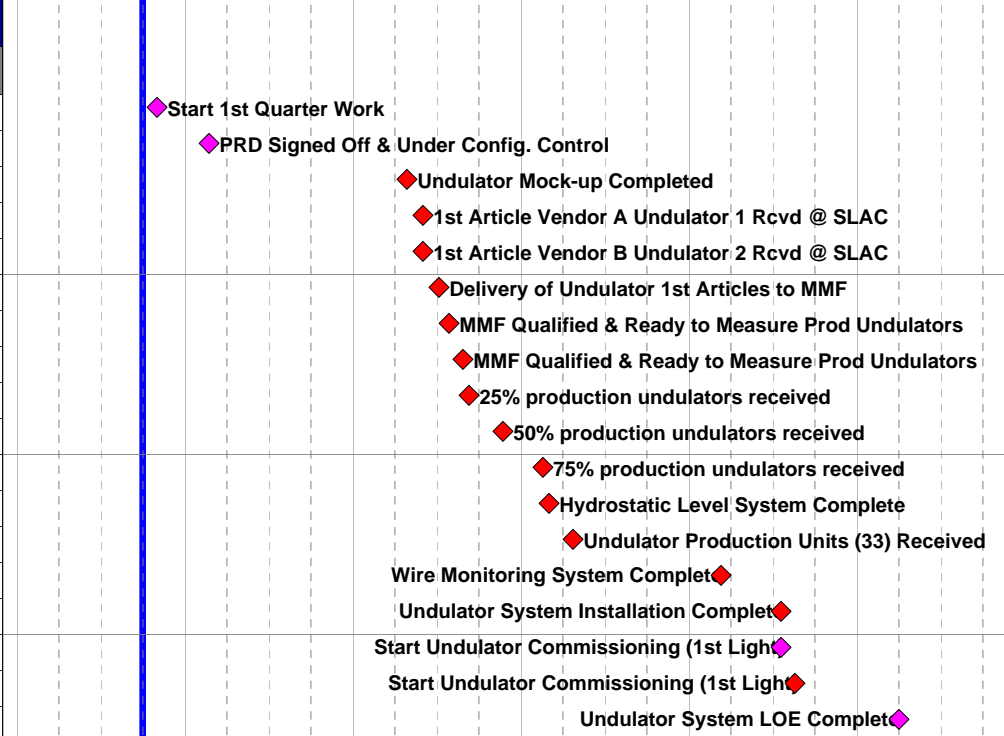


Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009

1 LCLS PROJECT - PED & CONSTRUCTION

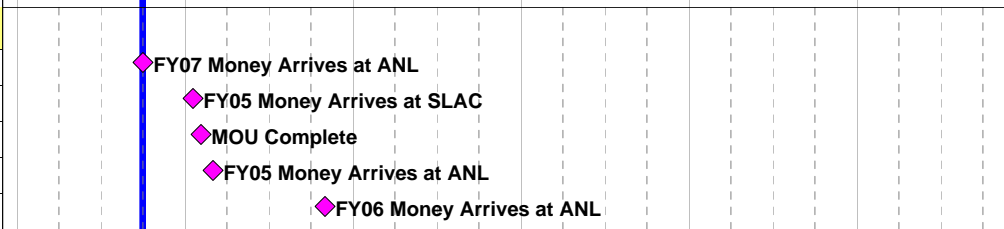
1.04 UNDULATOR SYSTEM

UNMS4_S11	Start 1st Quarter Work	0	01NOV04A	
UNMS4_S15	PRD Signed Off & Under Config. Control	0		18FEB05*
MS3_UN018	Undulator Mock-up Completed	0		28APR06*
MS3_UN006	1st Article Vendor A Undulator 1 Rcvd @ SLAC	0		02JUN06*
MS3_UN010	1st Article Vendor B Undulator 2 Rcvd @ SLAC	0		02JUN06*
MS2_UN010	Delivery of Undulator 1st Articles to MMF	0		03JUL06*
MS3_UN005	MMF Qualified & Ready to Measure Prod Undulators	0		28JUL06*
MS2_UN005	MMF Qualified & Ready to Measure Prod Undulators	0		28AUG06*
MS3_UN015	25% production undulators received	0		06SEP06*
MS3_UN022	50% production undulators received	0		22NOV06*
MS3_UN027	75% production undulators received	0		14FEB07*
MS3_UN040	Hydrostatic Level System Complete	0		02MAR07*
MS3_UN029	Undulator Production Units (33) Received	0		20APR07*
MS3_UN042	Wire Monitoring System Complete	0		07MAR08*
MS3_UN020	Undulator System Installation Complete	0		17JUL08*
MS3_UN025	Start Undulator Commissioning (1st Light)	0	18JUL08	
MS2_UN025	Start Undulator Commissioning (1st Light)	0	18AUG08*	
UN_LOE	Undulator System LOE Complete	0		30MAR09



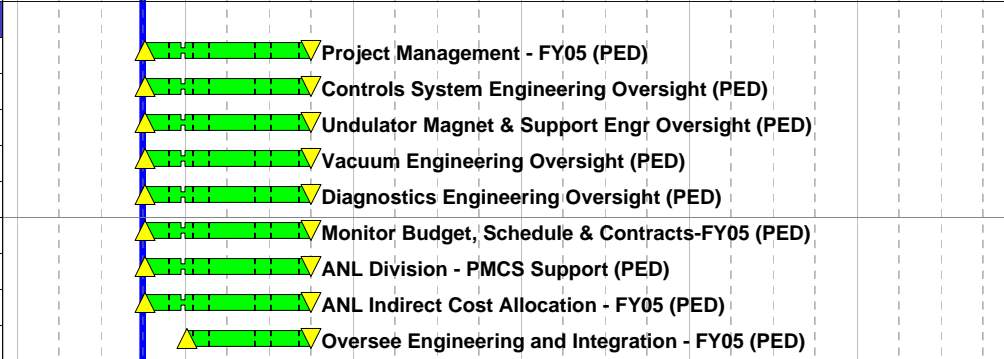
1.04.01 Undulator System Management & Integration

UNMS4_0120	FY07 Money Arrives at ANL	0		30SEP04
UNMS4_0100	FY05 Money Arrives at SLAC	0		18JAN05*
UNMS4_0105	MOU Complete	0		01FEB05
UNMS4_0110	FY05 Money Arrives at ANL	0		28FEB05*
UNMS4_0115	FY06 Money Arrives at ANL	0		01NOV05



1.04.01.01 Undulator System Management

UN11_00010	Project Management - FY05 (PED)	243	04OCT04	30SEP05
UN11_00035	Controls System Engineering Oversight (PED)	243	04OCT04	30SEP05
UN11_00055	Undulator Magnet & Support Engr Oversight (PED)	243	04OCT04	30SEP05
UN11_00075	Vacuum Engineering Oversight (PED)	243	04OCT04	30SEP05
UN11_00095	Diagnostics Engineering Oversight (PED)	243	04OCT04	30SEP05
UN11_00405	Monitor Budget, Schedule & Contracts-FY05 (PED)	243	04OCT04	30SEP05
UN11_00425	ANL Division - PMCS Support (PED)	243	04OCT04	30SEP05
UN11_00540	ANL Indirect Cost Allocation - FY05 (PED)	243	04OCT04	30SEP05
UN11_00025	Oversee Engineering and Integration - FY05 (PED)	190	03JAN05	30SEP05



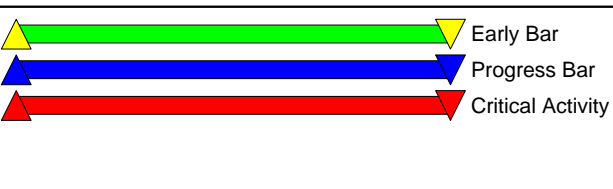
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Year						
					2004	2005	2006	2007	2008	2009	
UN11_00027	Undulator Mgmt/Engr @ SLAC - FY05 (PED)	190	03JAN05	30SEP05							
UN11_00175	Oversee Quality Assurance - FY05 (PED)	190	03JAN05	30SEP05							
UN11_00028	Undulator Designer @ SLAC - FY05 (PED)	170	01FEB05*	30SEP05							
UN11_00029	Visiting Physicist	170	01FEB05*	30SEP05							
UN11_00442	ANL Division - Website Support-FY05 (PED)	128	01APR05*	30SEP05							
UN11_00443	ANL Division - Website Support-FY05 (PED)	128	01APR05*	30SEP05							
UN11_00441	ANL Division - Website Support (CNST) -FY06	242	03OCT05	29SEP06							
UN11_00550	ANL Indirect Cost Allocation - FY06 (CNST)	242	03OCT05	29SEP06							
UN11_00038	Undulator Designer @ SLAC - FY06-07 (CNST)	484	03OCT05	28SEP07							
UN11_00290	Oversee Quality Assurance (CNST)	484	03OCT05	28SEP07							
UN11_00220	Oversee Engineering and Integration (CNST)	532	03OCT05	07DEC07							
UN11_00200	Project Management (CNST)	564	03OCT05	08FEB08							
UN11_00230	Controls System Engineering Oversight (CNST)	564	03OCT05	08FEB08							
UN11_00240	Undulator Magnet & Support Engr Oversight (CNST)	564	03OCT05	08FEB08							
UN11_00250	Vacuum Engineering Oversight (CNST)	564	03OCT05	08FEB08							
UN11_00260	Diagnostics Engineering Oversight (CNST)	564	03OCT05	08FEB08							
UN11_00270	Monitor Budget, Schedule and Contracts (CNST)	564	03OCT05	08FEB08							
UN11_00500	ANL Division - PMCS Support (CNST)	564	03OCT05	08FEB08							
UN11_00037	Undulator Mgmt/Engr @ SLAC - FY06-08 (CNST)	845	03OCT05	30MAR09							
UN11_00560	ANL Indirect Cost Allocation - FY07 (CNST)	241	02OCT06	27SEP07							
UN11_00520	ANL Division - Website Support (CNST)	485	02OCT06	30SEP08							
UN11_00570	ANL Indirect Cost Allocation - FY08 (CNST)	242	28SEP07	26SEP08							
1.04.01.02 Undulator System Materials & Supplies											
UN12_00035	CPUs and Software - FY05 (PED) -1st Half	115	04OCT04	31MAR05							
UN501_0042	Travel End-Of-Undulator - FY05 (PED)	157	04OCT04	31MAY05							
UN12_00015	Office Supplies and Misc Materials - FY05 (PED)	243	04OCT04	30SEP05							
UN12_00025	Tele/Video Conferencing - FY05 (PED)	243	04OCT04	30SEP05							
UN12_00110	Domestic Travel - FY05 (PED)	243	04OCT04	30SEP05							
UN12_00125	Foreign Travel - FY05 (PED)	243	04OCT04	30SEP05							
UN501_0115	Travel SLAC Project Engineer, etc.	170	01FEB05*	30SEP05							
UN12_00111	Domestic Travel - FY05 (PED) (Rollup)	151	01MAR05*	30SEP05							
UN12_00038	Undulator Controls Lab Construction	56	14MAR05*	31MAY05							
UN12_00036	CPUs and Software - FY05 (PED) -2nd Half	128	01APR05	30SEP05							
UN12_00040	Shipping and Storage (PED)	128	01APR05*	30SEP05							
UN12_00130	Domestic Travel (CNST)	538*	03OCT05	02JAN08							
UN12_00140	Foreign Travel (CNST)	558	03OCT05	31JAN08							
UN12_00050	Office Supplies and Misc Materials (CNST)	564	03OCT05	08FEB08							

ANL Indirect Cost Allocation - FY07 (CNST)

ANL Division - Website Support (CNST)

ANL Indirect Cost Allocation - FY08 (CNST)



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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish									
					2004	2005	2006	2007	2008	2009			
UN12_00060	Tele/Video Conferencing (CNST)	564	03OCT05	08FEB08								Tele/Video Conferencing (CNS)	
UN12_00070	CPUs and Software (CNST)	564	03OCT05	08FEB08								CPUs and Software (CNST)	
UN12_00080	Shipping and Storage (CNST)	564	03OCT05	08FEB08								Shipping and Storage (CNST)	
1.04.01.03 Undulator System Reviews and Workshops													
UNUN_00270	Review Undulator System 3	2	04OCT04*	05OCT04									Review Undulator System 3
UNUN_00460	FY05 Workshops and Meetings	114	04OCT04	30MAR05									FY05 Workshops and Meetings
UNUN_00280	Review Undulator System 4	2	06OCT04	07OCT04									Review Undulator System 4
UNUN_00262	Undulator Vacuum System Review 1	2	09DEC04	10DEC04									Undulator Vacuum System Review 1
UNUN_00470	FY06 Workshops and Meetings	1	03OCT05	03OCT05									FY06 Workshops and Meetings
UNUN_00290	Review Undulator System 5	2	03OCT05*	04OCT05									Review Undulator System 5
UNUN_00300	Review Undulator System 6	2	05OCT05*	06OCT05									Review Undulator System 6
UNUN_00480	FY07 Workshops and Meetings	1	02OCT06*	02OCT06									FY07 Workshops and Meetings
UNUN_00310	Review Undulator System 7	2	02OCT06*	03OCT06									Review Undulator System 7
UNUN_00320	Review Undulator System 8	2	04OCT06*	05OCT06									Review Undulator System 8
UNUN_00490	FY08 Workshops and Meetings	1	01OCT07*	01OCT07									FY08 Workshops and Meetings
UNUN_00330	Review Undulator System 9	2	01OCT07*	02OCT07									Review Undulator System 9
1.04.02 Controls													
1.04.02.01 Controls Management and Integration													
UNMS4_0265	Image Analysis Software Complete	0		30SEP04									Image Analysis Software Complete
UN21_00141	Advise on overall controls system integration	243	04OCT04	30SEP05									Advise on overall controls system integration
UN21_J20	Generate schematic-controls hardway, rack, tray	39	03JAN05*	28FEB05									Generate schematic-controls hardway, rack, tray
UN21_J21	Estimate motor cable runs	5	01MAR05*	07MAR05									Estimate motor cable runs
UN21_J22	Estimate imaging cable runs	5	01MAR05*	07MAR05									Estimate imaging cable runs
UN21_J23	Estimate vacuum cable runs	5	01MAR05*	07MAR05									Estimate vacuum cable runs
UNMS4_0205	Fine Motion Test Fixture Ready for Use	0		27MAY05									Fine Motion Test Fixture Ready for Use
UNMS4_0210	Coarse Motion Test Fixture Ready for Use	0		27MAY05									Coarse Motion Test Fixture Ready for Use
UN21_J25	Estimate WPM and HLS cable runs	5	01JUN05*	07JUN05									Estimate WPM and HLS cable runs
UNMS4_0215	Image Capture Test Fixture Complete	0		14JUN05									Image Capture Test Fixture Complete
UNMS4_0250	Image Capture Hardware Selection Finalized	0		28JUN05									Image Capture Hardware Selection Finalized
UN21_J24	Estimate BPM cable runs	5	01JUL05*	08JUL05									Estimate BPM cable runs
UNMS4_0200	EM Supply Spec. Accepted	0		26JUL05									EM Supply Spec. Accepted
UNMS4_0220	Fine Motion Control Hardware Selection Finalized	0		24AUG05									Fine Motion Control Hardware Selection Finalized
UNMS4_0245	Undulator Cradle Motion Software Complete	0		29AUG05									Undulator Cradle Motion Software Complete
UN21_J26	Estimate MPS cable runs	5	03OCT05	07OCT05									Estimate MPS cable runs
UN21_J27	Generate UN Hall cable, tray, rack document	25	10OCT05	11NOV05									Generate UN Hall cable, tray, rack document
UN21_J28	Submit UN Hall cable, tray, rack document	0		11NOV05									Submit UN Hall cable, tray, rack document
UNMS4_0230	Coarse Motion Control HW Selection Finalized	0		02DEC05									Coarse Motion Control HW Selection Finalized

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UNMS4_0260	Image Capturing Controls Software Complete	0		09FEB06			◆ Image Capturing Controls Software Complete				
UNMS4_0235	Undulator Fine Motion Controls Software Complete	0		08JUN06			◆ Undulator Fine Motion Controls Software Complete				
UNMS4_0240	EM Magnet Supply Choice Finalized	0		17AUG06			◆ EM Magnet Supply Choice Finalized				
UNMS4_0225	EM Magnet Supply Test Fixture Ready for Use	0		25SEP06			◆ EM Magnet Supply Test Fixture Ready for Use				
UNMS4_0255	EM Magnet Supply Controls Software Complete	0		25SEP06			◆ EM Magnet Supply Controls Software Complete				
1.04.02.02 Motion											
UN22_J34	Evaluate host choices	5	07FEB05*	11FEB05			⚠ Evaluate host choices				
UN22_J33	Procure motions controllers-motion test stand	21	07FEB05*	08MAR05			⚠ Procure motions controllers-motion test stand				
UN22_J35	Procure host for motion test stand	21	14FEB05*	15MAR05			⚠ Procure host for motion test stand				
UN22_J30	Evaluate motor choices	5	22FEB05*	28FEB05			⚠ Evaluate motor choices				
UN22_J32	Evaluate motion controller choices	5	01MAR05*	07MAR05			⚠ Evaluate motion controller choices				
UN22_J31	Procure motors for motion test stand	21	07MAR05*	13MAY05			▲ Procure motors for motion test stand				
UN22_J36	Assemble components	5	16MAY05	20MAY05			⚠ Assemble components				
UN22_J37	Test stand checkout	5	23MAY05	27MAY05			⚠ Test stand checkout				
UN22_J38	Motion test stand complete	0		27MAY05			◆ Motion test stand complete				
UN22_03970	Specify prototype motor driver	5	31MAY05	07JUN05			⚠ Specify prototype motor driver				
UN22_03690	Specify prototype motor interface	10	31MAY05	14JUN05			⚠ Specify prototype motor interface				
UN22_J00	Test smart motor at APS	61	31MAY05	24AUG05			▲ Test smart motor at APS				
UN22_03980	Procure prototype motor driver	20	08JUN05	07JUL05			⚠ Procure prototype motor driver				
UN22_04310	Write control Software Requirements Spec.	10	15JUN05	29JUN05			⚠ Write control Software Requirements Spec.				
UN22_03700	Procure prototype motor interfaces	20	15JUN05	14JUL05			⚠ Procure prototype motor interfaces				
UN22_04320	Design control software	20	30JUN05	29JUL05			⚠ Design control software				
UN22_03990	Receive prototype motor driver	2	08JUL05	12JUL05			⚠ Receive prototype motor driver				
UN22_04000	RCV:Prototyping driver	0		12JUL05			◆ RCV:Prototyping driver				
UN22_03710	Receive prototype motor interfaces	2	15JUL05	19JUL05			⚠ Receive prototype motor interfaces				
UN22_03720	RCV:Prototyping motor interface	0		19JUL05			◆ RCV:Prototyping motor interface				
UN22_04380	Write control software	20	01AUG05	29AUG05			⚠ Write control software				
UN22_04400	CMPLT: Control Software	0		29AUG05			◆ CMPLT: Control Software				
UN22_04440	Design prototype test setup	10	30AUG05	13SEP05			⚠ Design prototype test setup				
UN22_04450	Prepare for design review - hardware	5	14SEP05	20SEP05			⚠ Prepare for design review - hardware				
UN22_04460	Prepare for design review - software	10	21SEP05	05OCT05			⚠ Prepare for design review - software				
UN22_02865	Procure prototype motor interfaces	1	03OCT05	03OCT05			⚠ Procure prototype motor interfaces				
UN22_02930	Procure prototype encoder interface	1	03OCT05	03OCT05			⚠ Procure prototype encoder interface				
UN22_02995	Procure prototype motor driver	1	03OCT05	03OCT05			⚠ Procure prototype motor driver				
UN22_03435	Write control software	40	03OCT05*	29NOV05			▲ Write control software				
UN22_02870	Receive prototype motor interfaces	20	04OCT05	31OCT05			⚠ Receive prototype motor interfaces				
UN22_02935	Receive prototype encoder interface	20	04OCT05	31OCT05			⚠ Receive prototype encoder interface				

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UN22_03000	Receive prototype motor driver	20	04OCT05	31OCT05			▲ Receive prototype motor driver				
UN22_04470	Conduct design review	0		05OCT05			◆ Conduct design review				
UN22_04480	Procure integration components for prototype	26	06OCT05	10NOV05			▲ Procure integration components for prototype				
UN22_02875	RCVD: Prototyping motor interface	0		31OCT05			◆ RCVD: Prototyping motor interface				
UN22_02940	RCVD:Prototyping encoder interface	0		31OCT05			◆ RCVD:Prototyping encoder interface				
UN22_03005	RCVD:Prototyping motor driver	0		31OCT05			◆ RCVD:Prototyping motor driver				
UN22_03010	Write QA procedure for motor driver	2	01NOV05	02NOV05			▲ Write QA procedure for motor driver				
UN22_02880	Write QA procedure for Motor interface	4	01NOV05	04NOV05			▲ Write QA procedure for Motor interface				
UN22_02945	Write QA procedure for Encoder interface	4	01NOV05	04NOV05			▲ Write QA procedure for Encoder interface				
UN22_03055	Design motor drive cables	5	01NOV05*	07NOV05			▲ Design motor drive cables				
UN22_03060	Design encoder signal cables	5	01NOV05	07NOV05			▲ Design encoder signal cables				
UN22_03015	Prepare Bid Package for motor driver	4	03NOV05	08NOV05			▲ Prepare Bid Package for motor driver				
UN22_02885	Prepare Bid Package for Motor interface	4	07NOV05	10NOV05			▲ Prepare Bid Package for Motor interface				
UN22_02950	Prepare Bid Package for Encoder interface	4	07NOV05	10NOV05			▲ Prepare Bid Package for Encoder interface				
UN22_03020	Release RFP for motor driver	1	09NOV05	09NOV05			▲ Release RFP for motor driver				
UN22_03025	Vendor Prepare Proposal for motor driver	10	10NOV05	23NOV05			▲ Vendor Prepare Proposal for motor driver				
UN22_02890	Release RFP for Motor interface	1	11NOV05	11NOV05			▲ Release RFP for Motor interface				
UN22_02955	Release RFP for Encoder interface	1	11NOV05	11NOV05			▲ Release RFP for Encoder interface				
UN22_04490	Receive integration components for prototype	3	11NOV05	16NOV05			▲ Receive integration components for prototype				
UN22_02895	Vendor Prepare Proposal for Motor interface	10	14NOV05	29NOV05			▲ Vendor Prepare Proposal for Motor interface				
UN22_02960	Vendor Prepare Proposal for Encoder interface	10	14NOV05	29NOV05			▲ Vendor Prepare Proposal for Encoder interface				
UN22_04500	Assemble prototype	10	17NOV05	02DEC05			▲ Assemble prototype				
UN22_03030	RCVD: Proposal for motor driver	0		23NOV05			◆ RCVD: Proposal for motor driver				
UN22_03035	Evaluate Proposal for motor driver	5	28NOV05	02DEC05			▲ Evaluate Proposal for motor driver				
UN22_02900	RCV: Proposal for Motor interface	0		29NOV05			◆ RCV: Proposal for Motor interface				
UN22_02965	RCVD: Proposal for Encoder interface	0		29NOV05			◆ RCVD: Proposal for Encoder interface				
UN22_02905	Evaluate Proposal for Motor interface	5	30NOV05	06DEC05			▲ Evaluate Proposal for Motor interface				
UN22_02970	Evaluate Proposal for Encoder interface	5	30NOV05	06DEC05			▲ Evaluate Proposal for Encoder interface				
UN22_03590	Perform prototype testing	10	30NOV05	13DEC05			▲ Perform prototype testing				
UN22_04510	CMPLT: Integrated prototype	0		02DEC05			◆ CMPLT: Integrated prototype				
UN22_04520	Write integrated test procedure	5	05DEC05	09DEC05			▲ Write integrated test procedure				
UN22_03045	Receive production motor driver	20	06DEC05	18JAN06			▲ Receive production motor driver				
UN22_02915	Receive production motor interface	40	08DEC05	17FEB06			▲ Receive production motor interface				
UN22_02980	Receive production encoder interface	40	08DEC05	17FEB06			▲ Receive production encoder interface				
UN22_04530	Assemble test setup	5	12DEC05	16DEC05			▲ Assemble test setup				
UN22_03600	CMPLT: Integrated prototype testing	0		13DEC05			◆ CMPLT: Integrated prototype testing				
UN22_03610	Write validation procedure	5	14DEC05	04JAN06			▲ Write validation procedure				

