : CENTRE (UNIT #1)

NBTI CONDUCTOR

WIRE: 5 T at 872 A

PEAK FIELD : 4.19 T AT 265.9 A

LAYER TO LAYER INSULATION : 2.5 MIL FIBERGLASS

WINDING METHOD: WET WIND WITH STY width thick SP =

retangular condutor : 1.6460 0.9960 (MM)

CONDUCTOR DIMENSION (IN CM): 0.167640 0.106426

TURN TO TURN 0.06600 INCH 0.16764 CM

LAYER TO LAYER : 0.04190 INCH 0.10643 CM

	Z1	Z2 (WARM DIMENSION)
Z(CM)	105.6851	237.1149
R(CM)	25.8000	27.9285
COIL DIA. (IN INCH):	**20.3150**	**21.9909**
	(I.D)	**(O.D.)** (JUNE 28, 06)

WNDING TENSION: 20 TO 25 LB.
784 TURN PER LAYER
20 LAYERS

REMARK :

PREPARATION MEASUREMENT: COIL STARTING DIA. (IN INCH) : _____

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)	REMARK SHORT CHECKING
				SPOOL BILLET #:		36679	33140	METER			
1	784	4169.67	17.2001	4187	20.3988	108699	104512				
2	784	4186.87	17.2001	8374	20.4826	(LIST FT)	100325				
3	784	4204.07	17.2001	12578	20.5664		96121				
4	784	4221.27	17.2001	16799	20.6502		91900				
5	784	4238.47	17.2001	21038	20.7340		87662				
6	784	4255.67	17.2001	25293	20.8178		83406				
7	784	4272.87	17.2001	29566	20.9016		79133				
8	784	4290.07	17.2001	33856	20.9854		74843				
9	784	4307.27	17.2001	38163	21.0692		70536				
10	784	4324.47	17.2001	42488	21.1530		66211	→	**LEAD IN AND OUT FOR MAGNET PROTECTION**		
11	784	4341.67	17.2001	46830	21.2368		61870		**APPEOX. 6 FT (DON'T CUT THE CONDUCTOR)**		
12	784	4358.87	17.2001	51188	21.3206		57511				
13	784	4376.07	17.2001	55565	21.4044		53135				
14	784	4393.27	17.2001	59958	21.4882		48741				
15	784	4410.47	17.2001	64368	21.5720		44331				
16	784	4427.67	17.2001	68796	21.6558		39903				
17	784	4444.87	17.2001	73241	21.7396		35458				
18	784	4462.07	17.2001	77703	21.8234		30996				

COIL WINDING INSTRUCTION- MICE MAGNET

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT
19	784	4479.27	17.2001	82182	21.9072	30996	26517	
20	784	4496.47	17.2001	86679	21.9910		22021	
			LEAD OUT					
FINISH OUTER RADIAL.=					**27.9285 CM**		**DESIGN TURNS**	**27.9285**
TOTAL TURNS =					**15680**			

Q. C.		REMARK
ACTUAL TURN	FINISHED O. D. (IN.)	SHORT CHECKING
(LEFTOVER ESTIMATE 6683 METER, CONTINUED		
TO WIND UNIT #1 MATCH #2 COIL)		
ACTUAL WINDING RAD.		
I.D.=		
CHECKING FINAL O.D. (IN INCHES)=		

Leftover
6688

COIL WINDING INSTRUCTION- MICE MAGNET

COIL WINDING LOG

SUPERCONDUCTOR USAGE FOR :
PROJECT: MICE END COIL#1 MAGNET

DATE:
OPERATOR:

COIL # : END COIL#1 (UNIT #1)
NBTI CONDUCTOR

WIRE: 5 T at 872 A
PEAK FIELD : 5.90 T AT 249.5 A
LAYER TO LAYER INSULATION : 2.5 MIL FIBERGLASS
WINDING METHOD: WET WIND WITH STY width thick SP =
retangular condutor : 1.6460 0.9960 (MM)
CONDUCTOR DIMENSION (IN CM): 0.167640 0.106426
TURN TO TURN 0.06600 INCH 0.16764 CM
LAYER TO LAYER : 0.04190 INCH 0.10643 CM

	Z1	Z2 (WARM DIMENSION)
Z(CM)	90.8679	101.9321
R(CM)	25.8	31.7599
COIL DIA. (IN INCH):	**20.3150 (I.D)**	**25.0078 (O.D.)** (JUNE 30, 06)

WNDING TENSION: 20 TO 25 LB.
66 TURN PER LAYER
56 LAYERS

REMARK :

