NuMI Checkout

5/13/2004

WBS	Description	% Comp	Duration	Start	Finish	Lead Person	Notes
3.1	Primary Beam	1%	117 d	May-04	Nov-04		
3.1.1	Primary Beam Magnets	2%	117 d	May-04	Nov-04		Polarity checkand power testing completed
3.1.1.1	I:KPS6N	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.2	Check effect of Lambertson operation on Recycler orbit	0%	1 d	May-04	May-04	Sam Childress,Alberto Marchionni	
3.1.1.3	I:LAM60	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.4	I:LAM61	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.5	I:V100 (C-Magnet)	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.6	E:QD101	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.7	E:HT102	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.8	Check residual field at Recycler due to HV101:1,6	100%	1 d	May-04	May-04	Doug Jensen	Fields at Recycler as expected. Need end caps and more shields
3.1.1.9	Check residual field at Recycler with all HV101 shields in place	0%	1 d	Jun-04	Jun-04	Doug Jensen	Need all shields installed and another power-on access to check HV101 fields at Recycler
3.1.1.10	Check effect of HV101 on Recycler orbit	0%	1 d	Jul-04	Jul-04	Alberto Marchionni	Joint study with Alberto & Cons Gattuso
3.1.1.11	E:HV101	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.12	E:QF102	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.13	E:VT103	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.14	Check residual fieds at Recycler from extraction quads	0%	1 d	Jul-04	Jul-04	Doug Jensen	
3.1.1.15	E:QD103	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.16	E:QF104	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.17	E:H104 (200 turn dipole)	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.18	E:QF105	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.19	E:HT105	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.20	E:QD106	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.21	E:VT106	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.22	E:QF107	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.23	E:HT107	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.24	E:VT108	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.25	E:QD108	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.26	E:V108	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.27	E:HT109	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.28	E:QF109	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.29	E:VT110	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.30	E:QD110	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.31	E:VT111	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.32	E:QD111	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.33	E:HT112	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.34	E:QF112	0%	1 d	Nov-04	Nov-04	George Krafczyk	
3.1.1.35	E:QD113	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.36	E:VT114	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.37	E:HT114	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.38	E:QF114	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.39	E:QF115	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.40	E:HT115	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.41	E:QD116	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.42	E:VT116	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.43	E:QF117	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.44	E:HT117	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.45	E:H117	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.46	E:QD118	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.47	E:VT118	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.48	E:V118	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.49	E:HT119	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.50	E:QF119	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.51	E:QD120	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.52	E:QF121	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.53	E:HT121	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.1.54	E:VT121	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.1.2	Beam Position Monitors	0%	76 d	Jul-04	Nov-04		A/B plates pulsed and read out throught ACNET
3.1.2.1	E:VP101	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.2.2	E:HP101	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.2.3	E:HP102	0%	1 d	Nov-04	Nov-04	Sam Childress	

3.1.2.4	E:VP103	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.2.5	E:HP104	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.2.6	E:HP105	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.2.7	E:VP106	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.2.8	E:HP107	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.2.9	E:VP108	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.2.10	E:HP109	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.2.11	E:VP110	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.2.12	E:VP111	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.2.13	E:HP112	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.2.14	E:VP113	0%	1 d	Jul-04	Jul-04	Sam Childress	
3.1.2.15	E:HP114	0%	1 d	Jul-04	Jul-04	Sam Childress	
3.1.2.16	E:HP115	0%	1 d	Jul-04	Jul-04	Sam Childress	
3.1.2.17	E:VP116	0%	1 d	Jul-04	Jul-04	Sam Childress	
3.1.2.18	E:HP117	0%	1 d	Jul-04	Jul-04	Sam Childress	
3.1.2.19	Evaluate effect of image current using network analyzer	0%	1 d	Aug-04	Aug-04	Instrument Dept	
3.1.2.20	E:VP118	0%	1 d	Jul-04	Jul-04	Sam Childress	
3.1.2.21	E:HP119	0%	1 d	Jul-04	Jul-04	Sam Childress	
3.1.2.22	E:HP121	0%	1 d	Jul-04	Jul-04	Sam Childress	
3.1.2.23	E:VP121	0%	1 d	Jul-04	Jul-04	Sam Childress	
3.1.2.24	E:HPTAR	0%	1 d	Jul-04	Jul-04	Sam Childress	
3.1.2.25	E:VPTAR	0%	1 d	Jul-04	Jul-04	Sam Childress	
3.1.3	Profile Monitors	0%	66 d	Aug-04	Nov-04		Motor drives are run to check limits and status read from ACNET. Final alignment done.
3.1.3.1	E:PM101	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.3.2	E:PM105	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.3.3	E:PM107	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.3.4	E:PM108	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.3.5	E:PM112	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.3.6	E:PM114	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.3.7	E:PM115	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.3.8	E:PM117	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.3.9	E:PM121	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.3.10	E:PMTGT	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.4	Beam Loss Monitors	0%	66 d	Aug-04	Nov-04		Signal cable rung out through ACNET. HV connected
3.1.4.1	E:LMHV1O - MI60	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.2	E:LMHV1R - MI60	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.3	E:LMV100	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.4	E:LMQ101	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.5	E:LM1011	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.6	E:LM1012	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.7	E:LMQ102	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.8	E:LMHV2O - MI60	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.9	E:LMHV2R - MI60	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.10	E:LM1013	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.11	E:LM1014	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.12	E:LM1015	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.13	E:LMQ103	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.14	E:LM1016	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.15	E:LMQ104	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.16	E:LMH104	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.17	E:LMQ105	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.18	E:LMQ106	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.19	E:LMQ107	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.20	E:LMHV3O	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.21	E:LMHV3R	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.22	E:LMQ108	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.23	E:LM1081	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.24	E:LM1082	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.25	E:LMQ109	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.26	E:LM1083	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.27	E:LM1084	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.28	E:LMQ110	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.29	E:LM1085	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.30	E:LM1086	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.31	E:LMQ111	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.4.32	E:LMQ112	0%	1 d	Nov-04	Nov-04	Sam Childress	