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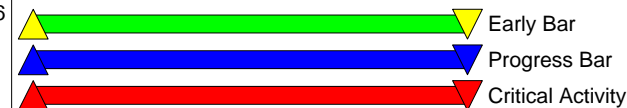
▲ Early Bar
▲ Progress Bar
▲ Critical Activity

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN22_03730	Write QA procedure for Motor interface	4	03JAN06*	06JAN06			⚠ Write QA procedure for Motor interface			
UN22_04010	Write QA Procedure for Motor Driver	4	03JAN06*	06JAN06			⚠ Write QA Procedure for Motor Driver			
UN22_04110	Design motor drive cables	5	03JAN06*	09JAN06			⚠ Design motor drive cables			
UN22_04540	Perform prototype testing	5	03JAN06	09JAN06			⚠ Perform prototype testing			
UN22_03620	Design installation layout and plan	20	05JAN06	02FEB06			⚠ Design installation layout and plan			
UN22_04550	CMPLT: Integrated prototype testing	0		09JAN06			◆ CMPLT: Integrated prototype testing			
UN22_03740	Prepare Bid Package for motor interface	4	09JAN06	12JAN06			⚠ Prepare Bid Package for motor interface			
UN22_04020	Prepare Bid Pkg for Driver Interface	4	09JAN06	12JAN06			⚠ Prepare Bid Pkg for Driver Interface			
UN22_04140	Specify connectors	2	10JAN06	12JAN06			⚠ Specify connectors			
UN22_04130	Specify cables	4	10JAN06	13JAN06			⚠ Specify cables			
UN22_04560	Write validation procedure	5	10JAN06	17JAN06			⚠ Write validation procedure			
UN22_03750	Release RFP for motor interface	1	13JAN06	13JAN06			⚠ Release RFP for motor interface			
UN22_04080	Release RFP for production motor driver	10	13JAN06	27JAN06			⚠ Release RFP for production motor driver			
UN22_00295	Specify prototype motor driver	5	17JAN06	23JAN06			⚠ Specify prototype motor driver			
UN22_00015	Specify prototype motor interface	10	17JAN06*	30JAN06			⚠ Specify prototype motor interface			
UN22_00155	Specify prototype encoder interface	10	17JAN06	30JAN06			⚠ Specify prototype encoder interface			
UN22_03760	Vendor Prepare Proposal for motor interface	10	17JAN06	30JAN06			⚠ Vendor Prepare Proposal for motor interface			
UN22_04150	Procure prototype parts	25	17JAN06	22FEB06			⚠ Procure prototype parts			
UN22_04570	Design installation layout and plan	20	18JAN06	14FEB06			⚠ Design installation layout and plan			
UN22_03050	QA Motor Driver	10	19JAN06	01FEB06			⚠ QA Motor Driver			
UN22_00300	Procure prototype motor driver	1	24JAN06	24JAN06			⚠ Procure prototype motor driver			
UN22_00310	Receive prototype motor driver	20	25JAN06	22FEB06			⚠ Receive prototype motor driver			
UN22_03770	RCV: Proposal for motor interface	0		30JAN06			◆ RCV: Proposal for motor interface			
UN22_04081	Vendor Prepare Proposal for Driver interface	10	30JAN06	10FEB06			⚠ Vendor Prepare Proposal for Driver interface			
UN22_00020	Procure prototype motor interfaces	1	31JAN06	31JAN06			⚠ Procure prototype motor interfaces			
UN22_00160	Procure prototype encoder interface	1	31JAN06	31JAN06			⚠ Procure prototype encoder interface			
UN22_03780	Evaluate Proposal for motor interface	5	31JAN06	06FEB06			⚠ Evaluate Proposal for motor interface			
UN22_00630	Write control Software Requirements Spec.	20	31JAN06	28FEB06			⚠ Write control Software Requirements Spec.			
UN22_00030	Receive prototype motor interfaces	20	01FEB06	01MAR06			⚠ Receive prototype motor interfaces			
UN22_00170	Receive prototype encoder interface	20	01FEB06	01MAR06			⚠ Receive prototype encoder interface			
UN22_03630	Procure production integration components	2	03FEB06	06FEB06			⚠ Procure production integration components			
UN22_03640	Receive production integration components	30	07FEB06	21MAR06			⚠ Receive production integration components			
UN22_03810	Receive production motor interface	20	08FEB06	08MAR06			⚠ Receive production motor interface			
UN22_04082	RCV: Proposal for Driver interface	0		10FEB06			◆ RCV: Proposal for Driver interface			
UN22_04083	Evaluate Proposal for Driver Interface	5	13FEB06	17FEB06			⚠ Evaluate Proposal for Driver Interface			
UN22_04580	Procure production integration components	2	15FEB06	16FEB06			⚠ Procure production integration components			
UN22_04590	Receive production integration components	30	17FEB06	31MAR06			⚠ Receive production integration components			

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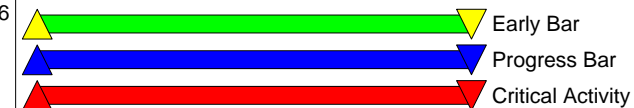


Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN22_02920	QA Test motor interface	10	21FEB06	06MAR06			⚠ QA Test motor interface			
UN22_02985	QA Test encoder interface	10	21FEB06	06MAR06			⚠ QA Test encoder interface			
UN22_00320	RCVD:Prototyping motor driver	0		22FEB06			⬠ RCVD:Prototyping motor driver			
UN22_04090	Receive production motor driver	20	22FEB06	21MAR06			⚠ Receive production motor driver			
UN22_00330	Write QA procedure for motor driver	2	23FEB06	24FEB06			⚠ Write QA procedure for motor driver			
UN22_04160	Receive prototype parts	2	23FEB06	27FEB06			⚠ Receive prototype parts			
UN22_00340	Prepare Bid Package for motor driver	4	27FEB06	02MAR06			⚠ Prepare Bid Package for motor driver			
UN22_04170	Assemble prototype cables	5	28FEB06	07MAR06			⚠ Assemble prototype cables			
UN22_00040	RCVD: Prototyping motor interface	0		01MAR06			⬠ RCVD: Prototyping motor interface			
UN22_00180	RCVD:Prototyping encoder interface	0		01MAR06			⬠ RCVD:Prototyping encoder interface			
UN22_00640	Design control software	20	01MAR06	28MAR06			⚠ Design control software			
UN22_00050	Write QA procedure for Motor interface	4	02MAR06	07MAR06			⚠ Write QA procedure for Motor interface			
UN22_00190	Write QA procedure for Encoder interface	4	02MAR06	07MAR06			⚠ Write QA procedure for Encoder interface			
UN22_00430	Design motor drive cables	5	02MAR06	08MAR06			⚠ Design motor drive cables			
UN22_00440	Design encoder signal cables	5	02MAR06	08MAR06			⚠ Design encoder signal cables			
UN22_00350	Release RFP for motor driver	1	03MAR06	03MAR06			⚠ Release RFP for motor driver			
UN22_00360	Vendor Prepare Proposal for motor driver	10	06MAR06	17MAR06			⚠ Vendor Prepare Proposal for motor driver			
UN22_00060	Prepare Bid Package for Motor interface	4	08MAR06	13MAR06			⚠ Prepare Bid Package for Motor interface			
UN22_00200	Prepare Bid Package for Encoder interface	4	08MAR06	13MAR06			⚠ Prepare Bid Package for Encoder interface			
UN22_04180	Test prototype cables	5	08MAR06	15MAR06			⚠ Test prototype cables			
UN22_00460	Specify connectors	2	09MAR06	10MAR06			⚠ Specify connectors			
UN22_03065	Specify connectors	2	09MAR06	10MAR06			⚠ Specify connectors			
UN22_00450	Specify cables	4	09MAR06	14MAR06			⚠ Specify cables			
UN22_03070	Specify cables	4	09MAR06	14MAR06			⚠ Specify cables			
UN22_03820	QA Test motor interface	10	09MAR06	22MAR06			⚠ QA Test motor interface			
UN22_00070	Release RFP for Motor interface	1	14MAR06	14MAR06			⚠ Release RFP for Motor interface			
UN22_00210	Release RFP for Encoder interface	1	14MAR06	14MAR06			⚠ Release RFP for Encoder interface			
UN22_00470	Procure prototype parts	1	15MAR06	15MAR06			⚠ Procure prototype parts			
UN22_03075	Procure prototype parts	1	15MAR06	15MAR06			⚠ Procure prototype parts			
UN22_04190	CMPLT: Prototype cables	0		15MAR06			⬠ CMPLT: Prototype cables			
UN22_00080	Vendor Prepare Proposal for Motor interface	10	15MAR06	28MAR06			⚠ Vendor Prepare Proposal for Motor interface			
UN22_00220	Vendor Prepare Proposal for Encoder interface	10	15MAR06	28MAR06			⚠ Vendor Prepare Proposal for Encoder interface			
UN22_04200	Specify production cables	10	16MAR06	29MAR06			⚠ Specify production cables			
UN22_00480	Receive prototype parts	25	16MAR06	19APR06			⚠ Receive prototype parts			
UN22_03080	Receive prototype parts	25	16MAR06	19APR06			⚠ Receive prototype parts			
UN22_00370	RCVD: Proposal for motor driver	0		17MAR06			⬠ RCVD: Proposal for motor driver			
UN22_00380	Evaluate Proposal for motor driver	5	20MAR06	24MAR06			⚠ Evaluate Proposal for motor driver			

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN22_03790	RFI: Production Integration Components	0		21MAR06			◆RFI: Production Integration Components			
UN22_04100	QA Motor Driver	10	22MAR06	04APR06			⚠QA Motor Driver			
UN22_00090	RCV: Proposal for Motor interface	0		28MAR06			◆RCV: Proposal for Motor interface			
UN22_00230	RCVD: Proposal for Encoder interface	0		28MAR06			◆RCVD: Proposal for Encoder interface			
UN22_00100	Evaluate Proposal for Motor interface	5	29MAR06	04APR06			⚠Evaluate Proposal for Motor interface			
UN22_00240	Evaluate Proposal for Encoder interface	5	29MAR06	04APR06			⚠Evaluate Proposal for Encoder interface			
UN22_00650	Write testing Software Requirements Spec.	20	29MAR06	25APR06			⚠Write testing Software Requirements Spec.			
UN22_04210	Write QA procedure for production cables	2	30MAR06	03APR06			⚠Write QA procedure for production cables			
UN22_04600	QA Test production integration components	10	03APR06	14APR06			⚠QA Test production integration components			
UN22_04220	Prepare Bid Package for production cables	5	04APR06	10APR06			⚠Prepare Bid Package for production cables			
UN22_00130	Receive production motor interface	40	06APR06	01JUN06			⚠Receive production motor interface			
UN22_00270	Receive production encoder interface	40	06APR06	01JUN06			⚠Receive production encoder interface			
UN22_04230	Release RFP for production cables	1	11APR06	11APR06			⚠Release RFP for production cables			
UN22_04240	Vendor Prepare Proposal for production cables	10	12APR06	25APR06			⚠Vendor Prepare Proposal for production cables			
UN22_00490	Assemble prototype cables	5	20APR06	26APR06			⚠Assemble prototype cables			
UN22_03085	Assemble prototype cables	5	20APR06	26APR06			⚠Assemble prototype cables			
UN22_04250	RCV: Proposal for production cables	0		25APR06			◆RCV: Proposal for production cables			
UN22_00680	Procure commercial software	1	26APR06	26APR06			⚠Procure commercial software			
UN22_04260	Evaluate Proposal for production cables	5	26APR06	02MAY06			⚠Evaluate Proposal for production cables			
UN22_00500	Test prototype cables	5	27APR06	03MAY06			⚠Test prototype cables			
UN22_03090	Test prototype cables	5	27APR06	03MAY06			⚠Test prototype cables			
UN22_00700	Write control software	20	27APR06	24MAY06			⚠Write control software			
UN22_00510	CMPLT: Prototype cables	0		03MAY06			◆CMPLT: Prototype cables			
UN22_03095	CMPLT: Prototype cables	0		03MAY06			◆CMPLT: Prototype cables			
UN22_00520	Specify production cables	10	04MAY06	17MAY06			⚠Specify production cables			
UN22_03100	Specify production cables	10	04MAY06	17MAY06			⚠Specify production cables			
UN22_04290	Receive production cables	30	04MAY06	15JUN06			⚠Receive production cables			
UN22_00530	Write QA procedure for production cables	2	18MAY06	19MAY06			⚠Write QA procedure for production cables			
UN22_03105	Write QA procedure for production cables	2	18MAY06	19MAY06			⚠Write QA procedure for production cables			
UN22_00540	Prepare Bid Package for production cables	5	22MAY06	26MAY06			⚠Prepare Bid Package for production cables			
UN22_03110	Prepare Bid Package for production cables	5	22MAY06	26MAY06			⚠Prepare Bid Package for production cables			
UN22_00710	Test control software	10	25MAY06	08JUN06			⚠Test control software			
UN22_00550	Release RFP for production cables	1	30MAY06	30MAY06			⚠Release RFP for production cables			
UN22_03115	Release RFP for production cables	1	30MAY06	30MAY06			⚠Release RFP for production cables			
UN22_00560	Vendor Prepare Proposal for production cables	10	31MAY06	13JUN06			⚠Vendor Prepare Proposal for production cables			
UN22_03120	Vendor Prepare Proposal for production cables	10	31MAY06	13JUN06			⚠Vendor Prepare Proposal for production cables			
UN22_00140	QA Test motor interface	10	02JUN06	15JUN06			⚠QA Test motor interface			

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN22_00280	QA Test encoder interface	10	02JUN06	15JUN06			⚠ QA Test encoder interface			
UN22_00720	CMPLT: Control Software	0		08JUN06			◆ CMPLT: Control Software			
UN22_00760	Design prototype test setup	10	09JUN06	22JUN06			⚠ Design prototype test setup			
UN22_00570	RCVD: Proposal for production cables	0		13JUN06			◆ RCVD: Proposal for production cables			
UN22_03125	RCVD: Proposal for production cables	0		13JUN06			◆ RCVD: Proposal for production cables			
UN22_00580	Evaluate Proposal for production cables	5	14JUN06	20JUN06			⚠ Evaluate Proposal for production cables			
UN22_03130	Evaluate Proposal for production cables	5	14JUN06	20JUN06			⚠ Evaluate Proposal for production cables			
UN22_04300	QA Test production cables	10	16JUN06	29JUN06			⚠ QA Test production cables			
UN22_00610	Receive production cables	30	22JUN06	03AUG06			⚠ Receive production cables			
UN22_03140	Receive production cables	30	22JUN06	03AUG06			⚠ Receive production cables			
UN22_00770	Prepare for design review	5	23JUN06	29JUN06			⚠ Prepare for design review			
UN22_00780	Conduct design review	10	30JUN06	14JUL06			⚠ Conduct design review			
UN22_00790	CMPLT: Design review	0		14JUL06			◆ CMPLT: Design review			
UN22_00800	Procure integration components for prototype	2	17JUL06	18JUL06			⚠ Procure integration components for prototype			
UN22_00810	Receive integration components for prototype	30	19JUL06	29AUG06			⚠ Receive integration components for prototype			
UN22_00620	QA Test production cables	10	04AUG06	17AUG06			⚠ QA Test production cables			
UN22_03145	QA Test production cables	10	04AUG06	17AUG06			⚠ QA Test production cables			
UN22_00820	Assemble prototype	10	30AUG06	13SEP06			⚠ Assemble prototype			
UN22_00830	CMPLT: Integrated prototype	0		13SEP06			◆ CMPLT: Integrated prototype			
UN22_00840	Write integrated test procedure	5	14SEP06	20SEP06			⚠ Write integrated test procedure			
UN22_00850	Assemble test setup	5	21SEP06	27SEP06			⚠ Assemble test setup			
UN22_00860	Perform prototype testing	5	28SEP06	04OCT06			⚠ Perform prototype testing			
UN22_00410	Receive production motor driver	20	03OCT06	30OCT06			⚠ Receive production motor driver			
UN22_00870	CMPLT: Integrated prototype testing	0		04OCT06			◆ CMPLT: Integrated prototype testing			
UN22_00880	Write validation procedure	5	05OCT06	11OCT06			⚠ Write validation procedure			
UN22_00890	Design installation layout and plan	20	12OCT06	08NOV06			⚠ Design installation layout and plan			
UN22_00420	QA Motor Driver	10	31OCT06	13NOV06			⚠ QA Motor Driver			
UN22_00900	Procure production integration components	2	09NOV06	10NOV06			⚠ Procure production integration components			
UN22_00910	Receive production integration components	30	13NOV06	10JAN07			⚠ Receive production integration components			
UN22_00920	QA Test production integration components	10	11JAN07	25JAN07			⚠ QA Test production integration components			
UN22_00922	RFI: Production integration components	0		25JAN07			◆ RFI: Production integration components			
1.04.02.03 Signal Analysis										
UN23_01285	REQD: LINAC Toroid Design	0		30SEP05			◆ REQD: LINAC Toroid Design			
UNSL_0005	REQD: 2 Charge Monitors From SLAC	1	23NOV05*	23NOV05			⚠ REQD: 2 Charge Monitors From SLAC			
UN23_01290	Write control Software Requirements Spec.	20	23NOV05	06JAN06			⚠ Write control Software Requirements Spec.			
UN23_02375	REQD: ULD-SWA Design	0		09JAN06			◆ REQD: ULD-SWA Design			
UN23_01300	Design control software	20	09JAN06	06FEB06			⚠ Design control software			

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UNSL_0002	REQD: 1 Proto SWA Analog Electronics From SLAC	1	10JAN06	10JAN06							⚠REQD: 1 Proto SWA Analog Electronics From SLAC
UN23_02380	Design control software	20	10JAN06	07FEB06							⚠Design control software
UN23_02440	Write control software	30	08FEB06	22MAR06							⚠Write control software
UN23_00115	REQD: LINAC RFBPM Design	0		23FEB06							⚠REQD: LINAC RFBPM Design
UN23_00275	REQD: LINAC RFBPM Design	0		23FEB06							⚠REQD: LINAC RFBPM Design
UN23_00475	REQD: LINAC RFBPM Design	0		23FEB06							⚠REQD: LINAC RFBPM Design
UN23_00655	REQD: LINAC RFBPM Design	0		23FEB06							⚠REQD: LINAC RFBPM Design
UNSL_0003	REQD: 33 BPM Assembly From SLAC	1	24FEB06	24FEB06							⚠REQD: 33 BPM Assembly From SLAC
UNSL_0004	REQD: 76 Timing Boards From SLAC	1	24FEB06	24FEB06							⚠REQD: 76 Timing Boards From SLAC
UN23_00480	Specify cables	5	24FEB06	02MAR06							⚠Specify cables
UN23_00120	Specify prototype A/D interface	10	24FEB06	09MAR06							⚠Specify prototype A/D interface
UN23_00660	Write control Software Requirements Spec.	20	24FEB06	23MAR06							⚠Write control Software Requirements Spec.
UN23_00280	Design timing electronics	100	24FEB06	17JUL06							⚠Design timing electronics
UN23_01360	Write control software	30	27FEB06	07APR06							⚠Write control software
UN23_00500	Procure prototype parts	1	03MAR06	03MAR06							⚠Procure prototype parts
UN23_00510	Receive prototype parts	20	06MAR06	31MAR06							⚠Receive prototype parts
UN23_00130	Procure prototype A/D interfaces	1	10MAR06	10MAR06							⚠Procure prototype A/D interfaces
UN23_00140	Receive prototype A/D interfaces	20	13MAR06	07APR06							⚠Receive prototype A/D interfaces
UN23_02450	Test control software	10	23MAR06	05APR06							⚠Test control software
UN23_00670	Design control software	20	24MAR06	20APR06							⚠Design control software
UN23_00520	Assemble prototype cables	10	03APR06	14APR06							⚠Assemble prototype cables
UN23_02460	CMPLT: Control Software	0		05APR06							⚠CMPLT: Control Software
UN23_02500	Design prototype test setup	5	06APR06	13APR06							⚠Design prototype test setup
UN23_00150	Assemble prototype	10	10APR06	21APR06							⚠Assemble prototype
UN23_01370	Test control software	10	10APR06	21APR06							⚠Test control software
UN23_02510	Prepare for design review	5	14APR06	20APR06							⚠Prepare for design review
UN23_00530	Test prototype cables	10	17APR06	28APR06							⚠Test prototype cables
UN23_02530	Conduct design review	2	21APR06	24APR06							⚠Conduct design review
UN23_00680	Write testing Software Requirements Spec.	20	21APR06	18MAY06							⚠Write testing Software Requirements Spec.
UN23_00160	Prototype testing	10	24APR06	05MAY06							⚠Prototype testing
UN23_02540	Procure integration components for prototype (	1	25APR06	25APR06							⚠Procure integration components for prototype (
UN23_02550	Receive integration components for prototype	20	26APR06	23MAY06							⚠Receive integration components for prototype
UN23_00540	CMPLT: Prototype cables	0		28APR06							⚠CMPLT: Prototype cables
UN23_00550	Specify production cables	10	01MAY06	12MAY06							⚠Specify production cables
UN23_00170	CMPLT: Prototyping A/D interface	0		05MAY06							⚠CMPLT: Prototyping A/D interface
UN23_00180	Write QA procedure for A/D interface	4	08MAY06	11MAY06							⚠Write QA procedure for A/D interface
UN23_00560	Write QA procedure for production cables	5	15MAY06	19MAY06							⚠Write QA procedure for production cables