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)	REMARK SHORT CHECKING
PREPARATION MEASUREMENT: COIL STARTING DIA. (IN INCH) :									_____		
				SPOOL BILLET #:		**36680**	**24255**	**METER**	(LEFTOVER FROM UNIT #1 MATCH 1)		
1	66	351.02	1.4480	352	20.3988	79556	79204				
2	66	352.46	1.4480	705	20.4826	(LIST FT)	78851				
3	66	353.91	1.4480	1059	20.5664		78498				
4	66	355.36	1.4480	1414	20.6502		78142				
5	66	356.81	1.4480	1771	20.7340		77785				
6	66	358.26	1.4480	2129	20.8178		77427				
7	66	359.70	1.4480	2489	20.9016		77067				
8	66	361.15	1.4480	2850	20.9854		76706				
9	66	362.60	1.4480	3213	21.0692		76344				
10	66	364.05	1.4480	3577	21.1530		75980				
11	66	365.50	1.4480	3942	21.2368		75614				
12	66	366.94	1.4480	4309	21.3206		75247				
13	66	368.39	1.4480	4678	21.4044		74879				
14	66	369.84	1.4480	5047	21.4882		74509				
15	66	371.29	1.4480	5419	21.5720		74138				
16	66	372.74	1.4480	5791	21.6558		73765				
17	66	374.18	1.4480	6166	21.7396		73391				
18	66	375.63	1.4480	6541	21.8234		73015				

COIL WINDING INSTRUCTION- MICE MAGNET

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)	REMARK SHORT CHECKING
19	66	377.08	1.4480	6918	21.9072	73015	72638				
20	66	378.53	1.4480	7297	21.9910		72260				
21	66	379.98	1.4480	7677	22.0748		71880				
22	66	381.42	1.4480	8058	22.1586		71498				
23	66	382.87	1.4480	8441	22.2424		71115				
24	66	384.32	1.4480	8825	22.3262		70731				
25	66	385.77	1.4480	9211	22.4100		70345				
26	66	387.22	1.4480	9598	22.4938		69958				
27	66	388.66	1.4480	9987	22.5776		69569				
28	66	390.11	1.4480	10377	22.6614		69179				
29	66	391.56	1.4480	10769	22.7452		68788				
30	66	393.01	1.4480	11162	22.8290		68395				
31	66	394.46	1.4480	11556	22.9128		68000				
32	66	395.90	1.4480	11952	22.9966		67604				
33	66	397.35	1.4480	12350	23.0804		67207				
34	66	398.80	1.4480	12748	23.1642		66808				
35	66	400.25	1.4480	13149	23.2480		66408				
36	66	401.70	1.4480	13550	23.3318		66006				
37	66	403.14	1.4480	13953	23.4156		65603				
38	66	404.59	1.4480	14358	23.4994		65198				
39	66	406.04	1.4480	14764	23.5832		64792				
40	66	407.49	1.4480	15172	23.6670		64385				
41	66	408.94	1.4480	15580	23.7508		63976				
42	66	410.38	1.4480	15991	23.8346		63566				
43	66	411.83	1.4480	16403	23.9184		63154				
44	66	413.28	1.4480	16816	24.0022		62740				
45	66	414.73	1.4480	17231	24.0860		62326				
46	66	416.17	1.4480	17647	24.1698		61910				

COIL WINDING INSTRUCTION- MICE MAGNET

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	FINISHED O. D. (IN.)	
47	66	417.62	1.4480	18064	24.2536		61492				
48	66	419.07	1.4480	18484	24.3374		61073				
49	66	420.52	1.4480	18904	24.4212		60652				
50	66	421.97	1.4480	19326	24.5050		60230				
51	66	423.41	1.4480	19749	24.5888		59807				
52	66	424.86	1.4480	20174	24.6726		59382				
53	66	426.31	1.4480	20601	24.7564		58956				
54	66	427.76	1.4480	21028	24.8402		58528				
55	66	429.21	1.4480	21458	24.9240		58099				
56	66	430.65	1.4480	21888	25.0078		57668				
			LEAD OUT		(CONTINUED TO WIND UNIT #1 END COIL #2)						
									ACTUAL WINDING RAD.		
									I.D.=		

FINISH OUTER RADIAL.= 31.7599 CM | DESIGN 31.7599 | CHECKING FINAL O.D. (IN INCHES)=

TOTAL TURNS = 3696 | TURNS

COIL WINDING INSTRUCTION- MICE MAGNET

COIL WINDING LOG

SUPERCONDUCTOR USAGE FOR :
PROJECT: MICE END COIL#2 MAGNET

DATE:
OPERATOR:

COIL # : END COIL#2 (unit #1)
NBTI CONDUCTOR
WIRE: 5 T at 872 A
PEAK FIELD : 6.37 T AT 265.2 A
LAYER TO LAYER INSULATION : 2.5 MIL FIBERGLASS
WINDING METHOD: WET WIND WITH STY width thick SP =
retangular condutor : 1.6460 0.9960 (MM)
CONDUCTOR DIMENSION (IN CM): 0.167640 0.106426
TURN TO TURN 0.06600 INCH 0.16764 CM
LAYER TO LAYER : 0.04190 INCH 0.10643 CM