3.1.4.33	E:LMHV4O - MI65	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.4.34	E:LMHV4R - MI65	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.4.35	E:LMQ113	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.4.36	E:LMQ114	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.4.37	E:LMQ115	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.4.38	E:LMQ116	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.4.39	E:LMQ117	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.4.40	E:LMH117	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.4.41	E:LMQ118	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.4.42	E:LM1181	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.4.43	E:LM1182	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.4.44	E:LMQ119	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.4.45	E:LMHV5O	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.4.46	E:LMHV5R	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.4.47	E:LM1183	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.4.48	E:LM1184	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.4.49	E:LMQ120	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.4.50	E:LMQ121	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.5	Total Loss Monitors	0%	1 d	Nov-04	Nov-04		Signal cable rung out through ACNET. HV connected
3.1.5.1	E:TLMNS	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.5.2	E:TLMCTU	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.5.3	E:TLMCTD	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.5.4	E:TLMPT	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.5.5	E:TLMHV	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.5.6	E:TLMGF	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.6	Toroids	0%	66 d	Aug-04	Nov-04		Signal cable rung out through ACNET
3.1.6.1	E:NIUP	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.6.2	E:NIDN	0%	1 d	Aug-04	Aug-04	Sam Childress	
3.1.7	Calibration Targets	0%	1 d	Nov-04	Nov-04		Motor drives are run to check limits and status read from ACNET.
3.1.7.1	E:CT111	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.7.2	E:CT118	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.8	Resistive Wall Monitor	0%	1 d	Nov-04	Nov-04	Sam Childress	
3.1.9	Primary beam vacuum system	0%	66 d	Aug-04	Nov-04		Beamline section is pumped down. Vac & status verified on ACNET
3.1.9.1	Extraction channel vacuum	0%	1 d	Nov-04	Nov-04	Dave Pushka	
3.1.9.2	Carrier Tunnel vacuum	0%	1 d	Nov-04	Nov-04	Dave Pushka	
3.1.9.3	Pre-target vacuum	0%	1 d	Aug-04	Aug-04	Dave Pushka	
3.2	Target Hall	0%	127 d	Jun-04	Dec-04		
3.2.1	Target/Baffle Module	0%	127 d	Jun-04	Dec-04		
3.2.1.1	E:BTHTnn	0%	1 d	Dec-04	Dec-04	Jim Hylen	
3.2.1.2	E:BTHTnn	0%	1 d	Dec-04	Dec-04	Jim Hylen	
3.2.1.3	Target Budal Monitor	0%	1 d	Dec-04	Dec-04	Jim Hylen	
3.2.1.4	Target helium flow/pressure	0%	1 d	Dec-04	Dec-04	Jim Hylen	
3.2.1.5	Target positioning	0%	1 d	Dec-04	Dec-04	Jim Hylen	
3.2.1.6	Target/Baffle RAW system	0%	1 d	Jun-04	Jun-04	Dave Pushka	
3.2.2	Horn 1 Module	0%	127 d	Jun-04	Dec-04		
3.2.2.1	E:BTHTnn	0%	1 d	Dec-04	Dec-04	Jim Hylen	
3.2.2.2	E:BTHTnn	0%	1 d	Dec-04	Dec-04	Jim Hylen	
3.2.2.3	E:BTHTnn	0%	1 d	Dec-04	Dec-04	Jim Hylen	
3.2.2.4	Horn 1 Bdot system	0%	1 d	Dec-04	Dec-04	Jim Hylen	
3.2.2.5	Horn 1 RAW System	0%	1 d	Jun-04	Jun-04	Dave Pushka	
3.2.2.6	Horn 1 motor controls	0%	1 d	Dec-04	Dec-04	Jim Hylen	
3.2.3	Horn 2 Module	0%	127 d	Jun-04	Dec-04		
3.2.3.1	E:BTHTnn	0%	1 d	Dec-04	Dec-04	Jim Hylen	
3.2.3.2	E:BTHTnn	0%	1 d	Dec-04	Dec-04	Jim Hylen	
3.2.3.3	Horn 2 Bdot system	0%	1 d	Dec-04	Dec-04	Jim Hylen	
3.2.3.4	Horn 2 RAW System	0%	1 d	Jun-04	Jun-04	Dave Pushka	
3.2.3.5	Horn 2 motor controls	0%	1 d	Dec-04	Dec-04	Jim Hylen	
3.2.4	Horn Power supply	0%	1 d	Jul-04	Jul-04	George Krafczyk	
3.2.5	Chase Cooling System	0%	1 d	Dec-04	Dec-04		
3.2.5.1	Target pile temperature monitors	0%	1 d	Dec-04	Dec-04	Jim Hylen	
3.2.5.2	Differential pressure monitors	0%	1 d	Dec-04	Dec-04	Jim Hylen	
3.2.5.3	Confirm target pile leak rate is OK	0%	1 d	Dec-04	Dec-04	Jim Hylen	
3.3	Absorber Area	0%	68 d	Jun-04	Sep-04		