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UN23_00690	Design testing software	10	19MAY06	02JUN06							Design testing software
UN23_00570	Prepare Bid Package for production cables	4	22MAY06	25MAY06							Prepare Bid Package for production cables
UN23_02560	Assemble prototype	20	24MAY06	21JUN06							Assemble prototype
UN23_00580	Release RFP for production cables	1	26MAY06	26MAY06							Release RFP for production cables
UN23_00590	Vendor Prepare Proposal for production cables	10	30MAY06	12JUN06							Vendor Prepare Proposal for production cables
UN23_00700	Specify commercial software required	5	05JUN06	09JUN06							Specify commercial software required
UN23_00600	RCV: Proposal for production cables	0		12JUN06							RCV: Proposal for production cables
UN23_00710	Procure commercial software	1	12JUN06	12JUN06							Procure commercial software
UN23_00610	Evaluate Proposal for production cables	5	13JUN06	19JUN06							Evaluate Proposal for production cables
UN23_00720	Receive commercial software	20	13JUN06	11JUL06							Receive commercial software
UN23_02570	CMPLT: Integrated prototype	0		21JUN06							CMPLT: Integrated prototype
UN23_00640	Receive production cables	20	21JUN06	19JUL06							Receive production cables
UN23_02580	Write integrated test procedure	2	22JUN06	26JUN06							Write integrated test procedure
UN23_02590	Assemble test setup	2	27JUN06	29JUN06							Assemble test setup
UN23_01380	CMPLT: Control Software	0		29JUN06							CMPLT: Control Software
UN23_02600	Perform prototype testing	2	30JUN06	05JUL06							Perform prototype testing
UN23_01420	Design prototype test setup	5	30JUN06	07JUL06							Design prototype test setup
UN23_02610	CMPLT: Integrated prototype testing	0		05JUL06							CMPLT: Integrated prototype testing
UN23_02620	Write validation procedure	5	06JUL06	12JUL06							Write validation procedure
UN23_01430	Prepare for design review	10	10JUL06	21JUL06							Prepare for design review
UN23_00730	Write control software	30	12JUL06	22AUG06							Write control software
UN23_02630	Design installation layout and plan	20	13JUL06	09AUG06							Design installation layout and plan
UN23_00281	Prepare for Design Review	10	18JUL06	31JUL06							Prepare for Design Review
UN23_00650	QA Test production cables	10	20JUL06	02AUG06							QA Test production cables
UN23_01450	Conduct design review	2	24JUL06	25JUL06							Conduct design review
UN23_01460	Procure integration components for prototype	1	26JUL06	26JUL06							Procure integration components for prototype
UN23_01470	Receive integration components for prototype	20	27JUL06	23AUG06							Receive integration components for prototype
UN23_00290	Conduct Timing I/F Design Review	5	01AUG06	07AUG06							Conduct Timing I/F Design Review
UN23_00190	Prepare Bid Package for A/D interface	4	04AUG06	09AUG06							Prepare Bid Package for A/D interface
UN23_00200	Release RFP for A/D interface	1	10AUG06	10AUG06							Release RFP for A/D interface
UN23_02631	Prepare Bid Package for product integration co	4	10AUG06	15AUG06							Prepare Bid Package for product integration co
UN23_00210	Vendor Prepare Proposal for A/D interface	10	11AUG06	24AUG06							Vendor Prepare Proposal for A/D interface
UN23_02632	Release RFP for production integration comp	1	16AUG06	16AUG06							Release RFP for production integration comp
UN23_02633	Vendor Prepare Prop for product integration co	10	17AUG06	30AUG06							Vendor Prepare Prop for product integration co
UN23_00740	Test control software	10	23AUG06	06SEP06							Test control software
UN23_00220	RCV: Proposal for A/D interface	0		24AUG06							RCV: Proposal for A/D interface
UN23_01480	Assemble prototype	20	24AUG06	21SEP06							Assemble prototype

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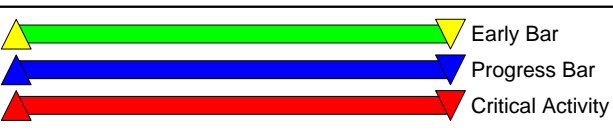
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UN23_00230	Evaluate Proposal for A/D interface	5	25AUG06	31AUG06							⚠ Evaluate Proposal for A/D interface
UN23_02634	RCV: Proposal for production integration comp	0		30AUG06							◆ RCV: Proposal for production integration comp
UN23_02635	Evaluate Proposal for product integration comp	5	31AUG06	07SEP06							⚠ Evaluate Proposal for product integration comp
UN23_00750	CMPLT: Control Software	0		06SEP06							◆ CMPLT: Control Software
UN23_00790	Design prototype test setup	5	07SEP06	13SEP06							⚠ Design prototype test setup
UN23_02650	Receive production integration components	20	11SEP06	06OCT06							⚠ Receive production integration components
UN23_00800	Prepare for design review	5	14SEP06	20SEP06							⚠ Prepare for design review
UN23_01490	CMPLT: Integrated prototype	0		21SEP06							◆ CMPLT: Integrated prototype
UN23_00820	Conduct design review	2	21SEP06	22SEP06							⚠ Conduct design review
UN23_01500	Write integrated test procedure	2	22SEP06	25SEP06							⚠ Write integrated test procedure
UN23_00830	Procure integration components for prototype (	1	25SEP06	25SEP06							⚠ Procure integration components for prototype (
UN23_01510	Assemble test setup	2	26SEP06	27SEP06							⚠ Assemble test setup
UN23_00840	Receive integration components for prototype	20	26SEP06	23OCT06							⚠ Receive integration components for prototype
UN23_01520	Perform prototype testing	2	28SEP06	29SEP06							⚠ Perform prototype testing
UN23_01530	CMPLT: Integrated prototype testing	0		29SEP06							◆ CMPLT: Integrated prototype testing
UN23_01540	Write validation procedure	5	02OCT06	06OCT06							⚠ Write validation procedure
UN23_02660	QA Test production integration components	10	09OCT06	23OCT06							⚠ QA Test production integration components
UN23_01550	Design installation layout and plan	20	09OCT06	03NOV06							⚠ Design installation layout and plan
UN23_00850	Assemble prototype	20	24OCT06	20NOV06							⚠ Assemble prototype
UN23_00260	Receive production A/D interface	2	30OCT06	31OCT06							⚠ Receive production A/D interface
UN23_00270	QA Test A/D interface	10	01NOV06	14NOV06							⚠ QA Test A/D interface
UN23_01551	Prepare Bid Package for product integration co	4	06NOV06	09NOV06							⚠ Prepare Bid Package for product integration co
UN23_01552	Release RFP for production integration comp	1	10NOV06	10NOV06							⚠ Release RFP for production integration comp
UN23_01553	Vendor Prepare Prop for product integration co	10	13NOV06	28NOV06							⚠ Vendor Prepare Prop for product integration co
UN23_00860	CMPLT: Integrated prototype	0		20NOV06							◆ CMPLT: Integrated prototype
UN23_00870	Write integrated test procedure	2	21NOV06	22NOV06							⚠ Write integrated test procedure
UN23_00880	Assemble test setup	2	27NOV06	28NOV06							⚠ Assemble test setup
UN23_01554	RCV: Proposal for production integration comp	0		28NOV06							◆ RCV: Proposal for production integration comp
UN23_00890	Perform prototype testing	2	29NOV06	30NOV06							⚠ Perform prototype testing
UN23_01555	Evaluate Proposal for product integration comp	5	29NOV06	05DEC06							⚠ Evaluate Proposal for product integration comp
UN23_00900	CMPLT: Integrated prototype testing	0		30NOV06							◆ CMPLT: Integrated prototype testing
UN23_00910	Write validation procedure	5	01DEC06	07DEC06							⚠ Write validation procedure
UN23_01570	Receive production integration components	20	07DEC06	19JAN07							⚠ Receive production integration components
UN23_00920	Design installation layout and plan	20	08DEC06	22JAN07							⚠ Design installation layout and plan
UN23_01580	QA Test production integration components	10	22JAN07	02FEB07							⚠ QA Test production integration components
UN23_00921	Prepare Bid Pkg for production integration com	4	23JAN07	26JAN07							⚠ Prepare Bid Pkg for production integration com
UN23_00922	Release RFP for production integration comp	1	29JAN07	29JAN07							⚠ Release RFP for production integration comp

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UN23_00923	Vendor Prepare Prop for production integrat co	10	30JAN07	12FEB07				⚠	Vendor Prepare Prop for production integrat co		
UN23_00924	RCV: Proposal for production integration comp	0		12FEB07				◆	RCV: Proposal for production integration comp		
UN23_00925	Evaluate Prop for production integration comp	5	13FEB07	20FEB07				⚠	Evaluate Prop for production integration comp		
UN23_00940	Receive production integration components	20	22FEB07	21MAR07				⚠	Receive production integration components		
UN23_00950	QA Test production integration components	10	22MAR07	04APR07				⚠	QA Test production integration components		
1.04.02.04 Video											
UN22_J40	Evaluate camera choices	3	01OCT04	05OCT04				⚠	Evaluate camera choices		
UN22_J42	Evaluate image capture hardware choices	3	01OCT04	05OCT04				⚠	Evaluate image capture hardware choices		
UN22_J44	Evaluate host choices	3	01OCT04	05OCT04				⚠	Evaluate host choices		
UN22_J46	Assemble components	5	01JUN05*	07JUN05				⚠	Assemble components		
UN22_J47	Imaging stand checkout	5	08JUN05	14JUN05				⚠	Imaging stand checkout		
UN22_J48	Imaging test stand complete	0		14JUN05				◆	Imaging test stand complete		
UN24_00050	Prototype testing	10	15JUN05	28JUN05				⚠	Prototype testing		
UN24_00370	Prototype testing	10	15JUN05	28JUN05				⚠	Prototype testing		
UN24_00060	CMPLT: Prototyping Camera	0		28JUN05				◆	CMPLT: Prototyping Camera		
UN24_00380	CMPLT: Prototyping Digitizer	0		28JUN05				◆	CMPLT: Prototyping Digitizer		
UN24_00070	Write QA procedure for Camera	5	29JUN05	06JUL05				⚠	Write QA procedure for Camera		
UN24_00390	Write QA procedure for Digitizer	5	29JUN05	06JUL05				⚠	Write QA procedure for Digitizer		
UN24_00210	Prototype testing Camera Interface	10	03OCT05	14OCT05				⚠	Prototype testing Camera Interface		
UN24_00860	Write control Software Requirements Spec.	20	03OCT05	28OCT05				⚠	Write control Software Requirements Spec.		
UN24_00220	CMPLT: Prototyping Camera interface	0		14OCT05				◆	CMPLT: Prototyping Camera interface		
UN24_00230	Write QA procedure for Camera interface	5	17OCT05	21OCT05				⚠	Write QA procedure for Camera interface		
UN24_00870	Design control software	20	31OCT05*	29NOV05				⚠	Design control software		
UN24_00660	Design video feed cables	5	01NOV05*	07NOV05				⚠	Design video feed cables		
UN24_00670	Design timing signal cables	5	01NOV05*	07NOV05				⚠	Design timing signal cables		
UN24_00680	Specify cables	5	08NOV05	14NOV05				⚠	Specify cables		
UN24_00700	Procure prototype parts	1	15NOV05	15NOV05				⚠	Procure prototype parts		
UN24_00710	Receive prototype parts	20	16NOV05	15DEC05				⚠	Receive prototype parts		
UN24_00930	Write control software	30	30NOV05	26JAN06				⚠	Write control software		
UN24_00720	Assemble prototype cables	5	16DEC05	06JAN06				⚠	Assemble prototype cables		
UN24_00730	Test prototype cables	10	09JAN06	23JAN06				⚠	Test prototype cables		
UN24_00740	CMPLT: Prototype cables	0		23JAN06				◆	CMPLT: Prototype cables		
UN24_00750	Specify production cables	1	24JAN06	24JAN06				⚠	Specify production cables		
UN24_00760	Write QA procedure for production cables	4	25JAN06	30JAN06				⚠	Write QA procedure for production cables		
UN24_00940	Test control software	10	27JAN06*	09FEB06				⚠	Test control software		
UN24_00950	CMPLT: Control Software	0		09FEB06				◆	CMPLT: Control Software		
UN24_00960	RCV: OTR imaging requirements	0		09FEB06				◆	RCV: OTR imaging requirements		

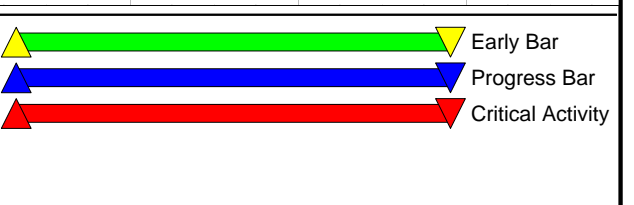
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN24_00970	Design analysis software	20	10FEB06*	10MAR06			▲ Design analysis software			
UN24_02570	Specify prototype Multiplexer	5	24FEB06	02MAR06			▲ Specify prototype Multiplexer			
UN24_02370	Specify prototype Camera	10	24FEB06	09MAR06			▲ Specify prototype Camera			
UN24_02580	Procure prototype Multiplexer	1	03MAR06	03MAR06			▲ Procure prototype Multiplexer			
UN24_02590	Receive prototype Multiplexer	20	06MAR06	31MAR06			▲ Receive prototype Multiplexer			
UN24_02380	Procure prototype Camera	1	10MAR06	10MAR06			▲ Procure prototype Camera			
UN24_02500	Assemble prototype	5	13MAR06	17MAR06			▲ Assemble prototype			
UN24_00980	Test Analysis software	10	13MAR06*	24MAR06			▲ Test Analysis software			
UN24_02880	Write control Software Requirements Spec.	10	13MAR06	24MAR06			▲ Write control Software Requirements Spec.			
UN24_02390	Receive prototype Camera	20	13MAR06	07APR06			▲ Receive prototype Camera			
UN24_02510	Prototype testing	10	20MAR06	31MAR06			▲ Prototype testing			
UN24_00985	CMPLT : OTR Analysis software	0		24MAR06			◆ CMPLT : OTR Analysis software			
UN24_00990	Design prototype test setup	5	27MAR06*	31MAR06			▲ Design prototype test setup			
UN24_02890	Design control software	10	27MAR06	07APR06			▲ Design control software			
UN24_01000	Prepare for design review	5	03APR06	07APR06			▲ Prepare for design review			
UN24_02600	Assemble prototype	5	03APR06	07APR06			▲ Assemble prototype			
UN24_02670	Design video feed cables	2	10APR06	11APR06			▲ Design video feed cables			
UN24_01020	Conduct design review	5	10APR06	14APR06			▲ Conduct design review			
UN24_02610	Prototype testing	5	10APR06	14APR06			▲ Prototype testing			
UN24_02400	Assemble prototype	10	10APR06	21APR06			▲ Assemble prototype			
UN24_02950	Write control software	10	10APR06	21APR06			▲ Write control software			
UN24_02690	Specify cables	4	12APR06	17APR06			▲ Specify cables			
UN24_02620	CMPLT: Prototyping Multiplexer	0		14APR06			◆ CMPLT: Prototyping Multiplexer			
UN24_01030	Procure integration components for prototype (	1	17APR06	17APR06			▲ Procure integration components for prototype (
UN24_02630	Write QA procedure for Multiplexer	4	17APR06	20APR06			▲ Write QA procedure for Multiplexer			
UN24_02710	Procure prototype parts	1	18APR06	18APR06			▲ Procure prototype parts			
UN24_01040	Receive integration components for prototype	20	18APR06	15MAY06			▲ Receive integration components for prototype			
UN24_02720	Receive prototype parts	25	19APR06	23MAY06			▲ Receive prototype parts			
UN24_02640	Procure production Multiplexer	1	21APR06	21APR06			▲ Procure production Multiplexer			
UN24_02410	Prototype testing	5	24APR06	28APR06			▲ Prototype testing			
UN24_02650	Receive production Multiplexer	10	24APR06	05MAY06			▲ Receive production Multiplexer			
UN24_02960	Test control software	10	24APR06	05MAY06			▲ Test control software			
UN24_02420	CMPLT: Prototyping Camera	0		28APR06			◆ CMPLT: Prototyping Camera			
UN24_02430	Write QA procedure for Camera	4	01MAY06	04MAY06			▲ Write QA procedure for Camera			
UN24_02440	Procure production Camera	1	05MAY06	05MAY06			▲ Procure production Camera			
UN24_02970	CMPLT: Control Software	0		05MAY06			◆ CMPLT: Control Software			
UN24_03010	Design prototype test setup	5	08MAY06	12MAY06			▲ Design prototype test setup			

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN24_02660	QA Test Multiplexer	10	08MAY06	19MAY06			▲ QA Test Multiplexer			
UN24_02450	Receive production Camera	20	08MAY06	05JUN06			▲ Receive production Camera			
UN24_03020	Prepare for design review	10	15MAY06	26MAY06			▲ Prepare for design review			
UN24_01050	Assemble prototype	10	16MAY06	30MAY06			▲ Assemble prototype			
UN24_02730	Assemble prototype cables	5	24MAY06	31MAY06			▲ Assemble prototype cables			
UN24_01060	CMPLT: Integrated prototype	0		30MAY06			◆ CMPLT: Integrated prototype			
UN24_03040	Conduct design review	5	30MAY06	05JUN06			▲ Conduct design review			
UN24_01070	Write integrated test procedure	4	31MAY06	05JUN06			▲ Write integrated test procedure			
UN24_02740	Test prototype cables	10	01JUN06	14JUN06			▲ Test prototype cables			
UN24_03050	Procure integration components for prototype (	1	06JUN06	06JUN06			▲ Procure integration components for prototype (
UN24_01080	Assemble test setup	5	06JUN06	12JUN06			▲ Assemble test setup			
UN24_02460	QA Test Camera	10	06JUN06	19JUN06			▲ QA Test Camera			
UN24_03060	Receive integration components for prototype	20	07JUN06	05JUL06			▲ Receive integration components for prototype			
UN24_01090	Perform prototype testing	5	13JUN06	19JUN06			▲ Perform prototype testing			
UN24_02750	CMPLT: Prototype cables	0		14JUN06			◆ CMPLT: Prototype cables			
UN24_02760	Specify production cables	1	15JUN06	15JUN06			▲ Specify production cables			
UN24_02770	Write QA procedure for production cables	4	16JUN06	21JUN06			▲ Write QA procedure for production cables			
UN24_01100	CMPLT: Integrated prototype testing	0		19JUN06			◆ CMPLT: Integrated prototype testing			
UN24_01120	Write validation procedure	5	20JUN06	26JUN06			▲ Write validation procedure			
UN24_02780	Prepare Bid Package for production cables	4	22JUN06	27JUN06			▲ Prepare Bid Package for production cables			
UN24_01130	Design installation layout and plan	5	27JUN06	03JUL06			▲ Design installation layout and plan			
UN24_02790	Release RFP for production cables	1	28JUN06	28JUN06			▲ Release RFP for production cables			
UN24_02800	Vendor Prepare Proposal for production cables	10	29JUN06	13JUL06			▲ Vendor Prepare Proposal for production cables			
UN24_03070	Assemble prototype	10	06JUL06	19JUL06			▲ Assemble prototype			
UN24_02810	RCV: Proposal for production cables	0		13JUL06			◆ RCV: Proposal for production cables			
UN24_02820	Evaluate Proposal for production cables	5	14JUL06	20JUL06			▲ Evaluate Proposal for production cables			
UN24_03080	CMPLT: Integrated prototype	0		19JUL06			◆ CMPLT: Integrated prototype			
UN24_03090	Write integrated test procedure	4	20JUL06	25JUL06			▲ Write integrated test procedure			
UN24_02850	Receive production cables	10	24JUL06	04AUG06			▲ Receive production cables			
UN24_03100	Assemble test setup	5	26JUL06	01AUG06			▲ Assemble test setup			
UN24_03110	Perform prototype testing	5	02AUG06	08AUG06			▲ Perform prototype testing			
UN24_02860	QA Test production cables	10	07AUG06	18AUG06			▲ QA Test production cables			
UN24_03120	CMPLT: Integrated prototype testing	0		08AUG06			◆ CMPLT: Integrated prototype testing			
UN24_03130	Write validation procedure	5	09AUG06	15AUG06			▲ Write validation procedure			
UN24_03140	Design installation layout and plan	5	16AUG06	22AUG06			▲ Design installation layout and plan			
UN24_03150	Procure production integration components	1	23AUG06	23AUG06			▲ Procure production integration components			
UN24_03160	Receive production integration components	20	24AUG06	21SEP06			▲ Receive production integration components			

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN24_00080	Prepare Bid Package for Camera	4	05SEP06*	08SEP06				⚠ Prepare Bid Package for Camera		
UN24_00240	Prepare Bid Package for Camera Interface	4	05SEP06*	08SEP06				⚠ Prepare Bid Package for Camera Interface		
UN24_00400	Prepare Bid Package for Digitizer	4	05SEP06*	08SEP06				⚠ Prepare Bid Package for Digitizer		
UN24_00770	Prepare Bid Package for production cables	4	05SEP06*	08SEP06				⚠ Prepare Bid Package for production cables		
UN24_01131	Prepare Bid Package for product integration co	4	05SEP06*	08SEP06				⚠ Prepare Bid Package for product integration co		
UN24_00250	Release RFP for Camera Interface	1	11SEP06	11SEP06				⚠ Release RFP for Camera Interface		
UN24_00410	Release RFP for Digitizer	1	11SEP06	11SEP06				⚠ Release RFP for Digitizer		
UN24_00780	Release RFP for production cables	1	11SEP06	11SEP06				⚠ Release RFP for production cables		
UN24_01132	Release RFP for production integration comp	1	11SEP06	11SEP06				⚠ Release RFP for production integration comp		
UN24_00100	Vendor Prepare Proposal for Camera	10	11SEP06	22SEP06				⚠ Vendor Prepare Proposal for Camera		
UN24_00260	Vendor Prepare Proposal for Camera Interface	10	12SEP06	25SEP06				⚠ Vendor Prepare Proposal for Camera Interface		
UN24_00420	Vendor Prepare Proposal for Digitizer	10	12SEP06	25SEP06				⚠ Vendor Prepare Proposal for Digitizer		
UN24_00790	Vendor Prepare Proposal for production cables	10	12SEP06	25SEP06				⚠ Vendor Prepare Proposal for production cables		
UN24_01133	Vendor Prepare Prop for product integration co	10	12SEP06	25SEP06				⚠ Vendor Prepare Prop for product integration co		
UN24_00110	RCV: Proposal for Camera	0		22SEP06				◆ RCV: Proposal for Camera		
UN24_03170	QA Test production integration components	10	22SEP06	05OCT06				⚠ QA Test production integration components		
UN24_00270	RCV: Proposal for Camera Interface	0		25SEP06				◆ RCV: Proposal for Camera Interface		
UN24_00430	RCV: Proposal for Digitizer	0		25SEP06				◆ RCV: Proposal for Digitizer		
UN24_00800	RCV: Proposal for production cables	0		25SEP06				◆ RCV: Proposal for production cables		
UN24_01134	RCV: Proposal for production integration comp	0		25SEP06				◆ RCV: Proposal for production integration comp		
UN24_00120	Evaluate Proposal for Camera	5	25SEP06	29SEP06				⚠ Evaluate Proposal for Camera		
UN24_00280	Evaluate Proposal for Camera Interface	5	26SEP06	02OCT06				⚠ Evaluate Proposal for Camera Interface		
UN24_00440	Evaluate Proposal for Digitizer	5	26SEP06	02OCT06				⚠ Evaluate Proposal for Digitizer		
UN24_00810	Evaluate Proposal for production cables	5	26SEP06	02OCT06				⚠ Evaluate Proposal for production cables		
UN24_01135	Evaluate Proposal for product integration comp	5	26SEP06	02OCT06				⚠ Evaluate Proposal for product integration comp		
UN24_00150	Receive production Camera	20	03OCT06	30OCT06				⚠ Receive production Camera		
UN24_00470	Receive production Digitizer	10	04OCT06	17OCT06				⚠ Receive production Digitizer		
UN24_00840	Receive production cables	10	04OCT06	17OCT06				⚠ Receive production cables		
UN24_00310	Receive production Camera interface	20	04OCT06	31OCT06				⚠ Receive production Camera interface		
UN24_01150	Receive production integration components	20	04OCT06	31OCT06				⚠ Receive production integration components		
UN24_00480	QA Test Digitizer	10	18OCT06	31OCT06				⚠ QA Test Digitizer		
UN24_00850	QA Test production cables	10	18OCT06	31OCT06				⚠ QA Test production cables		
UN24_00160	QA Test Camera	10	31OCT06	13NOV06				⚠ QA Test Camera		
UN24_00320	QA Test Camera interface	10	01NOV06	14NOV06				⚠ QA Test Camera interface		
UN24_01160	QA Test production integration components	10	01NOV06	15NOV06				⚠ QA Test production integration components		
UN24_01110	AVAIL: OTR Monitor	0		15NOV06				◆ AVAIL: OTR Monitor		