	Z1	Z2 (WARM DIMENSION)
Z(CM)	240.8679	251.9321
R(CM)	25.8000	32.3984
COIL DIA. (IN INCH):	**20.3150**	**25.5106**
	(I.D)	**(O.D.)** (JUNE 23, 06)

WNDING TENSION: 20 TO 25 LB.
66 TURN PER LAYER
62 LAYERS

REMARK :

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	*Q. C.* ACTUAL TURN	*Q. C.* FINISHED O. D. (IN.)	REMARK SHORT CHECKING
PREPARATION MEASUREMENT: COIL STARTING DIA. (IN INCH) :									_____		
				SPOOL BILLET #:		**36680**	**17560**	**METER**	(LEFTOVER FROM END#1, UNIT1)		
1	66	351.02	1.4480	352	20.3988	57597	57244				
2	66	352.46	1.4480	705	20.4826	(LIST FT)	56892				
3	66	353.91	1.4480	1059	20.5664		56538				
4	66	355.36	1.4480	1414	20.6502		56183				
5	66	356.81	1.4480	1771	20.7340		55826				
6	66	358.26	1.4480	2129	20.8178		55468				
7	66	359.70	1.4480	2489	20.9016		55108				
8	66	361.15	1.4480	2850	20.9854		54747				
9	66	362.60	1.4480	3213	21.0692		54384				
10	66	364.05	1.4480	3577	21.1530		54020				
11	66	365.50	1.4480	3942	21.2368		53655				
12	66	366.94	1.4480	4309	21.3206		53288				
13	66	368.39	1.4480	4678	21.4044		52919				
14	66	369.84	1.4480	5047	21.4882		52549				
15	66	371.29	1.4480	5419	21.5720		52178				
16	66	372.74	1.4480	5791	21.6558		51805				
17	66	374.18	1.4480	6166	21.7396		51431				
18	66	375.63	1.4480	6541	21.8234		51056				

COIL WINDING INSTRUCTION- MICE MAGNET

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)	REMARK SHORT CHECKING
19	66	377.08	1.4480	6918	21.9072	51056	50678				
20	66	378.53	1.4480	7297	21.9910		50300				
21	66	379.98	1.4480	7677	22.0748		49920				
22	66	381.42	1.4480	8058	22.1586		49539				
23	66	382.87	1.4480	8441	22.2424		49156				
24	66	384.32	1.4480	8825	22.3262		48771				
25	66	385.77	1.4480	9211	22.4100		48386				
26	66	387.22	1.4480	9598	22.4938		47998				
27	66	388.66	1.4480	9987	22.5776		47610				
28	66	390.11	1.4480	10377	22.6614		47220				
29	66	391.56	1.4480	10769	22.7452		46828				
30	66	393.01	1.4480	11162	22.8290		46435				
31	66	394.46	1.4480	11556	22.9128		46041				
32	66	395.90	1.4480	11952	22.9966		45645				
33	66	397.35	1.4480	12350	23.0804		45247				
34	66	398.80	1.4480	12748	23.1642		44848				
35	66	400.25	1.4480	13149	23.2480		44448				
36	66	401.70	1.4480	13550	23.3318		44047				
37	66	403.14	1.4480	13953	23.4156		43643				
38	66	404.59	1.4480	14358	23.4994		43239				
39	66	406.04	1.4480	14764	23.5832		42833				
40	66	407.49	1.4480	15172	23.6670		42425				
41	66	408.94	1.4480	15580	23.7508		42016				
42	66	410.38	1.4480	15991	23.8346		41606				
43	66	411.83	1.4480	16403	23.9184		41194				
44	66	413.28	1.4480	16816	24.0022		40781				
45	66	414.73	1.4480	17231	24.0860		40366				
46	66	416.17	1.4480	17647	24.1698		39950				

COIL WINDING INSTRUCTION- MICE MAGNET

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	FINISHED O. D. (IN.)
47	66	417.62	1.4480	18064	24.2536		39532			
48	66	419.07	1.4480	18484	24.3374		39113			
49	66	420.52	1.4480	18904	24.4212		38693			
50	66	421.97	1.4480	19326	24.5050		38271			
51	66	423.41	1.4480	19749	24.5888		37847			
52	66	424.86	1.4480	20174	24.6726		37422			
53	66	426.31	1.4480	20601	24.7564		36996			
54	66	427.76	1.4480	21028	24.8402		36568			
55	66	429.21	1.4480	21458	24.9240		36139			
56	66	430.65	1.4480	21888	25.0078		35709			
57	66	432.10	1.4480	22320	25.0916		35276			
58	66	433.55	1.4480	22754	25.1754		34843			
59	66	435.00	1.4480	23189	25.2592		34408			
60	66	436.45	1.4480	23625	25.3430		33971			
61	66	437.89	1.4480	24063	25.4268		33534			
62	66	439.34	1.4480	24503	25.5106		33094		(THE LEFTOVER APPROX.10065 METER,	
									WILL WIND UNIT#2 MATCH#1 COIL)	
			LEAD OUT							
									ACTUAL WINDING RAD.	
									I.D.=	
									CHECKING FINAL O.D.	
									(IN INCHES)=	

FINISH OUTER RADIAL.= 32.3984 CM

TOTAL TURNS = 4092

DESIGN 32.3984 TURNS

APPENDIX II-9-2

UNIT 2 – Winding Instructions

For MICE Spectrometer Solenoid Magnets

Wang NMR, Inc.