NuMI Checkout

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3.3.1	Decay pipe vacuum system checkout	0%	1 d	Jun-04	Jun-04	Dave Pushka	DK pipe is evacuated to a stable vacuum level. Status is read out through ACNET
3.3.2	Checkout Decay Pipe RAW system	0%	1 d	Jul-04	Jul-04	Dave Pushka	RAW system is operated. Pumps, valves and instrumentation are checked for proper operation vis ACNET
3.3.3	Checkout Hadron Monitor gas and electrical	0%	1 d	Jul-04	Jul-04	Debbie Harris	Gas flows to monitor and checked for leaks. Electrical connections checked with HV & pulser through ACNET
3.3.4	Checkout Absorber temperature monitors	0%	1 d	Sep-04	Sep-04	Cat James	Temp monitors connected to ACNET and checked
3.3.5	Measure absorber air leak rate	0%	1 d	Sep-04	Sep-04	Cat James	Leak rate checked to ensure consistency with airborne release calculations. Mitigate leaks if too high.
3.3.6	Checkout muon monitor 1 gas & electrical	0%	1 d	Sep-04	Sep-04	Debbie Harris	Gas flows to monitor and checked for leaks. Electrical connections checked with HV & pulser through ACNET
3.3.7	Checkout muon monitor 2 gas & electrical	0%	1 d	Sep-04	Sep-04	Debbie Harris	Gas flows to monitor and checked for leaks. Electrical connections checked with HV & pulser through ACNET
3.3.8	Checkout muon monitor 3 gas & electrical	0%	1 d	Sep-04	Sep-04	Debbie Harris	Gas flows to monitor and checked for leaks. Electrical connections checked with HV & pulser through ACNET
3.4	Beam Permit System	0%	98 d	Jul-04	Dec-04		Inputs are checked after input signals are connected to the BPS. The signal is toggled at the device to verify operation on ACNET
3.4.1	Check MI/stub magnet inputs	0%	1 d	Nov-04	Nov-04	Bob Ducar	
3.4.2	Check MI/stub instrumentation inputs	0%	1 d	Nov-04	Nov-04	Bob Ducar	
3.4.3	Check CT magnet inputs	0%	1 d	Jul-04	Jul-04	Bob Ducar	
3.4.4	Check CT instrumentation inputs	0%	1 d	Nov-04	Nov-04	Bob Ducar	
3.4.5	Check pre-tgt magnet inputs	0%	1 d	Jul-04	Jul-04	Bob Ducar	
3.4.6	Check pre-tgt instrumentation inputs	0%	1 d	Nov-04	Nov-04	Bob Ducar	
3.4.7	Check target hall inputs	0%	1 d	Dec-04	Dec-04	Bob Ducar	
3.4.8	Check Upstream utility inputs	0%	1 d	Nov-04	Nov-04		
3.4.9	Check absorber area inputs	0%	1 d	Sep-04	Sep-04	Bob Ducar	
3.5	Safety System	0%	93 d	Jul-04	Nov-04		
3.5.1	All gates, search & secure boxes in place	0%	1 d	Jul-04	Jul-04	Bob Ducar	
3.5.2	Critical device test	0%	1 d	Nov-04	Nov-04	Bob Ducar	