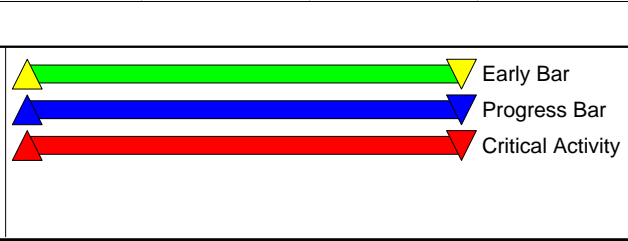
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
1.04.02.05 Data Acquisition and Control										
UN25_00010	Write control Software Requirements Spec	10	03OCT05	14OCT05			⚠ Write control Software Requirements Spec			
UN25_00020	Design control software	10	17OCT05	28OCT05			⚠ Design control software			
UN25_00080	Write control software	10	31OCT05	11NOV05			⚠ Write control software			
UN25_00090	Test control software	5	14NOV05	18NOV05			⚠ Test control software			
UN25_00100	CMPLT: Control Software	0		18NOV05			◆ CMPLT: Control Software			
UN25_00140	Design prototype test setup	5	21NOV05	29NOV05			⚠ Design prototype test setup			
UN25_00150	Prepare for design review	5	30NOV05	06DEC05			⚠ Prepare for design review			
UN25_00160	Conduct design review	2	07DEC05	08DEC05			⚠ Conduct design review			
UN25_00161	CMPLT: Design Review	0		08DEC05			◆ CMPLT: Design Review			
UN25_00170	Procure integration components for prototype (	1	09DEC05	09DEC05			⚠ Procure integration components for prototype (
UN25_00180	Receive integration components for prototype	20	12DEC05	24JAN06			⚠ Receive integration components for prototype			
UN25_00190	Assemble prototype	10	25JAN06	07FEB06			⚠ Assemble prototype			
UN25_00200	CMPLT: Integrated prototype	0		07FEB06			◆ CMPLT: Integrated prototype			
UN25_00210	Write integrated test procedure	2	08FEB06	09FEB06			⚠ Write integrated test procedure			
UN25_00220	Assemble test setup	2	10FEB06	13FEB06			⚠ Assemble test setup			
UN25_00230	Perform prototype testing	2	14FEB06	15FEB06			⚠ Perform prototype testing			
UN25_00240	CMPLT: Integrated prototype testing	0		15FEB06			◆ CMPLT: Integrated prototype testing			
UN25_00250	Write validation procedure	5	16FEB06	23FEB06			⚠ Write validation procedure			
UN25_00260	Design installation layout and plan	20	24FEB06	23MAR06			⚠ Design installation layout and plan			
UN25_00261	Prepare Bid Package for product integrated com	5	24MAR06	30MAR06			⚠ Prepare Bid Package for product integrated com			
UN25_00262	Release RFP for production integrated comp	1	31MAR06	31MAR06			⚠ Release RFP for production integrated comp			
UN25_00263	Vendor Prepare Prop for product integrated com	5	03APR06	07APR06			⚠ Vendor Prepare Prop for product integrated com			
UN25_00264	RCV: Proposal for product integrated comp	0		07APR06			◆ RCV: Proposal for product integrated comp			
UN25_00265	Evaluate Proposal for product integrated comp	5	10APR06	14APR06			⚠ Evaluate Proposal for product integrated comp			
UN25_00280	Receive production integration components	20	18APR06	15MAY06			⚠ Receive production integration components			
UN25_00290	QA Test production integration components	10	04MAY07	17MAY07			⚠ QA Test production integration components			
1.04.02.06 Vacuum										
UN26_01281		1	01OCT04	01OCT04	⚠					
UN26_01282		1	01OCT04	01OCT04	⚠					
UN26_00010	Write control Software Requirements Spec.	10	11MAY06*	24MAY06			⚠ Write control Software Requirements Spec.			
UN26_01000	Write control Software Requirements Spec.	10	11MAY06*	24MAY06			⚠ Write control Software Requirements Spec.			
UN26_00020	Design control software	10	25MAY06*	08JUN06			⚠ Design control software			
UN26_01010	Design control software	10	25MAY06*	08JUN06			⚠ Design control software			
UN26_00080	Write control software	10	09JUN06	22JUN06			⚠ Write control software			
UN26_01070	Write control software	10	09JUN06	22JUN06			⚠ Write control software			
UN26_00090	Test control software	5	23JUN06	29JUN06			⚠ Test control software			

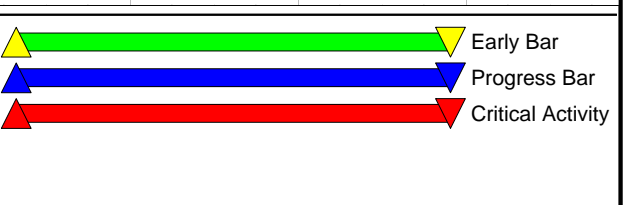
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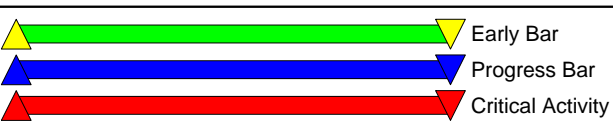
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UN26_01080	Test control software	5	23JUN06	29JUN06			⚠ Test control software			
UN26_00100	CMPLT: Control Software	0		29JUN06			◆ CMPLT: Control Software			
UN26_01090	CMPLT: Control Software	0		29JUN06			◆ CMPLT: Control Software			
UN26_00140	Design prototype test setup	5	30JUN06	07JUL06			⚠ Design prototype test setup			
UN26_01150	Prepare for design review	5	30JUN06	07JUL06			⚠ Prepare for design review			
UN26_01160	Conduct design review	2	10JUL06	11JUL06			⚠ Conduct design review			
UN26_00160	Prepare for design review	5	10JUL06	14JUL06			⚠ Prepare for design review			
UN26_01280	Receive production integration components	15	12JUL06	01AUG06			⚠ Receive production integration components			
UN26_00170	Conduct design review	2	17JUL06	18JUL06			⚠ Conduct design review			
UN26_00171	CMPLT: Design Review	0		18JUL06			◆ CMPLT: Design Review			
UN26_00180	Procure integration components for prototype (	1	19JUL06	19JUL06			⚠ Procure integration components for prototype (
UN26_00190	Receive integration components for prototype	30	20JUL06	30AUG06			⚠ Receive integration components for prototype			
UN26_01290	QA Test production integration components	10	02AUG06	15AUG06			⚠ QA Test production integration components			
UN26_00200	Assemble prototype	10	31AUG06	14SEP06			⚠ Assemble prototype			
UN26_00210	CMPLT: Integrated prototype	0		14SEP06			◆ CMPLT: Integrated prototype			
UN26_00220	Write integrated test procedure	2	15SEP06	18SEP06			⚠ Write integrated test procedure			
UN26_00230	Assemble test setup	2	19SEP06	20SEP06			⚠ Assemble test setup			
UN26_00240	Perform prototype testing	2	21SEP06	22SEP06			⚠ Perform prototype testing			
UN26_00250	CMPLT: Integrated prototype testing	0		22SEP06			◆ CMPLT: Integrated prototype testing			
UN26_00260	Write validation procedure	5	25SEP06	29SEP06			⚠ Write validation procedure			
UN26_00270	Design installation layout and plan	20	02OCT06	27OCT06			⚠ Design installation layout and plan			
UN26_00271	Prepare Bid Package for product integration co	5	30OCT06	03NOV06			⚠ Prepare Bid Package for product integration co			
UN26_00272	Release RFP for production integration comp	1	06NOV06	06NOV06			⚠ Release RFP for production integration comp			
UN26_00273	Vendor Prepare Prop for product integration co	5	07NOV06	13NOV06			⚠ Vendor Prepare Prop for product integration co			
UN26_00274	RCV: Proposal for product integration comp	0		13NOV06			◆ RCV: Proposal for product integration comp			
UN26_00275	Evaluate Proposal for product integration comp	5	14NOV06	20NOV06			⚠ Evaluate Proposal for product integration comp			
UN26_00290	Receive production integration components	20	22NOV06	05JAN07			⚠ Receive production integration components			
UN26_00300	QA Test production integration components	10	08JAN07	22JAN07			⚠ QA Test production integration components			
1.04.02.07 Machine Protection										
UN27_00011	Prepare for design review	5	03OCT05	07OCT05			⚠ Prepare for design review			
UN27_00010	Undulator global MPS module design	20	03OCT05	28OCT05			⚠ Undulator global MPS module design			
UN27_00020	conduct design review	2	31OCT05	01NOV05			⚠ conduct design review			
UN27_00120	Design interface electronics	10	31OCT05	11NOV05			⚠ Design interface electronics			
UN27_00030	Procure prototype MPS hardware components	1	02NOV05	02NOV05			⚠ Procure prototype MPS hardware components			
UN27_00340	Design signal interface	10	02NOV05	15NOV05			⚠ Design signal interface			
UN27_00031	Receive Prototype MPS Hardware Components	25	03NOV05	09DEC05			⚠ Receive Prototype MPS Hardware Components			
UN27_00121	Prepare for design review	5	14NOV05	18NOV05			⚠ Prepare for design review			

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					2004	2005	2006	2007	2008	2009	
UN27_00341	Prepare for design review	5	16NOV05	22NOV05			⚠ Prepare for design review				
UN27_00130	conduct design review	2	21NOV05	22NOV05			⚠ conduct design review				
UN27_00140	Procure prototype Interface electronics compon	1	23NOV05	23NOV05			⚠ Procure prototype Interface electronics compon				
UN27_00350	conduct design review	2	23NOV05	28NOV05			⚠ conduct design review				
UN27_00141	Receive Prototype Interface Electronics	25	28NOV05	17JAN06			⚠ Receive Prototype Interface Electronics				
UN27_00360	Procure prototype signal electronics component	1	29NOV05	29NOV05			⚠ Procure prototype signal electronics component				
UN27_00361	Receive Prototype Signal Electronics Component	25	30NOV05	19JAN06			⚠ Receive Prototype Signal Electronics Component				
UN27_00040	Assemble prototype MPS hardware	10	12DEC05	09JAN06			⚠ Assemble prototype MPS hardware				
UN27_00050	Test prototype MPS hardware	4	10JAN06	13JAN06			⚠ Test prototype MPS hardware				
UN27_00060	CMPLT: MPS hardware	0		13JAN06			◆ CMPLT: MPS hardware				
UN27_00070	Specify production MPS hardware	5	17JAN06	23JAN06			⚠ Specify production MPS hardware				
UN27_00150	Assemble prototype Interface electronics	10	18JAN06	31JAN06			⚠ Assemble prototype Interface electronics				
UN27_00370	Assemble prototype signal electronics	2	20JAN06	23JAN06			⚠ Assemble prototype signal electronics				
UN27_00380	Test prototype signal electronics	4	24JAN06	27JAN06			⚠ Test prototype signal electronics				
UN27_00080	Write QA procedure for production MPS hardware	5	24JAN06	30JAN06			⚠ Write QA procedure for production MPS hardware				
UN27_00390	CMPLT: signal electronics	0		27JAN06			◆ CMPLT: signal electronics				
UN27_00400	Specify production signal electronics	2	30JAN06	31JAN06			⚠ Specify production signal electronics				
UN27_00090	Procure production MPS hardware	1	31JAN06	31JAN06			⚠ Procure production MPS hardware				
UN27_00410	Write QA procedure for production signal elect	2	01FEB06	02FEB06			⚠ Write QA procedure for production signal elect				
UN27_00160	Test prototype Interface electronics	4	01FEB06	06FEB06			⚠ Test prototype Interface electronics				
UN27_00230	Design signal interface	10	01FEB06*	14FEB06			⚠ Design signal interface				
UN27_00100	Receive production and spare MPS hardware	12	01FEB06	16FEB06			⚠ Receive production and spare MPS hardware				
UN27_00420	Procure production signal electronics	1	03FEB06	03FEB06			⚠ Procure production signal electronics				
UN27_00170	CMPTL: Interface electronics	0		06FEB06			◆ CMPTL: Interface electronics				
UN27_00430	Receive production signal electronics	10	06FEB06	17FEB06			⚠ Receive production signal electronics				
UN27_00180	Specify production Interface electronics	5	07FEB06	13FEB06			⚠ Specify production Interface electronics				
UN27_00190	Write QA procedure for production Interface el	1	14FEB06	14FEB06			⚠ Write QA procedure for production Interface el				
UN27_00200	Procure production Interface electronics	1	15FEB06	15FEB06			⚠ Procure production Interface electronics				
UN27_00231	Prepare for design review	5	15FEB06	22FEB06			⚠ Prepare for design review				
UN27_00210	Receive production Interface electronics	10	16FEB06	02MAR06			⚠ Receive production Interface electronics				
UN27_00110	QA Test production MPS hardware	10	17FEB06	03MAR06			⚠ QA Test production MPS hardware				
UN27_00440	QA Test production signal electronics	10	21FEB06	06MAR06			⚠ QA Test production signal electronics				
UN27_00240	conduct design review	2	23FEB06	24FEB06			⚠ conduct design review				
UN27_00250	Procure prototype signal electronics component	1	27FEB06	27FEB06			⚠ Procure prototype signal electronics component				
UN27_00251	Receive Prototype Signal Electronics	25	28FEB06	03APR06			⚠ Receive Prototype Signal Electronics				
UN27_00220	QA Test production Interface electronics	10	03MAR06	16MAR06			⚠ QA Test production Interface electronics				
UN27_00260	Assemble prototype signal electronics	2	04APR06	05APR06			⚠ Assemble prototype signal electronics				

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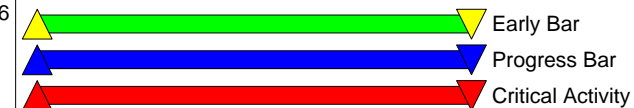
Undulator



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					2004	2005	2006	2007	2008	2009
UN27_00270	Test prototype signal electronics	4	06APR06	11APR06			⚠ Test prototype signal electronics			
UN27_00280	CMPTL: signal electronics	0		11APR06			⚠ CMPTL: signal electronics			
UN27_00290	Specify production signal electronics	2	12APR06	13APR06			⚠ Specify production signal electronics			
UN27_00300	Write QA procedure for production signal elect	2	14APR06	17APR06			⚠ Write QA procedure for production signal elect			
UN27_00320	Receive production and spare signal electronic	10	19APR06	02MAY06			⚠ Receive production and spare signal electronic			
UN27_00321	REC: production signal electronics	1	03MAY06	03MAY06			⚠ REC: production signal electronics			
UN27_00330	QA Test production and spare signal electronic	10	04MAY06	17MAY06			⚠ QA Test production and spare signal electronic			
1.04.02.08 Power Supply Controls										
UN27_00450	Design Power Supply Control	78	28APR06*	17AUG06			⚠ Design Power Supply Control			
UN27_00460	COMP: Power Supply Controls Design	0		17AUG06			⚠ COMP: Power Supply Controls Design			
UN27_00470	Build H/W and Write Docmnt Power Supply Control	26	18AUG06	25SEP06			⚠ Build H/W and Write Docmnt Power Supply Control			
UN27_00480	Write S/W Docmnt Power Supply Control	26	18AUG06	25SEP06			⚠ Write S/W Docmnt Power Supply Control			
UN27_00490	Integrate software & hardware	5	26SEP06	02OCT06			⚠ Integrate software & hardware			
UN27_00500	AVAIL: Power Supply Cntrls Ready for Install	0		02OCT06			⚠ AVAIL: Power Supply Cntrls Ready for Install			
1.04.03 Undulator Magnet & Support										
UNMS4_0305	Undulator Structure Final Design Review	0		15NOV04A			⚠ Undulator Structure Final Design Review			
UN30_28420	Strongback Motion Requirements Frozen	0	01OCT04*				⚠ Strongback Motion Requirements Frozen			
UNMS4_0300	Undulator System Requirements Frozen	0		18FEB05			⚠ Undulator System Requirements Frozen			
UNMS4_M64	Undulator Reqs. Frozen (including motion spec)	0		18FEB05			⚠ Undulator Reqs. Frozen (including motion spec)			
UNMS4_M65	LCLS commissioning plan	0		18FEB05			⚠ LCLS commissioning plan			
UNMS4_0310	Issue 3 Primary RFPs for LLP	0		01MAR05			⚠ Issue 3 Primary RFPs for LLP			
UNMS4_0320	RFP for Undulator Magnet Assembly	0		23MAY05			⚠ RFP for Undulator Magnet Assembly			
UNMS4_0340	1st Lot Magnet Poles Arrive	0		05JUL05			⚠ 1st Lot Magnet Poles Arrive			
UNMS4_0380	Vendor A Permission to Proceed with 1st Article	0		20JUL05			⚠ Vendor A Permission to Proceed with 1st Article			
UNMS4_0392	Vendor B Permission to Proceed with 1st Article	0		08AUG05			⚠ Vendor B Permission to Proceed with 1st Article			
UNMS4_0345	1st Lot Magnet Blocks Arrive	0		11AUG05			⚠ 1st Lot Magnet Blocks Arrive			
UNMS4_0350	1st Ti Strongback Arrives & Accepted	0		06SEP05			⚠ 1st Ti Strongback Arrives & Accepted			
UNMS4_0360	Undulator #1 LLPs Available for Fabrication	0		06SEP05			⚠ Undulator #1 LLPs Available for Fabrication			
UNMS4_0355	2nd Ti Strongback Arrives & Accepted	0		28SEP05			⚠ 2nd Ti Strongback Arrives & Accepted			
UNMS4_0365	Undulator #2 LLPs Available for Fabrication	0		05OCT05			⚠ Undulator #2 LLPs Available for Fabrication			
UNMS4_0382	Undulator 1 Assembly Com & Rcvd at ANL	0		05DEC05			⚠ Undulator 1 Assembly Com & Rcvd at ANL			
UNMS4_0385	Undulator 2 Assembly Com & Rcvd at ANL	0		06JAN06			⚠ Undulator 2 Assembly Com & Rcvd at ANL			
UNMS4_0390	Undulator #1 Tested w/Supt & Mover System @ ANL	0		17JAN06			⚠ Undulator #1 Tested w/Supt & Mover System @ ANL			
UNMS4_0387	Undulator 1 Measured and Tuned @ ANL	0		19JAN06			⚠ Undulator 1 Measured and Tuned @ ANL			
UNMS4_0381	Renegotiate Vendor A Contract for Production	0		10FEB06			⚠ Renegotiate Vendor A Contract for Production			
UNMS4_0389	Undulator 2 Measured and Tuned @ ANL	0		17FEB06			⚠ Undulator 2 Measured and Tuned @ ANL			
UNMS4_0397	Renegotiate Vendor B Contract for Production	0		13MAR06			⚠ Renegotiate Vendor B Contract for Production			

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UNMS4_0393	Vendor A Undulators 3 -> 19 Complete	0		30AUG06			◆ Vendor A Undulators 3 -> 19 Complete			
UNMS4_0394	Vendor B Undulators 4 -> 20 Complete	0		22SEP06			◆ Vendor B Undulators 4 -> 20 Complete			
UN30_28440	All Undulator Magnets Ready for Installation	0		24JAN08			◆ All Undulator Magnets Ready for Installation			
UNMS4_0395	Vendor A Undulators 21 -> 39 Complete	0		29JAN09			◆ Vendor A Undulators 21 -> 39 Complete			
UNMS4_0396	Vendor B Undulators 22 -> 40 Complete	0		12FEB09			◆ Vendor B Undulators 22 -> 40 Complete			
1.04.03.01 UND Magnet & Support - Mgmt and Integration										
UN31_00010	Undulator Systems Integration	449	03OCT05	09AUG07			▲ Undulator Systems Integration			
UN31_00040	Dev/Coord Instl/Checkout/Verif/Interface,etc D	240	13FEB06	07FEB07			▲ Dev/Coord Instl/Checkout/Verif/Interface,etc D			
1.04.03.03 1st Article Undulators & Long Lead Procurements										
UN33_00282	Undulator Transport/Remeasure (IDR)	7	04OCT04A	12OCT04A			▲ Undulator Transport/Remeasure (IDR)			
UN33_M66	Modify APPs for strongback, poles, magnet blocks	5	15NOV04A	29NOV04			▲ Modify APPs for strongback, poles, magnet blocks			
UN33_M90	Undulator structure design review complete	0		15NOV04A			◆ Undulator structure design review complete			
UN33_M91	Integrate comments from FDR into designs & plans	30	16NOV04A	29NOV04			▲ Integrate comments from FDR into designs & plans			
UN33_M71	Magnet pole APP approved	0		10DEC04A			◆ Magnet pole APP approved			
UN33_M72	Magnet block APP approved	0		10DEC04A			◆ Magnet block APP approved			
UN33_M81	Prepare RFP for LLPs	21	14DEC04A	17DEC04A			▲ Prepare RFP for LLPs			
MSC_UN005	CRIT: Release RFP Ti Strongback	0		14JAN05A			◆ CRIT: Release RFP Ti Strongback			
SSUN_0110	CRIT: Ti Strongback	0	01OCT04				◆ CRIT: Ti Strongback			
UN33_M88	Prepare for review	3	01OCT04	05OCT04			▲ Prepare for review			
UN33_00281	Incorporate Comments from Internal Des Rev.	22	04OCT04	02NOV04			▲ Incorporate Comments from Internal Des Rev.			
UN33_M83	Prequalify Ti strongback vendors	3	03JAN05*	05JAN05			▲ Prequalify Ti strongback vendors			
UN33_M84	Prequalify magnet block vendors	3	03JAN05*	05JAN05			▲ Prequalify magnet block vendors			
UN33_M85	Prequalify magnet pole vendors	3	03JAN05*	05JAN05			▲ Prequalify magnet pole vendors			
UN33_M77	Complete SOW for Ti strongback	5	03JAN05*	07JAN05			▲ Complete SOW for Ti strongback			
UN33_M89	Complete und struct FDR & incorp comments/revs	20	03JAN05*	31JAN05			▲ Complete und struct FDR & incorp comments/revs			
UN33_M79	Complete SOW for magnet blocks	39	03JAN05*	28FEB05			▲ Complete SOW for magnet blocks			
UN33_M78	Complete SOW for magnet poles	62	03JAN05*	31MAR05			▲ Complete SOW for magnet poles			
UN33_M86	Bidders list for 3 LLPs complete	0		05JAN05			◆ Bidders list for 3 LLPs complete			
UN33_10020	Release RFP - Ti Strongback	1	12JAN05	12JAN05			▲ Release RFP - Ti Strongback			
UN33_10030	Vendor Prep Proposal - Ti Strongback	23	13JAN05	15FEB05			▲ Vendor Prep Proposal - Ti Strongback			
UN33_M67	Modify APP for quadrupoles	23	14JAN05*	16FEB05			▲ Modify APP for quadrupoles			
UN33_M68	Modify undulator assembly APP	23	14JAN05*	16FEB05			▲ Modify undulator assembly APP			
UN33_M70	Strongback APP approved	0		24JAN05*			◆ Strongback APP approved			
UN33_30020	Release RFP - Magnet Poles	1	04FEB05*	04FEB05			▲ Release RFP - Magnet Poles			
UN33_30030	Vendor Prep Proposal - Magnet Poles	20	07FEB05	07MAR05			▲ Vendor Prep Proposal - Magnet Poles			
UN33_10040	RCV: Proposal - Ti Strongback	0		15FEB05			◆ RCV: Proposal - Ti Strongback			
UN33_10055	Evaluate Proposal - Ti Strongback	5	16FEB05	23FEB05			▲ Evaluate Proposal - Ti Strongback			