550 North Canyons Parkway , Livermore, Ca. 94551

COIL WINDING INSTRUCTION- MICE MAGNET

COIL WINDING LOG

SUPERCONDUCTOR USAGE FOR :

PROJECT: MICE TRACKER MATCH1 MAGNET

DATE:

OPERATOR:

COIL # : MATCH 1 (UNIT #2)

NBTI CONDUCTOR

WIRE: 5 T at 868 A

PEAK FIELD : 4.43 T AT 214.2 A

LAYER TO LAYER INSULATION : 2.5 MIL FIBERGLASS

WINDING METHOD: WET WIND WITH STY

	Z1	Z2	
Z(CM)	2.3416	22.4584	
R(CM)	25.8000	30.2699	
COIL DIA. (IN INCH):	**20.3150**	**23.8346**	
	(I.D)	**(O.D.)**	(JUNE 28, 06)

	width	thick	
retangular condutor :	1.6460	0.9960	(MM)
WINDING DIMENSION (IN CM):	0.16764	0.10643	
TURN TO TURN 0.06600 INCH	0.16764	CM	
LAYER TO LAYER : 0.04190 INCH	0.10643	CM	

SP = 56.0499

WNDING TENSION: 20 TO 25 LB.
120 TURN PER LAYER
42 LAYERS

REMARK :

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)	REMARK SHORT CHECKING
PREPARATION MEASUREMENT: COIL STARTING DIA. (IN INCH) :									_____		
				SPOOL BILLET #:		**36680**	**10065**	**METER**	**(LEFTOVER FROM Unit #1, Match1, End1 and End2,**		
1	120	638.21	2.6327	641	20.3988	33013	32372		**Then Unit#2 Match 1)**		
2	120	640.85	2.6327	1282	20.4826	(LIST FT)	31732				
3	120	643.48	2.6327	1925	20.5664		31088				
4	120	646.11	2.6327	2571	20.6502		30442				
5	120	648.75	2.6327	3220	20.7340		29793				
6	120	651.38	2.6327	3871	20.8178		29142				
7	120	654.01	2.6327	4525	20.9016		28488				
8	120	656.64	2.6327	5182	20.9854		27831				
9	120	659.28	2.6327	5841	21.0692		27172				
10	120	661.91	2.6327	6503	21.1530		26510				
11	120	664.54	2.6327	7168	21.2368		25845				
12	120	667.17	2.6327	7835	21.3206		25178				
13	120	669.81	2.6327	8505	21.4044		24508				
14	120	672.44	2.6327	9177	21.4882		23836				
15	120	675.07	2.6327	9852	21.5720		23161				
16	120	677.70	2.6327	10530	21.6558		22483				
17	120	680.34	2.6327	11210	21.7396		21803				
18	120	682.97	2.6327	11893	21.8234		21120				

COIL WINDING INSTRUCTION- MICE MAGNET

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)	REMARK SHORT CHECKING
19	120	685.60	2.6327	12579	21.9072	21120	20434				
20	120	688.24	2.6327	13267	21.9910		19746				
21	120	690.87	2.6327	13958	22.0748		19055				
22	120	693.50	2.6327	14652	22.1586		18362				
23	120	696.13	2.6327	15348	22.2424		17666				
24	120	698.77	2.6327	16046	22.3262		16967				
25	120	701.40	2.6327	16748	22.4100		16265				
26	120	704.03	2.6327	17452	22.4938		15561				
27	120	706.66	2.6327	18158	22.5776		14855				
28	120	709.30	2.6327	18868	22.6614		14145				
29	120	711.93	2.6327	19580	22.7452		13433				
30	120	714.56	2.6327	20294	22.8290		12719				
31	120	717.19	2.6327	21011	22.9128		12002				
32	120	719.83	2.6327	21731	22.9966		11282				
33	120	722.46	2.6327	22454	23.0804		10559				
34	120	725.09	2.6327	23179	23.1642		9834				
35	120	727.73	2.6327	23907	23.2480		9107				
36	120	730.36	2.6327	24637	23.3318		8376				
37	120	732.99	2.6327	25370	23.4156		7643				
38	120	735.62	2.6327	26106	23.4994		6908				
39	120	738.26	2.6327	26844	23.5832		6169				
40	120	740.89	2.6327	27585	23.6670		5428				
41	120	743.52	2.6327	28328	23.7508		4685				
42	120	746.15	2.6327	29074	23.8346		3939				
								(THE END, STORAGE THE WIRE)			
			LEAD OUT (lead wire both in and out reserved15 ft)								
									ACTUAL WINDING RAD.		
									I.D.=		
					FINISH OUTER RADIAL.=	**30.2699 CM**		**DESIGN**	**30.2699**	**CHECKING FINAL O.D. (IN INCHES)=**	
					TOTAL TURNS =	**5040**		**TURNS**			

COIL WINDING INSTRUCTION- MICE MAGNET

COIL WINDING LOG

SUPERCONDUCTOR USAGE FOR :

PROJECT: MICE MATCH2 MAGNET

DATE:

OPERATOR:

COIL # : MATCH 2 (UNIT #2)

NBTI CONDUCTOR

WIRE: 5 T at 872 A

PEAK FIELD : 4.01T AT 251.8 A

LAYER TO LAYER INSULATION : 2.5 MIL FIBERGLASS

WINDING METHOD: WET WIND WITH STY

CONDUCTOR DIMENSION (IN CM):

TURN TO TURN 0.06600 INCH 0.16764 CM

LAYER TO LAYER : 0.04190 INCH 0.10643 CM

	Z1	Z2
Z(CM)	46.4254	66.3746
R(CM)	25.8000	28.7799
COIL DIA. (IN INCH):	**20.3150**	**22.6613**
	(I.D)	**(O.D.)** (JUNE 28, 06)

	width	thick	
retangular condutor :	1.6460	0.9960	(MM)
	0.167640	0.106426	

SP = 56.0499

WNDING TENSION: 20 TO 25 LB.

119 TURN PER LAYER

28 LAYERS

REMARK :

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)	REMARK SHORT CHECKING
PREPARATION MEASUREMENT: COIL STARTING DIA. (IN INCH) :									_____		
				SPOOL BILLET #:		**36760-1-2**	**7440**	**METER**			
1	119	632.90	2.6107	636	20.3988	24403	23768				
2	119	635.51	2.6107	1271	20.4826	(LIST FT)	23132				
3	119	638.12	2.6107	1909	20.5664		22494				
4	119	640.73	2.6107	2550	20.6502		21853				
5	119	643.34	2.6107	3193	20.7340		21210				
6	119	645.95	2.6107	3839	20.8178		20564				
7	119	648.56	2.6107	4488	20.9016		19915				
8	119	651.17	2.6107	5139	20.9854		19264				
9	119	653.78	2.6107	5793	21.0692		18611				
10	119	656.39	2.6107	6449	21.1530		17954				
11	119	659.00	2.6107	7108	21.2368		17295				
12	119	661.62	2.6107	7770	21.3206		16634				
13	119	664.23	2.6107	8434	21.4044		15969				
14	119	666.84	2.6107	9101	21.4882		15302				
15	119	669.45	2.6107	9770	21.5720		14633				
16	119	672.06	2.6107	10442	21.6558		13961				
17	119	674.67	2.6107	11117	21.7396		13286				
18	119	677.28	2.6107	11794	21.8234		12609				

COIL WINDING INSTRUCTION- MICE MAGNET

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)	REMARK SHORT CHECKING
19	119	679.89	2.6107	12474	21.9072	12609	11929				
20	119	682.50	2.6107	13157	21.9910		11247				
21	119	685.11	2.6107	13842	22.0748		10561				
22	119	687.72	2.6107	14529	22.1586		9874				
23	119	690.33	2.6107	15220	22.2424		9183				
24	119	692.94	2.6107	15913	22.3262		8490				
25	119	695.56	2.6107	16608	22.4100		7795				
26	119	698.17	2.6107	17306	22.4938		7097				
27	119	700.78	2.6107	18007	22.5776		6396				
28	119	703.39	2.6107	18711	22.6614		5693		(THE END, STORAGE)		
			LEAD OUT								
									ACTUAL WINDING RAD.		
									I.D.=		
FINISH OUTER RADIAL.= 28.7799 CM							DESIGN	28.7799	CHECKING FINAL O.D.		
TOTAL TURNS = 3332							TURNS		(IN INCHES)=		

COIL WINDING INSTRUCTION- MICE MAGNET

COIL WINDING LOG

SUPERCONDUCTOR USAGE FOR :
PROJECT: MICE CENTRE MAGNET

DATE:
OPERATOR:

COIL # : CENTER (UNIT#2)
NBTI CONDUCTOR
WIRE: 5 T at 872 A
PEAK FIELD : 4.19 T AT 265.9 A
LAYER TO LAYER INSULATION : 2.5 MIL FIBERGLASS
WINDING METHOD: WET WIND WITH STY