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					2004	2005	2006	2007	2008	2009
UN33_M73	Quadrupole APP approved	0		28FEB05*		◆ Quadrupole APP approved				
UN33_20020	Release RFP - Magnet Blocks	1	01MAR05	01MAR05		⚠ Release RFP - Magnet Blocks				
UN33_MP93	Write undulator assembly procedures	34	01MAR05*	15APR05		⚠ Write undulator assembly procedures				
UN33_4P019	Pre-Qualify Vendors - Magnet Assembly	45	01MAR05*	02MAY05		⚠ Pre-Qualify Vendors - Magnet Assembly				
UN33_MP102	Controls/vacuum sys integration w/supp mover sys	127	01MAR05*	26AUG05		⚠ Controls/vacuum sys integration w/supp mover sys				
UN33_MP122	General M&S	151	01MAR05*	30SEP05		⚠ General M&S				
UN33_MP123	General Effort	151	01MAR05*	30SEP05		⚠ General Effort				
UN33_20030	Vendor Prep Proposal - Magnet Blocks	20	02MAR05	29MAR05		⚠ Vendor Prep Proposal - Magnet Blocks				
UN33_30040	RCV: Proposal - Magnet Poles	0		07MAR05		◆ RCV: Proposal - Magnet Poles				
UN33_30050	Evaluate Proposal - Magnet Poles	5	08MAR05	14MAR05		⚠ Evaluate Proposal - Magnet Poles				
UN33_MP94	Produce associated undulator structure drawings	34	15MAR05*	29APR05		⚠ Produce associated undulator structure drawings				
UN33_MP95	Produce SOW for undulator assembly	39	15MAR05*	06MAY05		⚠ Produce SOW for undulator assembly				
UN33_M74	Undulator assembly APP approved	0		21MAR05*		◆ Undulator assembly APP approved				
MSC_UN015	CRIT: Release RFP Magnet Poles	0		22MAR05		◆ CRIT: Release RFP Magnet Poles				
SSUN_0105	CRIT: Magnet Poles	0		22MAR05		◆ CRIT: Magnet Poles				
UN33_20040	RCV: Proposal - Magnet Blocks	0		29MAR05		◆ RCV: Proposal - Magnet Blocks				
UN33_M80	SOWs complete	0		31MAR05*		◆ SOWs complete				
UN33_30070	Vendor Fab/Assy - 1st Lot Magnet Poles (1-10)	65	01APR05*	01JUL05		⚠ Vendor Fab/Assy - 1st Lot Magnet Poles (1-10)				
UN33_10119	Acceptance Measmt & Verification of Strongbacks	243	01APR05*	31MAR06		⚠ Acceptance Measmt & Verification of Strongbacks				
UN33_D0300	Design Vacuum Tee Support	5	11APR05*	15APR05		⚠ Design Vacuum Tee Support				
UN33_D0400	Select Ion Pump	5	11APR05*	15APR05		⚠ Select Ion Pump				
UN33_D0900	Design Cherenkov Detector Support	5	11APR05*	15APR05		⚠ Design Cherenkov Detector Support				
UN33_D0100	Modify Design Stand-in Chamber	10	11APR05*	22APR05		⚠ Modify Design Stand-in Chamber				
UN33_D0200	Design Vacuum Tee	10	11APR05*	22APR05		⚠ Design Vacuum Tee				
UN33_D0500	Design Ion Pump Support	10	11APR05*	22APR05		⚠ Design Ion Pump Support				
UN33_D0600	Design RFBPM	10	11APR05*	22APR05		⚠ Design RFBPM				
UN33_D0700	Design RFBPM Support	10	11APR05*	22APR05		⚠ Design RFBPM Support				
UN33_D0800	Design Cherenkov Detector	10	11APR05*	22APR05		⚠ Design Cherenkov Detector				
UN33_10065	Vendor Procure All Ti Forgings	66	11APR05	13JUL05		⚠ Vendor Procure All Ti Forgings				
MSC_UN010	CRIT: Release RFP Magnet Blocks	0		13APR05		◆ CRIT: Release RFP Magnet Blocks				
SSUN_0115	CRIT: Magnet Blocks	0	14APR05			◆ CRIT: Magnet Blocks				
UN33_40245	All Break Section Interf to UM & Cradle Defined	0		15APR05*		◆ All Break Section Interf to UM & Cradle Defined				
UN33_40250	Interface to Fixed Supt Documented & Signed Off	0		15APR05		◆ Interface to Fixed Supt Documented & Signed Off				
UN33_20055	Evaluate Proposal - Magnet Blocks	5	18APR05*	22APR05		⚠ Evaluate Proposal - Magnet Blocks				
UN33_D0305	Get Quote on Tee Support	5	18APR05	22APR05		⚠ Get Quote on Tee Support				
UN33_D0405	Get Quote on Ion Pump	5	18APR05	22APR05		⚠ Get Quote on Ion Pump				
UN33_D0905	Get Quote on Cherenkov Detector Support	5	18APR05	22APR05		⚠ Get Quote on Cherenkov Detector Support				

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					2004	2005	2006	2007	2008	2009	
UN33_MP99	Design support/mover system to 80%	54	18APR05*	01JUL05		▲▼ Design support/mover system to 80%					
UN33_M101	Prepare S/M Engineering Specification	84	18APR05*	15AUG05		▲▼ Prepare S/M Engineering Specification					
UN33_MP98	Continued PED of support, mover, motion system	130	18APR05*	19OCT05		▲▼ Continued PED of support, mover, motion system					
UN33_D0105	Shops to Quote Chamber	5	25APR05	29APR05		▲ Shops to Quote Chamber					
UN33_D0205	Get Quote on Tee	5	25APR05	29APR05		▲ Get Quote on Tee					
UN33_D0505	Get Quote on Ion Pump Support	5	25APR05	29APR05		▲ Get Quote on Ion Pump Support					
UN33_D0605	Get Quote on RFBPM	5	25APR05	29APR05		▲ Get Quote on RFBPM					
UN33_D0705	Get Quote on RFBPM Support	5	25APR05	29APR05		▲ Get Quote on RFBPM Support					
UN33_D0805	Get Quote on Cherenkov Detector	5	25APR05	29APR05		▲ Get Quote on Cherenkov Detector					
UN33_D0310	Purchase Tee Support	30	25APR05	06JUN05		▲▼ Purchase Tee Support					
UN33_D0910	Purchase Cherenkov Detector Support	42	25APR05	22JUN05		▲▼ Purchase Cherenkov Detector Support					
UN33_D0410	Purchase Pump	63	25APR05	22JUL05		▲▼ Purchase Pump					
UN33_20070	Vendor Fab/Assy - 1st Half Magnet Blocks	75	26APR05	10AUG05		▲▼ Vendor Fab/Assy - 1st Half Magnet Blocks					
UN33_M96	Undulator assembly procedures complete	0		29APR05		◆ Undulator assembly procedures complete					
UN33_D0210	Purchase Tee	42	02MAY05	29JUN05		▲▼ Purchase Tee					
UN33_D0510	Shops to Fab Pump Support	42	02MAY05	29JUN05		▲▼ Shops to Fab Pump Support					
UN33_D0710	Purchase RFBPM Support	42	02MAY05	29JUN05		▲▼ Purchase RFBPM Support					
UN33_D0610	Purchase RFBPM	63	02MAY05	29JUL05		▲▼ Purchase RFBPM					
UN33_D0810	Purchase Cherenkov Detector	63	02MAY05	29JUL05		▲▼ Purchase Cherenkov Detector					
UN33_D0110	Shops to Fab Chamber	84	02MAY05	29AUG05		▲▼ Shops to Fab Chamber					
UN33_40010	Prep Bid Package - Magnet Assembly	10	09MAY05*	20MAY05		▲ Prep Bid Package - Magnet Assembly					
UN33_40020	Release RFP - Magnet Assembly	1	23MAY05*	23MAY05		▲ Release RFP - Magnet Assembly					
UN33_40030	Vendor Prep Proposal - Magnet Assembly	21	24MAY05	22JUN05		▲ Vendor Prep Proposal - Magnet Assembly					
UN33_40292	Pre-Qualify Vendors - Support/Mover System	21	14JUN05*	13JUL05		▲ Pre-Qualify Vendors - Support/Mover System					
UN33_00565	Develop Plan & Base Design for Single Und Test	31	16JUN05	29JUL05		▲▼ Develop Plan & Base Design for Single Und Test					
UN33_40040	RCV: Proposals - Magnet Assembly	0		22JUN05		◆ RCV: Proposals - Magnet Assembly					
UN33_40050	Evaluate Proposals - Magnet Assembly	5	23JUN05	29JUN05		▲ Evaluate Proposals - Magnet Assembly					
UN33_00585	Prepare Area for Single Undulator Test	31	30JUN05	12AUG05		▲▼ Prepare Area for Single Undulator Test					
UN33_00595	Prepare Ctrls HW/SW for Single Und Test	42	30JUN05	29AUG05		▲▼ Prepare Ctrls HW/SW for Single Und Test					
UN33_40070	Vendor A Prep Fab/Assy, QA, VE Plans	10	01JUL05	15JUL05		▲ Vendor A Prep Fab/Assy, QA, VE Plans					
UN33_30080	RCV: From Vendor - 1st Lot Magnet Poles (1-10)	1	05JUL05	05JUL05		▲ RCV: From Vendor - 1st Lot Magnet Poles (1-10)					
UN33_30082	Vendor Fab/Assy - 2nd Lot Magnet Poles (11-20)	65	05JUL05	04OCT05		▲▼ Vendor Fab/Assy - 2nd Lot Magnet Poles (11-20)					
UN33_40280	COMP: Prequalify Vendors Support/Mover System	0		13JUL05		◆ COMP: Prequalify Vendors Support/Mover System					
UN33_10070	Vendor Fab/Assy - Ti Strongback Article 01	31	14JUL05	25AUG05		▲▼ Vendor Fab/Assy - Ti Strongback Article 01					
UN33_40080	RCV: Vendor A Fab/Assy Plan	0		15JUL05		◆ RCV: Vendor A Fab/Assy Plan					
UN33_40090	Evaluate Vendor A Fab/Assy Plan	2	18JUL05	19JUL05		▲ Evaluate Vendor A Fab/Assy Plan					
UN33_40092	Feedback and Comments to Vendor A	1	20JUL05	20JUL05		▲ Feedback and Comments to Vendor A					

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Undulator



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					2004	2005	2006	2007	2008	2009
UN33_40094	Approve Vendor A VE and QA Plans	0	21JUL05	20JUL05				⚠ Approve Vendor A VE and QA Plans		
UN33_40096	Permission to start First Article - Vendor A	0	21JUL05	20JUL05				⚠ Permission to start First Article - Vendor A		
UN33_40160	Vendor B Prep Fab/Assy, QA, VE Plans	10	21JUL05	03AUG05				⚠ Vendor B Prep Fab/Assy, QA, VE Plans		
UN33_40100	Vendor A Procure - 1st Art Mag Assy Parts	42	21JUL05	19SEP05				⚠ Vendor A Procure - 1st Art Mag Assy Parts		
UN33_40170	RCV: Vendor B Fab/Assy Plan	0		03AUG05				⚠ RCV: Vendor B Fab/Assy Plan		
UN33_40180	Evaluate Vendor B Fab/Assy Plan	2	04AUG05	05AUG05				⚠ Evaluate Vendor B Fab/Assy Plan		
UN33_40182	Feedback and Comments to Vendor B	1	08AUG05	08AUG05				⚠ Feedback and Comments to Vendor B		
UN33_40184	Approve Vendor B VE and QA Plans	0	09AUG05	08AUG05				⚠ Approve Vendor B VE and QA Plans		
UN33_40186	Permission to start First Article - Vendor B	0	09AUG05	08AUG05				⚠ Permission to start First Article - Vendor B		
UN33_40190	Vendor B Procure - 1st Art Mag Assy Parts	42	09AUG05	06OCT05				⚠ Vendor B Procure - 1st Art Mag Assy Parts		
UN33_20080	RCV: From Vendor - 1st Half Magnet Blocks	1	11AUG05	11AUG05				⚠ RCV: From Vendor - 1st Half Magnet Blocks		
UN33_20090	Vendor Fab/Assy - 2nd Half Magnet Blocks	75	12AUG05	29NOV05				⚠ Vendor Fab/Assy - 2nd Half Magnet Blocks		
UN33_00575	Assemble Test/Meas/Verification Stand	63	15AUG05	10NOV05				⚠ Assemble Test/Meas/Verification Stand		
UN33_10071	ACCEPT: Factory Acceptance - Ti S/B Article 01	1	26AUG05	26AUG05				⚠ ACCEPT: Factory Acceptance - Ti S/B Article 01		
UN33_M103	Undulator support mover sys PED 80% complete	0		26AUG05				⚠ Undulator support mover sys PED 80% complete		
UN33_10072	Permission to proceed with Ti Production	1	29AUG05	29AUG05				⚠ Permission to proceed with Ti Production		
UN33_M120	Begin final 20% of S/M engineering/design effort	0	29AUG05					⚠ Begin final 20% of S/M engineering/design effort		
UN33_10073	Vendor Ship to Vendor A - Ti S/B Article 01	5	29AUG05	02SEP05				⚠ Vendor Ship to Vendor A - Ti S/B Article 01		
UN33_M104	Prepare for internal design review s/m system	10	29AUG05	12SEP05				⚠ Prepare for internal design review s/m system		
UN33_40255	Design Supt/Mover System w/Final Requirements	21	29AUG05	27SEP05				⚠ Design Supt/Mover System w/Final Requirements		
UN33_10078	Vendor Fab/Assy - Ti Strongback Article 02	21	30AUG05	28SEP05				⚠ Vendor Fab/Assy - Ti Strongback Article 02		
UN33_10074	RCV: Vendor A - Ti Strongback Article 01	0		02SEP05				⚠ RCV: Vendor A - Ti Strongback Article 01		
UN33_10075	ACCEPT: Site acceptance @ Vendor A - Ti S/B #1	1	06SEP05	06SEP05				⚠ ACCEPT: Site acceptance @ Vendor A - Ti S/B #1		
UN33_40110	RCV: Ti Strongback #01, Blocks, Poles, Parts	0		06SEP05				⚠ RCV: Ti Strongback #01, Blocks, Poles, Parts		
UN33_40291	Produce SOW - Support/Mover System	21	13SEP05	11OCT05				⚠ Produce SOW - Support/Mover System		
UN33_40120	Vendor A Fab/Assy-Magnet #1 Assembly	42	20SEP05	16NOV05				⚠ Vendor A Fab/Assy-Magnet #1 Assembly		
UN33_10080	ACCEPT: Factory Acceptance - Ti S/B Article 02	1	28SEP05	28SEP05				⚠ ACCEPT: Factory Acceptance - Ti S/B Article 02		
UN33_M105	Internal design review of S/M system	1	28SEP05	28SEP05				⚠ Internal design review of S/M system		
UN33_10082	Vendor Ship - Ti S/B Article 02	5	29SEP05	05OCT05				⚠ Vendor Ship - Ti S/B Article 02		
UN33_10090	Vendor Fab/Assy - Ti Strongback Article 03	10	29SEP05	12OCT05				⚠ Vendor Fab/Assy - Ti Strongback Article 03		
UN33_00310	Prototype Supt/Mover System w/Final Rqmts	42	29SEP05	29NOV05				⚠ Prototype Supt/Mover System w/Final Rqmts		
UN33_10084	RCV: From Vendor - Ti Strongback Article 02	0		05OCT05				⚠ RCV: From Vendor - Ti Strongback Article 02		
UN33_30086	RCV: From Vendor - 2nd Lot Magnet Poles (11-20)	1	05OCT05	05OCT05				⚠ RCV: From Vendor - 2nd Lot Magnet Poles (11-20)		
UN33_30096	50% magnet poles received	0		05OCT05				⚠ 50% magnet poles received		
UN33_40200	RCV: Ti Strongback #02, Blocks, Poles, Parts	0		05OCT05				⚠ RCV: Ti Strongback #02, Blocks, Poles, Parts		
UN33_30087	Vendor Fab/Assy - 3rd Lot Magnet Poles (21-30)	65	05OCT05	23JAN06				⚠ Vendor Fab/Assy - 3rd Lot Magnet Poles (21-30)		
UN33_40210	Vendor B Fab/Assy-Magnet #2 Assembly	42	07OCT05	07DEC05				⚠ Vendor B Fab/Assy-Magnet #2 Assembly		

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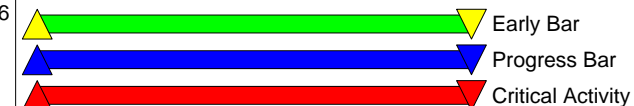


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					2004	2005	2006	2007	2008	2009
UN33_10092	ACCEPT: Factory Acceptance - Ti S/B Article 03	1	12OCT05	12OCT05			⚠ACCEPT: Factory Acceptance - Ti S/B Article 03			
UN33_40293	Prep Bid Package - Support/Mover System	10	12OCT05	25OCT05			⚠Prep Bid Package - Support/Mover System			
UN33_10094	Vendor Ship - Ti S/B Article 03	5	13OCT05	19OCT05			⚠Vendor Ship - Ti S/B Article 03			
UN33_10098	Vendor Fab/Assy - Ti Strongback Article 04	10	13OCT05	26OCT05			⚠Vendor Fab/Assy - Ti Strongback Article 04			
UN33_10096	RCV: From Vendor - Ti Strongback Article 03	0		19OCT05			◆RCV: From Vendor - Ti Strongback Article 03			
UN33_10100	ACCEPT: Factory Acceptance - Ti S/B Article 04	1	26OCT05	26OCT05			⚠ACCEPT: Factory Acceptance - Ti S/B Article 04			
UN33_10102	Vendor Ship - Ti S/B Article 04	5	27OCT05	02NOV05			⚠Vendor Ship - Ti S/B Article 04			
UN33_10110	Vendor Fab/Assy - Ti Strongback Article 05	10	27OCT05	09NOV05			⚠Vendor Fab/Assy - Ti Strongback Article 05			
UN33_10104	RCV: From Vendor - Ti Strongback Article 04	0		02NOV05			◆RCV: From Vendor - Ti Strongback Article 04			
UN33_10112	ACCEPT: Factory Acceptance - Ti S/B Article 05	1	09NOV05*	09NOV05			⚠ACCEPT: Factory Acceptance - Ti S/B Article 05			
UN33_10114	Vendor Ship - Ti S/B Article 05	5	10NOV05	16NOV05			⚠Vendor Ship - Ti S/B Article 05			
UN33_10118	Vendor Fab/Assy - Ti Strongback Article 06	10	10NOV05	23NOV05			⚠Vendor Fab/Assy - Ti Strongback Article 06			
UN33_10116	RCV: From Vendor - Ti Strongback Article 05	0		16NOV05			◆RCV: From Vendor - Ti Strongback Article 05			
UN33_40122	Review Vendor A travelers/data	2	17NOV05	18NOV05			⚠Review Vendor A travelers/data			
UN33_40124	Factory Acceptance #01 - Vendor A	2	21NOV05	22NOV05			⚠Factory Acceptance #01 - Vendor A			
UN33_10120	ACCEPT: Factory Acceptance - Ti S/B Article 06	1	23NOV05	23NOV05			⚠ACCEPT: Factory Acceptance - Ti S/B Article 06			
UN33_40126	Permission to Ship to ANL Article 01 - Vendor A	1	23NOV05	23NOV05			⚠Permission to Ship to ANL Article 01 - Vendor A			
UN33_10122	Vendor Ship - Ti S/B Article 06	5	28NOV05	02DEC05			⚠Vendor Ship - Ti S/B Article 06			
UN33_40128	Vendor A Undulator 01 Ship to ANL	5	28NOV05	02DEC05			⚠Vendor A Undulator 01 Ship to ANL			
UN33_10130	Vendor Fab/Assy - Ti Strongback Article 07	10	28NOV05	09DEC05			⚠Vendor Fab/Assy - Ti Strongback Article 07			
UN33_40265	Prototype Support/Mover System w/Final Reqmts	0		29NOV05			◆Prototype Support/Mover System w/Final Reqmts			
UN33_20081	50% magnet blocks delivered	0		30NOV05			◆50% magnet blocks delivered			
UN33_20100	RCV: From Vendor - 2nd Half Magnet Blocks 13/2	1	30NOV05	30NOV05			⚠RCV: From Vendor - 2nd Half Magnet Blocks 13/2			
UN33_00665	Mount Proto Und on PR S/M	3	30NOV05	02DEC05			⚠Mount Proto Und on PR S/M			
UN33_40274	Prep for FDR - Supt/Mover System, Incl Ctrls Pkg	5	30NOV05	06DEC05			⚠Prep for FDR - Supt/Mover System, Incl Ctrls Pkg			
UN33_10124	RCV: From Vendor - Ti Strongback Article 06	0		02DEC05			◆RCV: From Vendor - Ti Strongback Article 06			
UN33_40140	RCV: From Vendor A-1st Article Magnet Assy	1	05DEC05	05DEC05			⚠RCV: From Vendor A-1st Article Magnet Assy			
UN33_40230	1st Article Vendor A Undulator 1 received	0		05DEC05			◆1st Article Vendor A Undulator 1 received			
UN33_00615	Assemble Module Components on Stand/Connect	10	05DEC05	16DEC05			⚠Assemble Module Components on Stand/Connect			
UN33_00530	Mag Measure & Tune - Und #01 (1st Art) Vend A	21	06DEC05	19JAN06			⚠Mag Measure & Tune - Und #01 (1st Art) Vend A			
UN33_40211	Review Vendor B travelers/data	2	08DEC05	09DEC05			⚠Review Vendor B travelers/data			
UN33_10132	ACCEPT: Factory Acceptance - Ti S/B Article 07	1	09DEC05	09DEC05			⚠ACCEPT: Factory Acceptance - Ti S/B Article 07			
UN33_40212	Factory Acceptance #02 - Vendor B	2	12DEC05	13DEC05			⚠Factory Acceptance #02 - Vendor B			
UN33_10134	Vendor Ship - Ti S/B Article 07	5	12DEC05	16DEC05			⚠Vendor Ship - Ti S/B Article 07			
UN33_10138	Vendor Fab/Assy - Ti Strongback Article 08	10	12DEC05	09JAN06			⚠Vendor Fab/Assy - Ti Strongback Article 08			
UN33_40213	Permission to Ship to ANL Article 02 - Vendor B	1	14DEC05	14DEC05			⚠Permission to Ship to ANL Article 02 - Vendor B			
UN33_40214	Vendor B Undulator 02 Ship to ANL	5	15DEC05	05JAN06			⚠Vendor B Undulator 02 Ship to ANL			