	Z1	Z2 (WARM DIMENSION)
Z(CM)	105.6851	237.1149
R(CM)	25.8000	27.9285
COIL DIA. (IN INCH):	**20.3150**	**21.9909**
	(I.D)	**(O.D.)** (JUNE 28, 06)

	width	thick	SP =
retangular condutor :	1.6460	0.9960 (MM)	
CONDUCTOR DIMENSION (IN CM):	0.167640	0.106426	
TURN TO TURN	0.06600 INCH	0.16764 CM	
LAYER TO LAYER :	0.04190 INCH	0.10643 CM	

WNDING TENSION: 20 TO 25 LB.
784 TURN PER LAYER
20 LAYERS

REMARK :

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)	REMARK SHORT CHECKING
PREPARATION MEASUREMENT: COIL STARTING DIA. (IN INCH) :									_____		
				SPOOL BILLET #:		**36761-1**	**27363**	**METER**			
1	784	4169.67	17.2001	4187	20.3988	89751	85564				
2	784	4186.87	17.2001	8374	20.4826	(LIST FT)	81377				
3	784	4204.07	17.2001	12578	20.5664		77173				
4	784	4221.27	17.2001	16799	20.6502		72952				
5	784	4238.47	17.2001	21038	20.7340		68713				
6	784	4255.67	17.2001	25293	20.8178		64457				
7	784	4272.87	17.2001	29566	20.9016		60185				
8	784	4290.07	17.2001	33856	20.9854		55894				
9	784	4307.27	17.2001	38163	21.0692		51587				
10	784	4324.47	17.2001	42488	21.1530		47263		**LEAD IN AND OUT FOR MAGNET PROTECTION**		
11	784	4341.67	17.2001	46830	21.2368		42921		**(DON'T CUT THE CONDUCTOR)**		
12	784	4358.87	17.2001	51188	21.3206		38562				
13	784	4376.07	17.2001	55565	21.4044		34186				
14	784	4393.27	17.2001	59958	21.4882		29793				
15	784	4410.47	17.2001	64368	21.5720		25382				
16	784	4427.67	17.2001	68796	21.6558		20955				
17	784	4444.87	17.2001	73241	21.7396		16510				
18	784	4462.07	17.2001	77703	21.8234		12048				

COIL WINDING INSTRUCTION- MICE MAGNET

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)	REMARK SHORT CHECKING
19	784	4479.27	17.2001	82182	21.9072	12048	7568				
20	784	4496.47	17.2001	86679	21.9910		3072		(THE END, STORAGE)		
			LEAD OUT								
									ACTUAL WINDING RAD.		
									I.D.=		
FINISH OUTER RADIAL.= 27.9285 CM							DESIGN	27.9285	CHECKING FINAL O.D.		
TOTAL TURNS = 15680							TURNS		(IN INCHES)=		

COIL WINDING INSTRUCTION- MICE MAGNET

COIL WINDING LOG

SUPERCONDUCTOR USAGE FOR :
PROJECT: MICE END COIL#1 MAGNET

DATE:
OPERATOR:

COIL # : END COIL#1 (UNIT #2)
NBTI CONDUCTOR
WIRE: 5 T at 872 A
PEAK FIELD : 5.90 T AT 249.5 A
LAYER TO LAYER INSULATION : 2.5 MIL FIBERGLASS
WINDING METHOD: WET WIND WITH STY width thick SP =
retangular condutor : 1.6460 0.9960 (MM)
CONDUCTOR DIMENSION (IN CM): 0.167640 0.106426
TURN TO TURN 0.06600 INCH 0.16764 CM
LAYER TO LAYER : 0.04190 INCH 0.10643 CM

	Z1	Z2 (WARM DIMENSION)
Z(CM)	90.8679	101.9321
R(CM)	25.8	31.7599
COIL DIA. (IN INCH):	**20.3150**	**25.0078**
	(I.D)	**(O.D.)** (JUNE 30, 06)

WNDING TENSION: 20 TO 25 LB.
66 TURN PER LAYER
56 LAYERS

REMARK :

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)	REMARK SHORT CHECKING
PREPARATION MEASUREMENT: COIL STARTING DIA. (IN INCH) :									_____		
				SPOOL BILLET #:	36760-1-1		15218	METER	(SPOOL 36760-1-1WIND BOTH END 1		
1	66	351.02	1.4480	352	20.3988	49915	49563		AND END 2 OF UNIT #2)		
2	66	352.46	1.4480	705	20.4826	(LIST FT)	49210				
3	66	353.91	1.4480	1059	20.5664		48856				
4	66	355.36	1.4480	1414	20.6502		48501				
5	66	356.81	1.4480	1771	20.7340		48144				
6	66	358.26	1.4480	2129	20.8178		47786				
7	66	359.70	1.4480	2489	20.9016		47426				
8	66	361.15	1.4480	2850	20.9854		47065				
9	66	362.60	1.4480	3213	21.0692		46702				
10	66	364.05	1.4480	3577	21.1530		46338				
11	66	365.50	1.4480	3942	21.2368		45973				
12	66	366.94	1.4480	4309	21.3206		45606				
13	66	368.39	1.4480	4678	21.4044		45237				
14	66	369.84	1.4480	5047	21.4882		44868				
15	66	371.29	1.4480	5419	21.5720		44496				
16	66	372.74	1.4480	5791	21.6558		44124				
17	66	374.18	1.4480	6166	21.7396		43749				
18	66	375.63	1.4480	6541	21.8234		43374				

COIL WINDING INSTRUCTION- MICE MAGNET

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)	REMARK SHORT CHECKING
19	66	377.08	1.4480	6918	21.9072	43374	42997				
20	66	378.53	1.4480	7297	21.9910		42618				
21	66	379.98	1.4480	7677	22.0748		42238				
22	66	381.42	1.4480	8058	22.1586		41857				
23	66	382.87	1.4480	8441	22.2424		41474				
24	66	384.32	1.4480	8825	22.3262		41090				
25	66	385.77	1.4480	9211	22.4100		40704				
26	66	387.22	1.4480	9598	22.4938		40317				
27	66	388.66	1.4480	9987	22.5776		39928				
28	66	390.11	1.4480	10377	22.6614		39538				
29	66	391.56	1.4480	10769	22.7452		39146				
30	66	393.01	1.4480	11162	22.8290		38753				
31	66	394.46	1.4480	11556	22.9128		38359				
32	66	395.90	1.4480	11952	22.9966		37963				
33	66	397.35	1.4480	12350	23.0804		37566				
34	66	398.80	1.4480	12748	23.1642		37167				
35	66	400.25	1.4480	13149	23.2480		36766				
36	66	401.70	1.4480	13550	23.3318		36365				
37	66	403.14	1.4480	13953	23.4156		35962				
38	66	404.59	1.4480	14358	23.4994		35557				
39	66	406.04	1.4480	14764	23.5832		35151				
40	66	407.49	1.4480	15172	23.6670		34744				
41	66	408.94	1.4480	15580	23.7508		34335				
42	66	410.38	1.4480	15991	23.8346		33924				
43	66	411.83	1.4480	16403	23.9184		33512				
44	66	413.28	1.4480	16816	24.0022		33099				
45	66	414.73	1.4480	17231	24.0860		32684				
46	66	416.17	1.4480	17647	24.1698		32268				

COIL WINDING INSTRUCTION- MICE MAGNET

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT
47	66	417.62	1.4480	18064	24.2536		31851	
48	66	419.07	1.4480	18484	24.3374		31431	
49	66	420.52	1.4480	18904	24.4212		31011	
50	66	421.97	1.4480	19326	24.5050		30589	
51	66	423.41	1.4480	19749	24.5888		30166	
52	66	424.86	1.4480	20174	24.6726		29741	
53	66	426.31	1.4480	20601	24.7564		29314	
54	66	427.76	1.4480	21028	24.8402		28887	
55	66	429.21	1.4480	21458	24.9240		28457	
56	66	430.65	1.4480	21888	25.0078		28027	
			LEAD OUT					
FINISH OUTER RADIAL.=			31.7599 CM				DESIGN	31.7599
TOTAL TURNS =			3696				TURNS	

Q. C.	
ACTUAL TURN	FINISHED O. D. (IN.)
(CONTINUED TO WIND UNIT #2 END COIL #2)	
ACTUAL WINDING RAD.	
I.D.=	
CHECKING FINAL O.D. (IN INCHES)=	

COIL WINDING INSTRUCTION- MICE MAGNET

COIL WINDING LOG

SUPERCONDUCTOR USAGE FOR :

PROJECT: MICE END COIL#2 MAGNET

DATE:

OPERATOR:

COIL # : END COIL#2 (unit #2)

NBTI CONDUCTOR

WIRE: 5 T at 872 A

PEAK FIELD : 6.37 T AT 265.2 A

LAYER TO LAYER INSULATION : 2.5 MIL FIBERGLASS

WINDING METHOD: WET WIND WITH STY

CONDUCTOR DIMENSION (IN CM):

TURN TO TURN 0.06600 INCH

LAYER TO LAYER : 0.04190 INCH

	Z1	Z2 (WARM DIMENSION)
Z(CM)	240.8679	251.9321
R(CM)	25.8000	32.3984
COIL DIA. (IN INCH):	**20.3150**	**25.5106**
	(I.D)	**(O.D.)** (JUNE 28, 06)

	width	thick	SP =
retangular condutor :	1.6460	0.9960	(MM)
	0.167640	0.106426	
	0.16764	CM	
	0.10643	CM	

WNDING TENSION: 20 TO 25 LB.
66 TURN PER LAYER
62 LAYERS

REMARK :