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					2004	2005	2006	2007	2008	2009
UN33_10136	RCV: From Vendor - Ti Strongback Article 07	0		16DEC05			◆RCV: From Vendor - Ti Strongback Article 07			
UN33_00605	Carry out Short-Term Single Undulator Test	10	03JAN06	17JAN06			▲Carry out Short-Term Single Undulator Test			
UN33_40220	RCV: From Vendor B - Magnet Assembly	1	06JAN06	06JAN06			▲RCV: From Vendor B - Magnet Assembly			
UN33_40240	1st Article Vendor B Undulator 2 received	0		06JAN06			◆1st Article Vendor B Undulator 2 received			
UN33_10140	ACCEPT: Factory Acceptance - Ti S/B Article 08	1	09JAN06	09JAN06			▲ACCEPT: Factory Acceptance - Ti S/B Article 08			
UN33_10142	Vendor Ship - Ti S/B Article 08	5	10JAN06	17JAN06			▲Vendor Ship - Ti S/B Article 08			
UN33_10150	Vendor Fab/Assy - Ti Strongback Article 09	10	10JAN06	24JAN06			▲Vendor Fab/Assy - Ti Strongback Article 09			
UN33_00324	Single Undulator Module Tested-Short Term	0		17JAN06			◆Single Undulator Module Tested-Short Term			
UN33_10144	RCV: From Vendor - Ti Strongback Article 08	0		17JAN06			◆RCV: From Vendor - Ti Strongback Article 08			
UN33_00635	Write Report: Short Term Test Results	10	18JAN06	31JAN06			▲Write Report: Short Term Test Results			
UN33_00545	Carry Out Longer Term Stability Single Und Test	42	18JAN06	17MAR06			▲Carry Out Longer Term Stability Single Und Test			
UN33_00540	COMP: Magnetic Meas. & Tune from Vendor A	0		19JAN06			◆COMP: Magnetic Meas. & Tune from Vendor A			
UN33_00550	ACCEPT Vendor A Undulator #01 (1st Art) at ANL	5	20JAN06	26JAN06			▲ACCEPT Vendor A Undulator #01 (1st Art) at ANL			
UN33_00560	Mag Measure - Undulator #02 (1st Art) Vend B	21	20JAN06	17FEB06			▲Mag Measure - Undulator #02 (1st Art) Vend B			
UN33_10152	ACCEPT: Factory Acceptance - Ti S/B Article 09	1	24JAN06	24JAN06			▲ACCEPT: Factory Acceptance - Ti S/B Article 09			
UN33_30088	RCV: From Vendor - 3rd Lot Magnet Poles (21-30)	1	24JAN06	24JAN06			▲RCV: From Vendor - 3rd Lot Magnet Poles (21-30)			
UN33_30090	Vendor Fab/Assy - 4th Lot Magnet Poles (31-33)	65	24JAN06	25APR06			▲Vendor Fab/Assy - 4th Lot Magnet Poles (31-33)			
UN33_10154	Vendor Ship - Ti S/B Article 09	5	25JAN06	31JAN06			▲Vendor Ship - Ti S/B Article 09			
UN33_10158	Vendor Fab/Assy - Ti Strongback Article 10	10	25JAN06	07FEB06			▲Vendor Fab/Assy - Ti Strongback Article 10			
UN33_00553	Disassemble and pack Undulator Module 1	5	27JAN06	02FEB06			▲Disassemble and pack Undulator Module 1			
UN33_10156	RCV: From Vendor - Ti Strongback Article 09	0		31JAN06			◆RCV: From Vendor - Ti Strongback Article 09			
UN33_40275	FDR - Supt/Mover System, Incl Controls Package	1	01FEB06	01FEB06			▲FDR - Supt/Mover System, Incl Controls Package			
UN33_40285	Release RFP - Support/Mover System	0		01FEB06			◆Release RFP - Support/Mover System			
UN33_40290	Vendor Prep Bids - Support/Mover System	21	02FEB06	03MAR06			▲Vendor Prep Bids - Support/Mover System			
UN33_00552	Ship Vendor A Undulator #01 (1st Art) to SLAC	5	03FEB06	09FEB06			▲Ship Vendor A Undulator #01 (1st Art) to SLAC			
UN33_10160	ACCEPT: Factory Acceptance - Ti S/B Article 10	1	07FEB06	07FEB06			▲ACCEPT: Factory Acceptance - Ti S/B Article 10			
UN33_10162	Vendor Ship - Ti S/B Article 10	5	08FEB06	14FEB06			▲Vendor Ship - Ti S/B Article 10			
UN33_10170	Vendor Fab/Assy - Ti Strongback Article 11	10	08FEB06	22FEB06			▲Vendor Fab/Assy - Ti Strongback Article 11			
UN33_00554	ACCEPT: Vendor A Undulator #01 (1st Art) at SLAC	0		09FEB06			◆ACCEPT: Vendor A Undulator #01 (1st Art) at SLAC			
UN33_00556	Undulator 01 Ready for MMF	0		09FEB06			◆Undulator 01 Ready for MMF			
UN33_10164	RCV: From Vendor - Ti Strongback Article 10	0		14FEB06			◆RCV: From Vendor - Ti Strongback Article 10			
UN33_10165	25% Ti Strongbacks received	0		14FEB06			◆25% Ti Strongbacks received			
UN33_00570	COMP: Magnetic Measurement from Vendor B	0		17FEB06			◆COMP: Magnetic Measurement from Vendor B			
UN33_00580	ACCEPT: Vendor B Undulator #02 (1st Art) at AN	5	21FEB06	27FEB06			▲ACCEPT: Vendor B Undulator #02 (1st Art) at AN			
UN33_10172	ACCEPT: Factory Acceptance - Ti S/B Article 11	1	22FEB06	22FEB06			▲ACCEPT: Factory Acceptance - Ti S/B Article 11			
UN33_10174	Vendor Ship - Ti S/B Article 11	5	23FEB06	01MAR06			▲Vendor Ship - Ti S/B Article 11			
UN33_10178	Vendor Fab/Assy - Ti Strongback Article 12	10	23FEB06	08MAR06			▲Vendor Fab/Assy - Ti Strongback Article 12			

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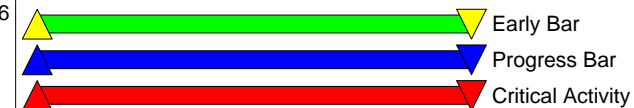
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					2004	2005	2006	2007	2008	2009
UN33_00612	Disassemble and pack Undulator Module 2	5	28FEB06	06MAR06			⚠	Disassemble and pack Undulator Module 2		
UN33_10176	RCV: From Vendor - Ti Strongback Article 11	0		01MAR06			◆	RCV: From Vendor - Ti Strongback Article 11		
UN33_40295	Bids Received - Support/Mover System	0		03MAR06			◆	Bids Received - Support/Mover System		
UN33_40300	Evaluate Bids - Support/Mover System	5	06MAR06	10MAR06			⚠	Evaluate Bids - Support/Mover System		
UN33_00610	Ship Vendor B Undulator #02 (1st Art) to SLAC	5	07MAR06	13MAR06			⚠	Ship Vendor B Undulator #02 (1st Art) to SLAC		
UN33_10180	ACCEPT: Factory Acceptance - Ti S/B Article 12	1	08MAR06	08MAR06			⚠	ACCEPT: Factory Acceptance - Ti S/B Article 12		
UN33_10182	Vendor Ship - Ti S/B Article 12	5	09MAR06	15MAR06			⚠	Vendor Ship - Ti S/B Article 12		
UN33_10190	Vendor Fab/Assy - Ti Strongback Article 13	10	09MAR06	22MAR06			⚠	Vendor Fab/Assy - Ti Strongback Article 13		
UN33_00620	ACCEPT: Vendor B Undulator #02 (1st Art) at SL	0		13MAR06			◆	ACCEPT: Vendor B Undulator #02 (1st Art) at SL		
UN33_00630	Undulator 02 Ready for MMF	0		13MAR06			◆	Undulator 02 Ready for MMF		
UN33_40310	Vendor Prep & Documentation-Support/Mover System	11	14MAR06	28MAR06			⚠	Vendor Prep & Documentation-Support/Mover System		
UN33_10184	RCV: From Vendor - Ti Strongback Article 12	0		15MAR06			◆	RCV: From Vendor - Ti Strongback Article 12		
UN33_00625	Single Undulator Module Tested - Long Term	0		17MAR06			◆	Single Undulator Module Tested - Long Term		
UN33_00548	Disassemble and Pack	5	20MAR06	24MAR06			⚠	Disassemble and Pack		
UN33_10192	ACCEPT: Factory Acceptance - Ti S/B Article 13	1	22MAR06	22MAR06			⚠	ACCEPT: Factory Acceptance - Ti S/B Article 13		
UN33_10194	Vendor Ship - Ti S/B Article 13	5	23MAR06	29MAR06			⚠	Vendor Ship - Ti S/B Article 13		
UN33_10198	Vendor Fab/Assy - Ti Strongback Article 14	10	23MAR06	05APR06			⚠	Vendor Fab/Assy - Ti Strongback Article 14		
UN33_10196	RCV: From Vendor - Ti Strongback Article 13	0		29MAR06			◆	RCV: From Vendor - Ti Strongback Article 13		
UN33_40315	Construction 1st Two Articles - Suppt/Mover Sys	84	29MAR06	26JUL06			⚠	Construction 1st Two Articles - Suppt/Mover Sys		
UN33_10200	ACCEPT: Factory Acceptance - Ti S/B Article 14	1	05APR06	05APR06			⚠	ACCEPT: Factory Acceptance - Ti S/B Article 14		
UN33_10202	Vendor Ship - Ti S/B Article 14	5	06APR06	12APR06			⚠	Vendor Ship - Ti S/B Article 14		
UN33_10210	Vendor Fab/Assy - Ti Strongback Article 15	10	06APR06	19APR06			⚠	Vendor Fab/Assy - Ti Strongback Article 15		
UN33_10204	RCV: From Vendor - Ti Strongback Article 14	0		12APR06			◆	RCV: From Vendor - Ti Strongback Article 14		
UN33_10212	ACCEPT: Factory Acceptance - Ti S/B Article 15	1	19APR06	19APR06			⚠	ACCEPT: Factory Acceptance - Ti S/B Article 15		
UN33_10214	Vendor Ship - Ti S/B Article 15	5	20APR06	26APR06			⚠	Vendor Ship - Ti S/B Article 15		
UN33_10218	Vendor Fab/Assy - Ti Strongback Article 16	10	20APR06	03MAY06			⚠	Vendor Fab/Assy - Ti Strongback Article 16		
UN33_10216	RCV: From Vendor - Ti Strongback Article 15	0		26APR06			◆	RCV: From Vendor - Ti Strongback Article 15		
UN33_30100	RCV: From Vendor - 4th Lot Magnet Poles (31-33)	1	26APR06	26APR06			⚠	RCV: From Vendor - 4th Lot Magnet Poles (31-33)		
UN33_10220	ACCEPT: Factory Acceptance - Ti S/B Article 16	1	03MAY06	03MAY06			⚠	ACCEPT: Factory Acceptance - Ti S/B Article 16		
UN33_10222	Vendor Ship - Ti S/B Article 16	5	04MAY06	10MAY06			⚠	Vendor Ship - Ti S/B Article 16		
UN33_10230	Vendor Fab/Assy - Ti Strongback Article 17	10	04MAY06	17MAY06			⚠	Vendor Fab/Assy - Ti Strongback Article 17		
UN33_10224	RCV: From Vendor - Ti Strongback Article 16	0		10MAY06			◆	RCV: From Vendor - Ti Strongback Article 16		
UN33_10232	ACCEPT: Factory Acceptance - Ti S/B Article 17	1	17MAY06	17MAY06			⚠	ACCEPT: Factory Acceptance - Ti S/B Article 17		
UN33_10234	Vendor Ship - Ti S/B Article 17	5	18MAY06	24MAY06			⚠	Vendor Ship - Ti S/B Article 17		
UN33_10238	Vendor Fab/Assy - Ti Strongback Article 18	10	18MAY06	01JUN06			⚠	Vendor Fab/Assy - Ti Strongback Article 18		
UN33_10236	RCV: From Vendor - Ti Strongback Article 17	0		24MAY06			◆	RCV: From Vendor - Ti Strongback Article 17		
UN33_10240	ACCEPT: Factory Acceptance - Ti S/B Article 18	1	01JUN06	01JUN06			⚠	ACCEPT: Factory Acceptance - Ti S/B Article 18		

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Undulator

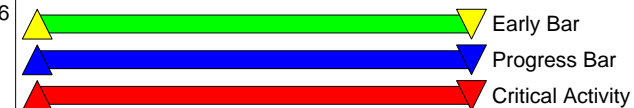


Start Date 01JUN01
 Finish Date 31MAR09
 Data Date 01OCT04
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN33_10242	Vendor Ship - Ti S/B Article 18	5	02JUN06	08JUN06						⚠ Vendor Ship - Ti S/B Article 18
UN33_10250	Vendor Fab/Assy - Ti Strongback Article 19	10	02JUN06	15JUN06						⚠ Vendor Fab/Assy - Ti Strongback Article 19
UN33_10244	RCV: From Vendor - Ti Strongback Article 18	0		08JUN06						⬠ RCV: From Vendor - Ti Strongback Article 18
UN33_10252	ACCEPT: Factory Acceptance - Ti S/B Article 19	1	15JUN06	15JUN06						⚠ ACCEPT: Factory Acceptance - Ti S/B Article 19
UN33_10254	Vendor Ship - Ti S/B Article 19	5	16JUN06	22JUN06						⚠ Vendor Ship - Ti S/B Article 19
UN33_10258	Vendor Fab/Assy - Ti Strongback Article 20	10	16JUN06	29JUN06						⚠ Vendor Fab/Assy - Ti Strongback Article 20
UN33_10256	RCV: From Vendor - Ti Strongback Article 19	0		22JUN06						⬠ RCV: From Vendor - Ti Strongback Article 19
UN33_10260	ACCEPT: Factory Acceptance - Ti S/B Article 20	1	29JUN06	29JUN06						⚠ ACCEPT: Factory Acceptance - Ti S/B Article 20
UN33_10262	Vendor Ship - Ti S/B Article 20	5	30JUN06	07JUL06						⚠ Vendor Ship - Ti S/B Article 20
UN33_10270	Vendor Fab/Assy - Ti Strongback Article 21	10	30JUN06	14JUL06						⚠ Vendor Fab/Assy - Ti Strongback Article 21
UN33_10264	RCV: From Vendor - Ti Strongback Article 20	0		07JUL06						⬠ RCV: From Vendor - Ti Strongback Article 20
UN33_10265	50% Ti Strongbacks received	0		07JUL06						⬠ 50% Ti Strongbacks received
UN33_10272	ACCEPT: Factory Acceptance - Ti S/B Article 21	1	14JUL06	14JUL06						⚠ ACCEPT: Factory Acceptance - Ti S/B Article 21
UN33_10274	Vendor Ship - Ti S/B Article 21	5	17JUL06	21JUL06						⚠ Vendor Ship - Ti S/B Article 21
UN33_10278	Vendor Fab/Assy - Ti Strongback Article 22	10	17JUL06	28JUL06						⚠ Vendor Fab/Assy - Ti Strongback Article 22
UN33_10276	RCV: From Vendor - Ti Strongback Article 21	0		21JUL06						⬠ RCV: From Vendor - Ti Strongback Article 21
UN33_40320	Factory Accept Testing - Support/Mover System	5	27JUL06	02AUG06						⚠ Factory Accept Testing - Support/Mover System
UN33_10280	ACCEPT: Factory Acceptance - Ti S/B Article 22	1	28JUL06	28JUL06						⚠ ACCEPT: Factory Acceptance - Ti S/B Article 22
UN33_10282	Vendor Ship - Ti S/B Article 22	5	31JUL06	04AUG06						⚠ Vendor Ship - Ti S/B Article 22
UN33_10290	Vendor Fab/Assy - Ti Strongback Article 23	10	31JUL06	11AUG06						⚠ Vendor Fab/Assy - Ti Strongback Article 23
UN33_40321	Ship 1st 2 Articles Support/Mover System to ANL	5	03AUG06	09AUG06						⚠ Ship 1st 2 Articles Support/Mover System to ANL
UN33_10284	RCV: From Vendor - Ti Strongback Article 22	0		04AUG06						⬠ RCV: From Vendor - Ti Strongback Article 22
UN33_40322	1st 2 Articles Support/Mover System recd. at ANL	0		09AUG06						⬠ 1st 2 Articles Support/Mover System recd. at ANL
UN34_00012	Evaluate 1st 2 Articles Support/Mover	21	10AUG06	08SEP06						⚠ Evaluate 1st 2 Articles Support/Mover
UN33_10292	ACCEPT: Factory Acceptance - Ti S/B Article 23	1	11AUG06	11AUG06						⚠ ACCEPT: Factory Acceptance - Ti S/B Article 23
UN33_10294	Vendor Ship - Ti S/B Article 23	5	14AUG06	18AUG06						⚠ Vendor Ship - Ti S/B Article 23
UN33_10298	Vendor Fab/Assy - Ti Strongback Article 24	10	14AUG06	25AUG06						⚠ Vendor Fab/Assy - Ti Strongback Article 24
UN33_10296	RCV: From Vendor - Ti Strongback Article 23	0		18AUG06						⬠ RCV: From Vendor - Ti Strongback Article 23
UN33_10300	ACCEPT: Factory Acceptance - Ti S/B Article 24	1	25AUG06	25AUG06						⚠ ACCEPT: Factory Acceptance - Ti S/B Article 24
SSUN_0050	MMF Qualified & REady to Measure Prod Undulators	0		28AUG06						⬠ MMF Qualified & REady to Measure Prod Undulators
UN33_10302	Vendor Ship - Ti S/B Article 24	5	28AUG06	01SEP06						⚠ Vendor Ship - Ti S/B Article 24
UN33_10310	Vendor Fab/Assy - Ti Strongback Article 25	10	28AUG06	11SEP06						⚠ Vendor Fab/Assy - Ti Strongback Article 25
UN33_10304	RCV: From Vendor - Ti Strongback Article 24	0		01SEP06						⬠ RCV: From Vendor - Ti Strongback Article 24
UN34_00017	ACCEPT: 1st 2 Articles Support/Mover	0		08SEP06						⬠ ACCEPT: 1st 2 Articles Support/Mover
UN33_10312	ACCEPT: Factory Acceptance - Ti S/B Article 25	1	11SEP06	11SEP06						⚠ ACCEPT: Factory Acceptance - Ti S/B Article 25
UN34_00013	Renegotiate Contract - 1st Article Support/Mover	10	11SEP06	22SEP06						⚠ Renegotiate Contract - 1st Article Support/Mover
UN33_10314	Vendor Ship - Ti S/B Article 25	5	12SEP06	18SEP06						⚠ Vendor Ship - Ti S/B Article 25

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN33_10318	Vendor Fab/Assy - Ti Strongback Article 26	10	12SEP06	25SEP06				⚠ Vendor Fab/Assy - Ti Strongback Article 26		
UN33_10316	RCV: From Vendor - Ti Strongback Article 25	0		18SEP06				◆ RCV: From Vendor - Ti Strongback Article 25		
UN33_10320	ACCEPT: Factory Acceptance - Ti S/B Article 26	1	25SEP06	25SEP06				⚠ ACCEPT: Factory Acceptance - Ti S/B Article 26		
UN33_10322	Vendor Ship - Ti S/B Article 26	5	26SEP06	02OCT06				⚠ Vendor Ship - Ti S/B Article 26		
UN33_10330	Vendor Fab/Assy - Ti Strongback Article 27	10	26SEP06	09OCT06				⚠ Vendor Fab/Assy - Ti Strongback Article 27		
UN33_10324	RCV: From Vendor - Ti Strongback Article 26	0		02OCT06				◆ RCV: From Vendor - Ti Strongback Article 26		
UN33_20120	100% magnet blocks received	0		03OCT06				◆ 100% magnet blocks received		
UN33_30120	100% magnet poles received	0		04OCT06				◆ 100% magnet poles received		
UN33_10332	ACCEPT: Factory Acceptance - Ti S/B Article 27	1	09OCT06	09OCT06				⚠ ACCEPT: Factory Acceptance - Ti S/B Article 27		
UN33_10334	Vendor Ship - Ti S/B Article 27	5	10OCT06	16OCT06				⚠ Vendor Ship - Ti S/B Article 27		
UN33_10338	Vendor Fab/Assy - Ti Strongback Article 28	10	10OCT06	23OCT06				⚠ Vendor Fab/Assy - Ti Strongback Article 28		
UN33_10336	RCV: From Vendor - Ti Strongback Article 27	0		16OCT06				◆ RCV: From Vendor - Ti Strongback Article 27		
UN33_10340	ACCEPT: Factory Acceptance - Ti S/B Article 28	1	23OCT06	23OCT06				⚠ ACCEPT: Factory Acceptance - Ti S/B Article 28		
UN33_10342	Vendor Ship - Ti S/B Article 28	5	24OCT06	30OCT06				⚠ Vendor Ship - Ti S/B Article 28		
UN33_10350	Vendor Fab/Assy - Ti Strongback Article 29	10	24OCT06	06NOV06				⚠ Vendor Fab/Assy - Ti Strongback Article 29		
UN33_10344	RCV: From Vendor - Ti Strongback Article 28	0		30OCT06				◆ RCV: From Vendor - Ti Strongback Article 28		
UN33_10352	ACCEPT: Factory Acceptance - Ti S/B Article 29	1	06NOV06	06NOV06				⚠ ACCEPT: Factory Acceptance - Ti S/B Article 29		
UN33_10354	Vendor Ship - Ti S/B Article 29	5	07NOV06	13NOV06				⚠ Vendor Ship - Ti S/B Article 29		
UN33_10358	Vendor Fab/Assy - Ti Strongback Article 30	10	07NOV06	20NOV06				⚠ Vendor Fab/Assy - Ti Strongback Article 30		
UN33_10356	RCV: From Vendor - Ti Strongback Article 29	0		13NOV06				◆ RCV: From Vendor - Ti Strongback Article 29		
UN33_10360	ACCEPT: Factory Acceptance - Ti S/B Article 30	1	20NOV06	20NOV06				⚠ ACCEPT: Factory Acceptance - Ti S/B Article 30		
UN33_10362	Vendor Ship - Ti S/B Article 30	5	21NOV06	29NOV06				⚠ Vendor Ship - Ti S/B Article 30		
UN33_10364	RCV: From Vendor - Ti Strongback Article 30	0		29NOV06				◆ RCV: From Vendor - Ti Strongback Article 30		
UN33_10365	75% Ti Strongbacks received	0		29NOV06				◆ 75% Ti Strongbacks received		
UN33_10370	Vendor Fab/Assy - Ti Strongback Article 31	10	30NOV06	13DEC06				⚠ Vendor Fab/Assy - Ti Strongback Article 31		
UN33_10372	ACCEPT: Factory Acceptance - Ti S/B Article 31	1	13DEC06	13DEC06				⚠ ACCEPT: Factory Acceptance - Ti S/B Article 31		
UN33_10374	Vendor Ship - Ti S/B Article 31	5	14DEC06	04JAN07				⚠ Vendor Ship - Ti S/B Article 31		
UN33_10378	Vendor Fab/Assy - Ti Strongback Article 32	10	14DEC06	11JAN07				⚠ Vendor Fab/Assy - Ti Strongback Article 32		
UN33_10376	RCV: From Vendor - Ti Strongback Article 31	0		04JAN07				◆ RCV: From Vendor - Ti Strongback Article 31		
UN33_10380	ACCEPT: Factory Acceptance - Ti S/B Article 32	1	11JAN07	11JAN07				⚠ ACCEPT: Factory Acceptance - Ti S/B Article 32		
UN33_10382	Vendor Ship - Ti S/B Article 32	5	12JAN07	19JAN07				⚠ Vendor Ship - Ti S/B Article 32		
UN33_10390	Vendor Fab/Assy - Ti Strongback Article 33	10	12JAN07	26JAN07				⚠ Vendor Fab/Assy - Ti Strongback Article 33		
UN33_10384	RCV: From Vendor - Ti Strongback Article 32	0		19JAN07				◆ RCV: From Vendor - Ti Strongback Article 32		
UN33_10392	ACCEPT: Factory Acceptance - Ti S/B Article 33	1	26JAN07	26JAN07				⚠ ACCEPT: Factory Acceptance - Ti S/B Article 33		
UN33_10394	Vendor Ship - Ti S/B Article 33	5	29JAN07	02FEB07				⚠ Vendor Ship - Ti S/B Article 33		
UN33_10396	RCV: From Vendor - Ti Strongback Article 33	0		02FEB07				◆ RCV: From Vendor - Ti Strongback Article 33		
UN33_10500	Ti Strongback Delivery 100% Complete	1	21JAN09	21JAN09				Ti Strongback Delivery 100% Complete		

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
1.04.03.04 Production Undulator Magnet Assembly & Supports										
UN34_00059	Acceptance Measmt and Verif of Undulator Assy	243	01APR05*	31MAR06				Acceptance Measmt and Verif of Undulator Assy		
MSC_UN020	CRIT: Release RFP Magnet Assemblies - 1st Art	0		23MAY05				◆CRIT: Release RFP Magnet Assemblies - 1st Art		
UN34_00066	RCV: 2nd Lot Magnet Blocks, Poles - Vend A #11	0		05OCT05				◆RCV: 2nd Lot Magnet Blocks, Poles - Vend A #11		
UN34_10065	RCV: 2nd Lot Magnet Blocks, Poles - Vend B #12	0		05OCT05				◆RCV: 2nd Lot Magnet Blocks, Poles - Vend B #12		
UN34_00045	RCV: Ti Strongback - Vend A #03	0		19OCT05				◆RCV: Ti Strongback - Vend A #03		
UN34_10045	RCV: Ti Strongback - Vend B #04	0		02NOV05				◆RCV: Ti Strongback - Vend B #04		
UN34_00053	RCV: Ti Strongback - Vend A #05	0		16NOV05				◆RCV: Ti Strongback - Vend A #05		
UN34_10053	RCV: Ti Strongback - Vend B #06	0		02DEC05				◆RCV: Ti Strongback - Vend B #06		
UN34_00057	RCV: Ti Strongback - Vend A #07	0		16DEC05				◆RCV: Ti Strongback - Vend A #07		
UN34_10057	RCV: Ti Strongback - Vend B #08	0		17JAN06				◆RCV: Ti Strongback - Vend B #08		
UN34_00084	RCV: 3rd Lot Magnet Blocks, Poles - Vend A #21	0		24JAN06				◆RCV: 3rd Lot Magnet Blocks, Poles - Vend A #21		
UN34_10084	RCV: 3rd Lot Magnet Blocks, Poles - Vend B #22	0		24JAN06				◆RCV: 3rd Lot Magnet Blocks, Poles - Vend B #22		
UN34_00010	Revise Contract Option Vendor A - Prdn Units	10	27JAN06	09FEB06				⚠Revise Contract Option Vendor A - Prdn Units		
UN34_00061	RCV: Ti Strongback - Vend A #09	0		31JAN06				◆RCV: Ti Strongback - Vend A #09		
UN34_00050	Vendor A Fab/Assy - Mag Assy Undulator 03	30	13FEB06	27MAR06				⚠Vendor A Fab/Assy - Mag Assy Undulator 03		
UN34_10061	RCV: Ti Strongback - Vend B #10	0		14FEB06				◆RCV: Ti Strongback - Vend B #10		
UN34_10010	Revise Contract Option Vendor B - Prdn Units	10	28FEB06	13MAR06				⚠Revise Contract Option Vendor B - Prdn Units		
UN34_00065	RCV: Ti Strongback - Vend A #11	0		01MAR06				◆RCV: Ti Strongback - Vend A #11		
UN34_10066	RCV: Ti Strongback - Vend B #12	0		15MAR06				◆RCV: Ti Strongback - Vend B #12		
UN34_10050	Vendor B Fab/Assy - Magnet Assy Article 04	30	15MAR06	25APR06				⚠Vendor B Fab/Assy - Magnet Assy Article 04		
UN34_00052	RCV: From Vendor A - Mag Assy Undulator 03	1	28MAR06	28MAR06				⚠RCV: From Vendor A - Mag Assy Undulator 03		
UN34_00069	RCV: Ti Strongback - Vend A #13	0		29MAR06				◆RCV: Ti Strongback - Vend A #13		
UN34_00054	Vendor A Fab/Assy - Mag Assy Undulator 05	21	29MAR06	26APR06				⚠Vendor A Fab/Assy - Mag Assy Undulator 05		
UN34_10069	RCV: Ti Strongback - Vend B #14	0		12APR06				◆RCV: Ti Strongback - Vend B #14		
UN34_00073	RCV: Ti Strongback - Vend A #15	0		26APR06				◆RCV: Ti Strongback - Vend A #15		
UN34_00104	RCV: 4th Lot Magnet Blocks, Poles - Vend A #31	0		26APR06				◆RCV: 4th Lot Magnet Blocks, Poles - Vend A #31		
UN34_10052	RCV: From Vendor B - Magnet Assy Article 04	1	26APR06	26APR06				⚠RCV: From Vendor B - Magnet Assy Article 04		
UN34_10108	RCV: 4th Lot Magnet Blocks, Poles - Vend B #32	0		26APR06				◆RCV: 4th Lot Magnet Blocks, Poles - Vend B #32		
UN34_00056	RCV: From Vendor A - Magnet Assy Article 05	1	27APR06	27APR06				⚠RCV: From Vendor A - Magnet Assy Article 05		
UN34_10054	Vendor B Fab/Assy - Magnet Assy Article 06	21	27APR06	25MAY06				⚠Vendor B Fab/Assy - Magnet Assy Article 06		
UN34_00058	Vendor A Fab/Assy - Magnet Assy Article 07	15	28APR06	18MAY06				⚠Vendor A Fab/Assy - Magnet Assy Article 07		
UN34_10073	RCV: Ti Strongback - Vend B #16	0		10MAY06				◆RCV: Ti Strongback - Vend B #16		
UN34_00060	RCV: From Vendor A - Magnet Assy Article 07	1	19MAY06	19MAY06				⚠RCV: From Vendor A - Magnet Assy Article 07		
UN34_00062	Vendor A Fab/Assy - Magnet Assy Article 09	10	22MAY06	05JUN06				⚠Vendor A Fab/Assy - Magnet Assy Article 09		
UN34_00075	RCV: Ti Strongback - Vend A #17	0		24MAY06				◆RCV: Ti Strongback - Vend A #17		
UN34_10056	RCV: From Vendor B - Magnet Assy Article 06	1	26MAY06	26MAY06				⚠RCV: From Vendor B - Magnet Assy Article 06		

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Undulator

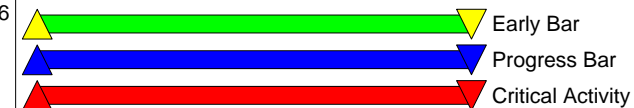


Start Date 01JUN01
 Finish Date 31MAR09
 Data Date 01OCT04
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UN34_10058	Vendor B Fab/Assy - Magnet Assy Article 08	15	30MAY06	19JUN06							⚠ Vendor B Fab/Assy - Magnet Assy Article 08
UN34_00064	RCV: From Vendor A - Magnet Assy Article 09	1	06JUN06	06JUN06							⚠ RCV: From Vendor A - Magnet Assy Article 09
UN34_00067	Vendor A Fab/Assy - Magnet Assy Article 11	10	07JUN06	20JUN06							⚠ Vendor A Fab/Assy - Magnet Assy Article 11
UN34_10077	RCV: Ti Strongback - Vend B #18	0		08JUN06							⬢ RCV: Ti Strongback - Vend B #18
UN34_10060	RCV: From Vendor B - Magnet Assy Article 08	1	20JUN06	20JUN06							⚠ RCV: From Vendor B - Magnet Assy Article 08
UN34_00068	RCV: From Vendor A - Magnet Assy Article 11	1	21JUN06	21JUN06							⚠ RCV: From Vendor A - Magnet Assy Article 11
UN34_10062	Vendor B Fab/Assy - Magnet Assy Article 10	10	21JUN06	05JUL06							⚠ Vendor B Fab/Assy - Magnet Assy Article 10
UN34_00081	RCV: Ti Strongback - Vend A #19	0		22JUN06							⬢ RCV: Ti Strongback - Vend A #19
UN34_00070	Vendor A Fab/Assy - Magnet Assy Article 13	10	22JUN06	06JUL06							⚠ Vendor A Fab/Assy - Magnet Assy Article 13
UN34_10064	RCV: From Vendor B - Magnet Assy Article 10	1	06JUL06	06JUL06							⚠ RCV: From Vendor B - Magnet Assy Article 10
UN34_10134	25% production undulators delivered	0		06JUL06							⬢ 25% production undulators delivered
UN34_00072	RCV: From Vendor A - Magnet Assy Article 13	1	07JUL06	07JUL06							⚠ RCV: From Vendor A - Magnet Assy Article 13
UN34_10081	RCV: Ti Strongback - Vend B #20	0		07JUL06							⬢ RCV: Ti Strongback - Vend B #20
UN34_10067	Vendor B Fab/Assy - Magnet Assy Article 12	10	07JUL06	20JUL06							⚠ Vendor B Fab/Assy - Magnet Assy Article 12
UN34_00074	Vendor A Fab/Assy - Magnet Assy Article 15	10	10JUL06	21JUL06							⚠ Vendor A Fab/Assy - Magnet Assy Article 15
UN34_00085	RCV: Ti Strongback - Vend A #21	0		21JUL06							⬢ RCV: Ti Strongback - Vend A #21
UN34_10068	RCV: From Vendor B - Magnet Assy Article 12	1	21JUL06	21JUL06							⚠ RCV: From Vendor B - Magnet Assy Article 12
UN34_00076	RCV: From Vendor A - Magnet Assy Article 15	1	24JUL06	24JUL06							⚠ RCV: From Vendor A - Magnet Assy Article 15
UN34_10070	Vendor B Fab/Assy - Magnet Assy Article 14	10	24JUL06	04AUG06							⚠ Vendor B Fab/Assy - Magnet Assy Article 14
UN34_00078	Vendor A Fab/Assy - Magnet Assy Article 17	10	25JUL06	07AUG06							⚠ Vendor A Fab/Assy - Magnet Assy Article 17
UN34_10085	RCV: Ti Strongback - Vend B #22	0		04AUG06							⬢ RCV: Ti Strongback - Vend B #22
UN34_10072	RCV: From Vendor B - Magnet Assy Article 14	1	07AUG06	07AUG06							⚠ RCV: From Vendor B - Magnet Assy Article 14
UN34_00080	RCV: From Vendor A - Magnet Assy Article 17	1	08AUG06	08AUG06							⚠ RCV: From Vendor A - Magnet Assy Article 17
UN34_10074	Vendor B Fab/Assy - Magnet Assy Article 16	10	08AUG06	21AUG06							⚠ Vendor B Fab/Assy - Magnet Assy Article 16
UN34_00082	Vendor A Fab/Assy - Magnet Assy Article 19	10	09AUG06	22AUG06							⚠ Vendor A Fab/Assy - Magnet Assy Article 19
UN34_00089	RCV: Ti Strongback - Vend A #23	0		18AUG06							⬢ RCV: Ti Strongback - Vend A #23
UN34_10076	RCV: From Vendor B - Magnet Assy Article 16	1	22AUG06	22AUG06							⚠ RCV: From Vendor B - Magnet Assy Article 16
UN34_10078	Vendor B Fab/Assy - Magnet Assy Article 18	10	23AUG06	06SEP06							⚠ Vendor B Fab/Assy - Magnet Assy Article 18
UN34_00083	RCV: From Vendor A - Magnet Assy Article 19	1	30AUG06	30AUG06							⚠ RCV: From Vendor A - Magnet Assy Article 19
UN34_00086	Vendor A Fab/Assy - Magnet Assy Article 21	10	31AUG06	14SEP06							⚠ Vendor A Fab/Assy - Magnet Assy Article 21
UN34_10089	RCV: Ti Strongback - Vend B #24	0		01SEP06							⬢ RCV: Ti Strongback - Vend B #24
UN34_10080	RCV: From Vendor B - Magnet Assy Article 18	1	07SEP06	07SEP06							⚠ RCV: From Vendor B - Magnet Assy Article 18
UN34_10082	Vendor B Fab/Assy - Magnet Assy Article 20	10	08SEP06	21SEP06							⚠ Vendor B Fab/Assy - Magnet Assy Article 20
UN34_00088	RCV: From Vendor A - Magnet Assy Article 21	1	15SEP06	15SEP06							⚠ RCV: From Vendor A - Magnet Assy Article 21
UN34_00093	RCV: Ti Strongback - Vend A #25	0		18SEP06							⬢ RCV: Ti Strongback - Vend A #25
UN34_00090	Vendor A Fab/Assy - Magnet Assy Article 23	10	18SEP06	29SEP06							⚠ Vendor A Fab/Assy - Magnet Assy Article 23
UN34_10083	RCV: From Vendor B - Magnet Assy Article 20	1	22SEP06	22SEP06							⚠ RCV: From Vendor B - Magnet Assy Article 20

**LCLS
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Undulator



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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UN34_10103	50% production undulators delivered	0		22SEP06							◆50% production undulators delivered
UN34_10086	Vendor B Fab/Assy - Magnet Assy Article 22	10	25SEP06	06OCT06							▲Vendor B Fab/Assy - Magnet Assy Article 22
UN34_00092	RCV: From Vendor A - Magnet Assy Article 23	1	02OCT06	02OCT06							▲RCV: From Vendor A - Magnet Assy Article 23
UN34_10093	RCV: Ti Strongback - Vend B #26	0		02OCT06							◆RCV: Ti Strongback - Vend B #26
UN34_00006	Renegotiate Contract for 38 Suppt/Mover System	1	03OCT06	03OCT06							▲Renegotiate Contract for 38 Suppt/Mover System
UN34_00007	Permission to Proc w/Rem 38 Supt/Mover Systems	0		03OCT06							◆Permission to Proc w/Rem 38 Supt/Mover Systems
UN34_00094	Vendor A Fab/Assy - Magnet Assy Article 25	10	03OCT06	16OCT06							▲Vendor A Fab/Assy - Magnet Assy Article 25
UN34_00014	Vendor Fab Support/Mover Production Units	300	04OCT06	10JAN08	Vendor Fab Support/Mover Production Units						
UN34_10088	RCV: From Vendor B - Magnet Assy Article 22	1	09OCT06	09OCT06							▲RCV: From Vendor B - Magnet Assy Article 22
UN34_10090	Vendor B Fab/Assy - Magnet Assy Article 24	10	10OCT06	23OCT06							▲Vendor B Fab/Assy - Magnet Assy Article 24
UN34_00097	RCV: Ti Strongback - Vend A #27	0		16OCT06							◆RCV: Ti Strongback - Vend A #27
UN34_00096	RCV: From Vendor A - Magnet Assy Article 25	1	17OCT06	17OCT06							▲RCV: From Vendor A - Magnet Assy Article 25
UN34_00098	Vendor A Fab/Assy - Magnet Assy Article 27	10	18OCT06	31OCT06							▲Vendor A Fab/Assy - Magnet Assy Article 27
UN34_10092	RCV: From Vendor B - Magnet Assy Article 24	1	24OCT06	24OCT06							▲RCV: From Vendor B - Magnet Assy Article 24
UN34_10094	Vendor B Fab/Assy - Magnet Assy Article 26	10	25OCT06	07NOV06							▲Vendor B Fab/Assy - Magnet Assy Article 26
UN34_10097	RCV: Ti Strongback - Vend B #28	0		30OCT06							◆RCV: Ti Strongback - Vend B #28
UN34_00100	RCV: From Vendor A - Magnet Assy Article 27	1	01NOV06	01NOV06							▲RCV: From Vendor A - Magnet Assy Article 27
UN34_10096	RCV: From Vendor B - Magnet Assy Article 26	1	08NOV06	08NOV06							▲RCV: From Vendor B - Magnet Assy Article 26
UN34_10098	Vendor B Fab/Assy - Magnet Assy Article 28	10	09NOV06	22NOV06							▲Vendor B Fab/Assy - Magnet Assy Article 28
UN34_00101	RCV: Ti Strongback - Vend A #29	0		13NOV06							◆RCV: Ti Strongback - Vend A #29
UN34_00102	Vendor A Fab/Assy - Magnet Assy Article 29	10	14NOV06	29NOV06							▲Vendor A Fab/Assy - Magnet Assy Article 29
UN34_10100	RCV: From Vendor B - Magnet Assy Article 28	1	27NOV06	27NOV06							▲RCV: From Vendor B - Magnet Assy Article 28
UN34_10101	RCV: Ti Strongback - Vend B #30	0		29NOV06							◆RCV: Ti Strongback - Vend B #30
UN34_00103	RCV: From Vendor A - Magnet Assy Article 29	1	30NOV06	30NOV06							▲RCV: From Vendor A - Magnet Assy Article 29
UN34_10102	Vendor B Fab/Assy - Magnet Assy Article 30	10	30NOV06	13DEC06							▲Vendor B Fab/Assy - Magnet Assy Article 30
UN34_10104	RCV: From Vendor B - Magnet Assy Article 30	1	14DEC06	14DEC06							▲RCV: From Vendor B - Magnet Assy Article 30
UN34_10144	75% production undulators delivered	0		14DEC06							◆75% production undulators delivered
UN34_00105	RCV: Ti Strongback - Vend A #31	0		04JAN07							◆RCV: Ti Strongback - Vend A #31
UN34_00106	Vendor A Fab/Assy - Magnet Assy Article 31	10	05JAN07	19JAN07							▲Vendor A Fab/Assy - Magnet Assy Article 31
UN34_10105	RCV: Ti Strongback - Vend B #32	0		19JAN07							◆RCV: Ti Strongback - Vend B #32
UN34_00108	RCV: From Vendor A - Magnet Assy Article 31	1	22JAN07	22JAN07							▲RCV: From Vendor A - Magnet Assy Article 31
UN34_10106	Vendor B Fab/Assy - Magnet Assy Article 32	10	22JAN07	02FEB07							▲Vendor B Fab/Assy - Magnet Assy Article 32
UN34_00109	RCV: Ti Strongback - Vend A #33	0		02FEB07							◆RCV: Ti Strongback - Vend A #33
UN34_10107	RCV: From Vendor B - Magnet Assy Article 32	1	05FEB07	05FEB07							▲RCV: From Vendor B - Magnet Assy Article 32
UN34_00110	Vendor A Fab/Assy - Magnet Assy Article 33	10	05FEB07	16FEB07							▲Vendor A Fab/Assy - Magnet Assy Article 33
UN34_00047	RCV: Support/Mover Lot 1 (9 units)	1	20FEB07	20FEB07							▲RCV: Support/Mover Lot 1 (9 units)
UN34_00112	RCV: From Vendor A - Magnet Assy Article 33	1	20FEB07	20FEB07							▲RCV: From Vendor A - Magnet Assy Article 33

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Undulator



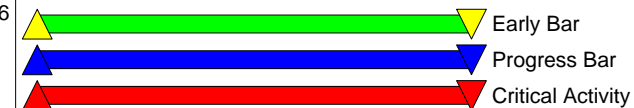
Start Date 01JUN01
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN34_00048	RCV: Support/Mover Lot 2 (10 units)	1	07JUN07	07JUN07				⚠RCV: Support/Mover Lot 2 (10 units)		
UN34_00049	RCV: Support/Mover Lot 3 (9 units)	1	01OCT07	01OCT07				⚠RCV: Support/Mover Lot 3 (9 units)		
UN34_00051	RCV: Support/Mover Lot 4 (3 units)	1	11JAN08	11JAN08				RCV: Support/Mover Lot 4 (3 units)⚠		
UN34_P0052	RCV: Support/Mover Lot 4 (2 units)	1	14JAN08	14JAN08				RCV: Support/Mover Lot 4 (2 units)⚠		
UN34_10154	100% production/spare undulators received	0		12FEB09				100% production/spare undulators receive◆		
1.04.03.05 Quadrupole Focusing Magnets										
UN35_00010	Receive Physics Requirements - Quadrupoles	0		01NOV04				◆Receive Physics Requirements - Quadrupoles		
UN35_M111	Quadrupole requirements frozen, incl aperture	0		31JAN05*				◆Quadrupole requirements frozen, incl aperture		
UN35_MP110	Preliminary engineering of quadrupole system	39	01APR05*	25MAY05				▲▼Preliminary engineering of quadrupole system		
UN35_00020	Define Engineering Requirements - Quadrupole	42	26MAY05	26JUL05				▲▼Define Engineering Requirements - Quadrupole		
UN35_00030	COMP: Rev Specs - Quadrupoles + Controls + PS	0		26JUL05				◆COMP: Rev Specs - Quadrupoles + Controls + PS		
UN35_M113	Specify quad and corrector power supplies	21	27JUL05	24AUG05				▲▼Specify quad and corrector power supplies		
UN35_M121	Write SOW for Stages, Stands, etc.	21	27JUL05	24AUG05				▲▼Write SOW for Stages, Stands, etc.		
UN35_M122	Write SOW for Quad Cables	21	27JUL05	24AUG05				▲▼Write SOW for Quad Cables		
UN35_M112	Design quadrupole magnet system	42	27JUL05	23SEP05				▲▼Design quadrupole magnet system		
UN35_M114	Write SOW for quad/corrector magnets	42	27JUL05	23SEP05				▲▼Write SOW for quad/corrector magnets		
UN35_00069	Prepare Bid Package - Stages, Stands, etc.	10	25AUG05	08SEP05				▲▼Prepare Bid Package - Stages, Stands, etc.		
UN35_M129	Prepare for Quadrupole System IDR	10	25AUG05	08SEP05				▲▼Prepare for Quadrupole System IDR		
UN35_M115	Write SOW for quad and corrector power supplies	42	25AUG05	24OCT05				▲▼Write SOW for quad and corrector power supplies		
UN35_00067	Prepare Bid Package - Quad Cables	10	09SEP05	22SEP05				▲▼Prepare Bid Package - Quad Cables		
UN35_M117	IDR - quadrupole magnet system	1	26SEP05	26SEP05				▲▼IDR - quadrupole magnet system		
UN35_M118	Prepare RFPs for quadrupole magnets	42	26SEP05	22NOV05				▲▼Prepare RFPs for quadrupole magnets		
UN35_00028	Prototype the Quadrupole	84	27SEP05	09FEB06				▲▼Prototype the Quadrupole		
UN35_M116	SOWs complete	0		24OCT05				◆SOWs complete		
UN35_M119	Prepare RFP for quad & corrector power supplies	42	25OCT05	23DEC05				▲▼Prepare RFP for quad & corrector power supplies		
UN35_M124	Verify Quad Prototype Performance	21	10FEB06	13MAR06				▲▼Verify Quad Prototype Performance		
UN35_M130	Prepare for Quadrupole System FDR	10	27FEB06	10MAR06				▲▼Prepare for Quadrupole System FDR		
UN35_00072	Release RFP - Quad Cables	0		13MAR06				◆Release RFP - Quad Cables		
UN35_00074	Release RFP - Stages, Stands, etc.	0		13MAR06				◆Release RFP - Stages, Stands, etc.		
UN35_M125	FDR Quad System	1	13MAR06	13MAR06				▲▼FDR Quad System		
MSC_UN016	CRIT: Release RFP - Quadrupoles	0		14MAR06				◆CRIT: Release RFP - Quadrupoles		
UN35_00070	Release RFP - Quadrupole Magnets	1	14MAR06*	14MAR06				▲▼Release RFP - Quadrupole Magnets		
UN35_00075	Release RFP - Quadrupole Power Supplies	1	14MAR06	14MAR06				▲▼Release RFP - Quadrupole Power Supplies		
UN35_00082	Vendor Prep Proposal - Quad Cables	21	14MAR06	11APR06				▲▼Vendor Prep Proposal - Quad Cables		
UN35_00084	Vendor Prep Proposal - Stages, Stands, etc.	21	14MAR06	11APR06				▲▼Vendor Prep Proposal - Stages, Stands, etc.		
UN35_00080	Vendor Prep Proposal - Quadrupole Magnets	21	15MAR06	12APR06				▲▼Vendor Prep Proposal - Quadrupole Magnets		
UN35_00085	Vendor Prep Proposal - Quadrupole Power Supplies	21	15MAR06	12APR06				▲▼Vendor Prep Proposal - Quadrupole Power Supplies		