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)	REMARK SHORT CHECKING
PREPARATION MEASUREMENT: COIL STARTING DIA. (IN INCH) :									_____		
				SPOOL BILLET #:	**36760-1-1**		**8524**	**METER**	**(LEFTOVER FROM END#1, UNIT#2)**		
1	66	351.02	1.4480	352	20.3988	27959	27606				
2	66	352.46	1.4480	705	20.4826	(LIST FT)	27254				
3	66	353.91	1.4480	1059	20.5664		26900				
4	66	355.36	1.4480	1414	20.6502		26545				
5	66	356.81	1.4480	1771	20.7340		26188				
6	66	358.26	1.4480	2129	20.8178		25829				
7	66	359.70	1.4480	2489	20.9016		25470				
8	66	361.15	1.4480	2850	20.9854		25109				
9	66	362.60	1.4480	3213	21.0692		24746				
10	66	364.05	1.4480	3577	21.1530		24382				
11	66	365.50	1.4480	3942	21.2368		24016				
12	66	366.94	1.4480	4309	21.3206		23650				
13	66	368.39	1.4480	4678	21.4044		23281				
14	66	369.84	1.4480	5047	21.4882		22911				
15	66	371.29	1.4480	5419	21.5720		22540				
16	66	372.74	1.4480	5791	21.6558		22167				
17	66	374.18	1.4480	6166	21.7396		21793				
18	66	375.63	1.4480	6541	21.8234		21417				

COIL WINDING INSTRUCTION- MICE MAGNET

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)	REMARK SHORT CHECKING
19	66	377.08	1.4480	6918	21.9072	21417	21040				
20	66	378.53	1.4480	7297	21.9910		20662				
21	66	379.98	1.4480	7677	22.0748		20282				
22	66	381.42	1.4480	8058	22.1586		19900				
23	66	382.87	1.4480	8441	22.2424		19518				
24	66	384.32	1.4480	8825	22.3262		19133				
25	66	385.77	1.4480	9211	22.4100		18747				
26	66	387.22	1.4480	9598	22.4938		18360				
27	66	388.66	1.4480	9987	22.5776		17972				
28	66	390.11	1.4480	10377	22.6614		17581				
29	66	391.56	1.4480	10769	22.7452		17190				
30	66	393.01	1.4480	11162	22.8290		16797				
31	66	394.46	1.4480	11556	22.9128		16402				
32	66	395.90	1.4480	11952	22.9966		16007				
33	66	397.35	1.4480	12350	23.0804		15609				
34	66	398.80	1.4480	12748	23.1642		15210				
35	66	400.25	1.4480	13149	23.2480		14810				
36	66	401.70	1.4480	13550	23.3318		14408				
37	66	403.14	1.4480	13953	23.4156		14005				
38	66	404.59	1.4480	14358	23.4994		13601				
39	66	406.04	1.4480	14764	23.5832		13195				
40	66	407.49	1.4480	15172	23.6670		12787				
41	66	408.94	1.4480	15580	23.7508		12378				
42	66	410.38	1.4480	15991	23.8346		11968				
43	66	411.83	1.4480	16403	23.9184		11556				
44	66	413.28	1.4480	16816	24.0022		11143				
45	66	414.73	1.4480	17231	24.0860		10728				
46	66	416.17	1.4480	17647	24.1698		10312				

COIL WINDING INSTRUCTION- MICE MAGNET

LAYER #	# Turn /Layer	Length per Layer (FEET)	INC/LAYE (FEET)	ACCUM/L (FEET)	FINISHED O. D. (INCH)	SUPPLY FOOTAGE	LEFTOVER FOOTAGE	DATE: COMMENT	Q. C. ACTUAL TURN	Q. C. FINISHED O. D. (IN.)
47	66	417.62	1.4480	18064	24.2536		9894			
48	66	419.07	1.4480	18484	24.3374		9475			
49	66	420.52	1.4480	18904	24.4212		9055			
50	66	421.97	1.4480	19326	24.5050		8633			
51	66	423.41	1.4480	19749	24.5888		8209			
52	66	424.86	1.4480	20174	24.6726		7784			
53	66	426.31	1.4480	20601	24.7564		7358			
54	66	427.76	1.4480	21028	24.8402		6930			
55	66	429.21	1.4480	21458	24.9240		6501			
56	66	430.65	1.4480	21888	25.0078		6070			
57	66	432.10	1.4480	22320	25.0916		5638			
58	66	433.55	1.4480	22754	25.1754		5205			
59	66	435.00	1.4480	23189	25.2592		4770			
60	66	436.45	1.4480	23625	25.3430		4333			
61	66	437.89	1.4480	24063	25.4268		3895			
62	66	439.34	1.4480	24503	25.5106		3456		(THE END, STORAGE)	
			LEAD OUT							
									ACTUAL WINDING RAD.	
		•							I.D.=	

FINISH OUTER RADIAL.=	32.3984 CM	DESIGN	32.3984
TOTAL TURNS =	4092	TURNS	

CHECKING FINAL O.D. (IN INCHES)=