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN35_00092	RCV Proposal - Quad Cables	0		11APR06			◆ RCV Proposal - Quad Cables			
UN35_00094	RCV Proposal - Stages, Stands, etc.	0		11APR06			◆ RCV Proposal - Stages, Stands, etc.			
UN35_00090	RCV: Proposal - Quadrupole Magnets	0		12APR06			◆ RCV: Proposal - Quadrupole Magnets			
UN35_00095	RCV: Proposal - Qudrupole Power Supplies	0		12APR06			◆ RCV: Proposal - Qudrupole Power Supplies			
UN35_00101	Evaluate Proposal - Quad Cables	5	12APR06	18APR06			⚠ Evaluate Proposal - Quad Cables			
UN35_00103	Evaluate Proposal - Stages, Stands, etc.	5	12APR06	18APR06			⚠ Evaluate Proposal - Stages, Stands, etc.			
UN35_00100	Evaluate Proposal - Quadrupole Magnets	10	13APR06	26APR06			⚠ Evaluate Proposal - Quadrupole Magnets			
UN35_00102	Evaluate Proposal - Quadrupole Power Supplies	15	13APR06	03MAY06			⚠ Evaluate Proposal - Quadrupole Power Supplies			
UN35_01133	Vendor Fab/Assy - Stages, Stands, etc.	126	20APR06	17OCT06			⚠ Vendor Fab/Assy - Stages, Stands, etc.			
UN35_00105	COMP: Accept Vendor Mag Design & Fab & Assy Plan	0		26APR06			◆ COMP: Accept Vendor Mag Design & Fab & Assy Plan			
UN35_00112	Vendor Fab/Assy - Quad Magnet 1st Article	105	28APR06	26SEP06			⚠ Vendor Fab/Assy - Quad Magnet 1st Article			
UN35_00113	Vendor Fab/Assy - Quad PS 1st Articles	126	05MAY06	01NOV06			⚠ Vendor Fab/Assy - Quad PS 1st Articles			
UN35_00134	Review Travelers - Quadrupole Magnet 1st article	5	21SEP06	27SEP06			⚠ Review Travelers - Quadrupole Magnet 1st article			
UN35_00114	Ship to ANL - Quad Magnet 1st Article	5	28SEP06	04OCT06			⚠ Ship to ANL - Quad Magnet 1st Article			
UN35_01132	Vendor Fab/Assy - Quad Cables	84	03OCT06	15FEB07			⚠ Vendor Fab/Assy - Quad Cables			
UN35_00116	Measure Magnet - Quad Magnet 1st Article	5	05OCT06	11OCT06			⚠ Measure Magnet - Quad Magnet 1st Article			
UN35_00117	Accept Quad Magnet 1st Article	1	12OCT06	12OCT06			⚠ Accept Quad Magnet 1st Article			
UN35_00127	Ship Quad 1st Article to SLAC MMF	5	13OCT06	19OCT06			⚠ Ship Quad 1st Article to SLAC MMF			
UN35_00120	Vendor Fab/Assy - Quad Mag 1st lot (18)	90	13OCT06	08MAR07			⚠ Vendor Fab/Assy - Quad Mag 1st lot (18)			
UN35_00184	Vendor Ship - Stages, Stands, etc. to SLAC	5	18OCT06	24OCT06			⚠ Vendor Ship - Stages, Stands, etc. to SLAC			
UN35_00174	REC: 100% of Stages and Stands, etc.	0		24OCT06			◆ REC: 100% of Stages and Stands, etc.			
UN35_00135	Review Travelers - Quadrupole PS 1st article	1	02NOV06	02NOV06			⚠ Review Travelers - Quadrupole PS 1st article			
UN35_00125	Ship to ANL - Quad PS 1st Article	5	03NOV06	09NOV06			⚠ Ship to ANL - Quad PS 1st Article			
UN35_00128	Electromagnetic Test Quad PS 1st Article	21	10NOV06	12DEC06			⚠ Electromagnetic Test Quad PS 1st Article			
UN35_00119	Dimensional Measurement Quad PS 1st Article	3	13DEC06	15DEC06			⚠ Dimensional Measurement Quad PS 1st Article			
UN35_00123	Accept Quad PS 1st Article	1	02JAN07	02JAN07			⚠ Accept Quad PS 1st Article			
UN35_00124	Permission to Proceed w/Quad PS Fabrication	1	03JAN07	03JAN07			⚠ Permission to Proceed w/Quad PS Fabrication			
UN35_00139	Ship to SLAC MMF - Quadrupole PS 1st Article	5	03JAN07	09JAN07			⚠ Ship to SLAC MMF - Quadrupole PS 1st Article			
UN35_00130	Vendor Fab/Assy -Quad/Corr PS+Ctl HW 1st lot(18)	90	04JAN07*	11MAY07	Vendor Fab/Assy -Quad/Corr PS+Ctl HW 1st lot(18) ⚠					
UN35_01142	Vendor Ship Quad Cables to Slac	5	16FEB07	23FEB07			⚠ Vendor Ship Quad Cables to Slac			
UN35_00175	REC: 100% of Quadrupole Cables	0		23FEB07			◆ REC: 100% of Quadrupole Cables			
UN35_00121	Review Travelers - Quadrupole Magnet 1st lot	5	09MAR07	15MAR07			⚠ Review Travelers - Quadrupole Magnet 1st lot			
UN35_00122	Vendor Fab/Assy - Quad Mag 2nd lot (15)	90	09MAR07	16JUL07			⚠ Vendor Fab/Assy - Quad Mag 2nd lot (15)			
UN35_00144	Ship to SLAC MMF - Quadrupole Magnet 1st lot	5	16MAR07	22MAR07			⚠ Ship to SLAC MMF - Quadrupole Magnet 1st lot			
UN35_00142	100% Quads received	0		23MAR07			◆ 100% Quads received			
UN35_00137	Review Travelers - Quadrupole PS 1st lot	5	14MAY07	18MAY07			⚠ Review Travelers - Quadrupole PS 1st lot			
UN35_00140	Vendor Fab/Assy -Quad/Corr PS+Ctl HW 2nd lot(15)	90	14MAY07	19SEP07	Vendor Fab/Assy -Quad/Corr PS+Ctl HW 2nd lot(15) ⚠					

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN35_00126	Accept Quad PS 1st Lot	1	21MAY07	21MAY07				⚠ Accept Quad PS 1st Lot		
UN35_00129	Permission to Proceed w/Quad PS Fabrication	1	22MAY07	22MAY07		⚠ Permission to Proceed w/Quad PS Fabrication				
UN35_00138	Ship to SLAC MMF - Quadrupole PS 1st lot	5	22MAY07	29MAY07				⚠ Ship to SLAC MMF - Quadrupole PS 1st lot		
UN35_00136	Review Travelers - Quadrupole Mag 2nd lot	5	17JUL07	23JUL07		⚠ Review Travelers - Quadrupole Mag 2nd lot				
UN35_00154	Ship to SLAC MMF - Quadrupole Mag 2nd lot	5	24JUL07	30JUL07		⚠ Ship to SLAC MMF - Quadrupole Mag 2nd lot				
UN35_00155	100% Quadrupole Magnets Recvd at SLAC	0		30JUL07		100% Quadrupole Magnets Recvd at SLAC				
UN35_00141	Review Travelers - Quadrupole PS 2nd lot	5	20SEP07	26SEP07		⚠ Review Travelers - Quadrupole PS 2nd lot				
UN35_00147	Accept Quad PS 2nd Lot	1	27SEP07	27SEP07				⚠ Accept Quad PS 2nd Lot		
UN35_00143	Ship to SLAC MMF - Quadrupole PS 2nd lot	5	28SEP07	04OCT07		⚠ Ship to SLAC MMF - Quadrupole PS 2nd lot				
UN35_00145	100% Quad Power Supplies received	1	01OCT07	01OCT07				⚠ 100% Quad Power Supplies received		
1.04.03.06 Undulator Magnetic Measurement Facility (SLAC)										
UN36_00010	Design Quad Fiducialization System	20	19JAN05	15FEB05		⚠ Design Quad Fiducialization System				
UN36_00050	Design Undulator Fiducialization System	20	19JAN05	15FEB05		⚠ Design Undulator Fiducialization System				
UN36_00090	Design Quad Strength and Field Quality	20	19JAN05	15FEB05		⚠ Design Quad Strength and Field Quality				
UN36_00130	Design Undulator Test Stand	20	19JAN05	15FEB05		⚠ Design Undulator Test Stand				
UN36_00170	Design Hall Probe Calibration System	20	19JAN05	15FEB05		⚠ Design Hall Probe Calibration System				
UN36_00210	Design Undulator Test Stand Proto	20	19JAN05	15FEB05		⚠ Design Undulator Test Stand Proto				
UN36_00250	Design Undulator Handling	20	19JAN05	15FEB05		⚠ Design Undulator Handling				
UN601_0468	Stretched Wire Systems Engineering (PED)	179	19JAN05	30SEP05		⚠ Stretched Wire Systems Engineering (PED)				
UN36_00132	Release RFP - Undulator Test Stand	1	16FEB05*	16FEB05		⚠ Release RFP - Undulator Test Stand				
UN36_00020	Procure Quad Fiducialization System	60	16FEB05	11MAY05		⚠ Procure Quad Fiducialization System				
UN36_00100	Procure Quad Strength and Field Quality	60	16FEB05	11MAY05		⚠ Procure Quad Strength and Field Quality				
UN36_00220	Procure Undulator Test Stand Proto	60	16FEB05	11MAY05		⚠ Procure Undulator Test Stand Proto				
UN36_00134	Vendor Prep Proposal - Undulator Test Stand	30	17FEB05	31MAR05		⚠ Vendor Prep Proposal - Undulator Test Stand				
UN36_00051	Approve APP - Undulator Fiducialization System	1	01MAR05*	01MAR05		⚠ Approve APP - Undulator Fiducialization System				
UN36_00052	Release RFP - Undulator Fiducialization System	1	15MAR05*	15MAR05		⚠ Release RFP - Undulator Fiducialization System				
UN36_00054	Vendor Prep Prop - Undulator Fiducialization Sys	33	16MAR05	29APR05		⚠ Vendor Prep Prop - Undulator Fiducialization Sys				
UN36_00141	Design Undulator Supports and Movers	149	01APR05*	31OCT05		⚠ Design Undulator Supports and Movers				
UN36_00140	Procure Undulator Test Stand	149	04APR05	01NOV05		⚠ Procure Undulator Test Stand				
UN36_00060	Procure Undulator Fiducialization System	129	03MAY05	02NOV05		⚠ Procure Undulator Fiducialization System				
UN36_00180	Procure Hall Probe Calibration System	60	06MAY05*	01AUG05		⚠ Procure Hall Probe Calibration System				
UN36_00011	Revise Design for Electro Magnets	43	01JUN05*	01AUG05		⚠ Revise Design for Electro Magnets				
UN36_00091	Revise Design for Electro Magnets	43	01JUN05*	01AUG05		⚠ Revise Design for Electro Magnets				
UN36_00143	Procure Undulator Supports and Movers	139	01JUN05	16DEC05		⚠ Procure Undulator Supports and Movers				
UN36_00221	Procure Undulator Supports and Movers	139	01JUN05	16DEC05		⚠ Procure Undulator Supports and Movers				
UN36_00021	Procure Hardware for Electro Magnets	44	01JUL05*	01SEP05		⚠ Procure Hardware for Electro Magnets				
UN36_00101	Procure Hardware for Electro Magnets	44	01JUL05*	01SEP05		⚠ Procure Hardware for Electro Magnets				




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 Early Bar
 Progress Bar
 Critical Activity

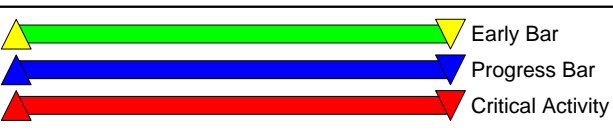
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN36_00265	Procure Forklift	60	05JUL05*	27SEP05			▲▼ Procure Forklift			
UN601_0368	HLS Systems Engineering (PED)	170	01AUG05	17APR06			▲▼ HLS Systems Engineering (PED)			
UN36_00251	Adapt Design for Cradle Concept	21	01SEP05*	30SEP05			▲▼ Adapt Design for Cradle Concept			
UN601_0370	Conceptual Design	5	03OCT05	07OCT05			▲▼ Conceptual Design			
UN601_0570	Revise Demodulator Module Design	10	03OCT05	14OCT05			▲▼ Revise Demodulator Module Design			
UN601_0470	Engineer Global Layout	14	03OCT05	20OCT05			▲▼ Engineer Global Layout			
UN601_0310	Specify Alignment Hardware	20	03OCT05	28OCT05			▲▼ Specify Alignment Hardware			
UN601_0395	Design Data Acquisition System	40	03OCT05	29NOV05			▲▼ Design Data Acquisition System			
UN601_0575	Revise SEDAC	40	03OCT05	29NOV05			▲▼ Revise SEDAC			
UN601_0580	Revise Quad ADC Design	40	03OCT05	29NOV05			▲▼ Revise Quad ADC Design			
UN601_0585	Revise RF Signal Processing Design	40	03OCT05	29NOV05			▲▼ Revise RF Signal Processing Design			
UN601_0590	Revise RF Signal Distribution	40	03OCT05	29NOV05			▲▼ Revise RF Signal Distribution			
UN36_00260	Procure Undulator Handling	53	03OCT05	16DEC05			▲▼ Procure Undulator Handling			
UN36_00370	Procure Fiducialization and Mag Meas Hardware	60	03OCT05	11JAN06			▲▼ Procure Fiducialization and Mag Meas Hardware			
UN601_0725	Develop Data Acquisition Software	60	03OCT05	11JAN06			▲▼ Develop Data Acquisition Software			
UN601_0467	WIRE MONITORING SYSTEM SUMMARY	100*	03OCT05	10MAR06			▲▼ WIRE MONITORING SYSTEM SUMMARY			
UN601_0367	HYDROSTATIC LEVEL SYSTEM SUMMARY	120*	03OCT05	07APR06			▲▼ HYDROSTATIC LEVEL SYSTEM SUMMARY			
UN601_0307	ALIGNMENT HW AND SW SUMMARY	202*	03OCT05	03AUG06			▲▼ ALIGNMENT HW AND SW SUMMARY			
UN601_0469	Stretched Wire Systems Engineering (CNST)	484	03OCT05	28SEP07			▲▼ Stretched Wire Systems Engineering			
UN601_0595	Revise RF Power Amplifier Design	10	17OCT05	28OCT05			▲▼ Revise RF Power Amplifier Design			
UN601_0480	Adapt Wire Pulley Design	1	21OCT05	21OCT05			▲▼ Adapt Wire Pulley Design			
UN601_0475	Design Global Layout	40	21OCT05	03JAN06			▲▼ Design Global Layout			
UN601_0490	Adapt Wire Fixed End Device Design	1	24OCT05	24OCT05			▲▼ Adapt Wire Fixed End Device Design			
UN601_0485	Modify Wire Pulley Drawing	5	24OCT05	28OCT05			▲▼ Modify Wire Pulley Drawing			
UN601_0495	Modify Wire Fixed End Device Drawing	5	31OCT05	04NOV05			▲▼ Modify Wire Fixed End Device Drawing			
UN601_0600	Update Circuit Drawings	40	31OCT05	11JAN06			▲▼ Update Circuit Drawings			
UN36_00142	RCV: Undulator Test Stand	0		01NOV05			◆ RCV: Undulator Test Stand			
UN36_00062	RCV: Undulator Fiducialization System	0		02NOV05			◆ RCV: Undulator Fiducialization System			
UN601_0400	DAS Drafting & Doc	10	14NOV05	29NOV05			▲▼ DAS Drafting & Doc			
UN601_0350	Procure Portable HLS	180	23NOV05*	24AUG06			▲▼ Procure Portable HLS			
UN601_0638	Specify SEDAC	1	30NOV05	30NOV05			▲▼ Specify SEDAC			
UN601_0375	Engineer Layout	10	30NOV05	13DEC05			▲▼ Engineer Layout			
UN601_0460	Develop Data Acquisition S/W	60	30NOV05	10MAR06			▲▼ Develop Data Acquisition S/W			
UN601_0565	Design Data Acquisition System	10	06DEC05	03JAN06			▲▼ Design Data Acquisition System			
UN601_0380	Design Layout	20	07DEC05	19JAN06			▲▼ Design Layout			
UN36_00032	Commission Quad Fiducialization System	39	03JAN06*	28FEB06			▲▼ Commission Quad Fiducialization System			
UN36_00112	Commission Quad Strength and Field System	39	03JAN06*	28FEB06			▲▼ Commission Quad Strength and Field System			

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					2004	2005	2006	2007	2008	2009
UN601_0500	Engineer Monitor Supports	5	04JAN06	10JAN06			⚠ Engineer Monitor Supports			
UN601_0385	Engineer Support System	8	05JAN06	17JAN06			⚠ Engineer Support System			
UN601_0505	Engineer Strongback Supports	2	11JAN06	12JAN06			⚠ Engineer Strongback Supports			
UN601_0605	Specify Wire Pulley System	1	12JAN06	12JAN06			⚠ Specify Wire Pulley System			
UN601_0630	Specify Data Acquisition System	1	12JAN06	12JAN06			⚠ Specify Data Acquisition System			
UN601_0730	Develop Local Control Program	20	12JAN06	09FEB06			⚠ Develop Local Control Program			
UN601_0635	Specify Demodulator Modules	1	13JAN06	13JAN06			⚠ Specify Demodulator Modules			
UN601_0510	Draft Support System	20	13JAN06	10FEB06			⚠ Draft Support System			
UN601_0640	Specify Quad ADC	1	17JAN06	17JAN06			⚠ Specify Quad ADC			
UN601_0645	Specify RF Signaling Processing HW	1	18JAN06	18JAN06			⚠ Specify RF Signaling Processing HW			
UN601_0650	Specify RF Signaling Distribution HW	1	19JAN06	19JAN06			⚠ Specify RF Signaling Distribution HW			
UN601_0405	Specify Components	1	20JAN06	20JAN06			⚠ Specify Components			
UN601_0655	Specify RF Power Amplifier	1	20JAN06	20JAN06			⚠ Specify RF Power Amplifier			
UN601_0390	Design Support System	20	20JAN06	16FEB06			⚠ Design Support System			
UN601_0660	Specify Crates	1	23JAN06	23JAN06			⚠ Specify Crates			
UN601_0430	Procure Capacitive Sensors	180	23JAN06	05OCT06			⚠ Procure Capacitive Sensors			
UN601_0432	Procure Acoustic Sensors	180	23JAN06	05OCT06			⚠ Procure Acoustic Sensors			
UN601_0440	Procure Re-Fill Station	180	23JAN06	05OCT06			⚠ Procure Re-Fill Station			
UN601_0665	Specify Cables	1	24JAN06	24JAN06			⚠ Specify Cables			
UN601_0712	Procure Cables	40	25JAN06	22MAR06			⚠ Procure Cables			
UN601_0715	Procure Crates	40	25JAN06	22MAR06			⚠ Procure Crates			
UN601_0720	Procure Data Acquisition System	40	25JAN06	22MAR06			⚠ Procure Data Acquisition System			
UN601_0690	Procure Demodulation Modules	120	25JAN06	14JUL06			⚠ Procure Demodulation Modules			
UN601_0695	Procure Quad ADC	120	25JAN06	14JUL06			⚠ Procure Quad ADC			
UN601_0700	Procure RF Signal Processing	120	25JAN06	14JUL06			⚠ Procure RF Signal Processing			
UN601_0705	Procure RF Signal Distribution	120	25JAN06	14JUL06			⚠ Procure RF Signal Distribution			
UN601_0710	Procure RF Power Amplifier	120	25JAN06	14JUL06			⚠ Procure RF Power Amplifier			
UN362_0010	REQD: Undulator Mag Assy - 01	0		09FEB06			◆ REQD: Undulator Mag Assy - 01			
UN601_0735	Develop Control System Connection	20	10FEB06	10MAR06			⚠ Develop Control System Connection			
UN601_0515	Adapt Tube Clips Design	1	13FEB06	13FEB06			⚠ Adapt Tube Clips Design			
UN601_0525	Adapt Tube w Bellows Design 242mm	1	13FEB06	13FEB06			⚠ Adapt Tube w Bellows Design 242mm			
UN601_0530	Adapt Wire Tube Design 1142mm	1	14FEB06	14FEB06			⚠ Adapt Wire Tube Design 1142mm			
UN601_0520	Draft Tube Clips	2	14FEB06	15FEB06			⚠ Draft Tube Clips			
UN601_0535	Adapt Wire Tube Design 1442mm	1	15FEB06	15FEB06			⚠ Adapt Wire Tube Design 1442mm			
UN601_0320	Procure Laser Trackers (2)	120	15FEB06*	04AUG06			⚠ Procure Laser Trackers (2)			
UN601_0540	Adapt Wire Tube Strongback Design 1220mm	1	16FEB06	16FEB06			⚠ Adapt Wire Tube Strongback Design 1220mm			
UN601_0550	Draft Wire Tubes	20	16FEB06	16MAR06			⚠ Draft Wire Tubes			

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					2004	2005	2006	2007	2008	2009
UN601_0410	Specify Piping	1	17FEB06	17FEB06			⚠Specify Piping			
UN601_0545	Adapt Wire Tube Strongback Design 920mm	1	17FEB06	17FEB06			⚠Adapt Wire Tube Strongback Design 920mm			
UN601_0415	Specify Support System	1	21FEB06	21FEB06			⚠Specify Support System			
UN601_0555	Adapt Wire Monitor Design	1	21FEB06	21FEB06			⚠Adapt Wire Monitor Design			
UN601_0445	Procure Piping	10	21FEB06	06MAR06			⚠Procure Piping			
UN601_0420	Specify Data Acquisition System	1	22FEB06	22FEB06			⚠Specify Data Acquisition System			
UN601_0435	Procure Support System	120	22FEB06	10AUG06			⚠Procure Support System			
UN601_0425	Specify Cables	2	23FEB06	24FEB06			⚠Specify Cables			
UN601_0450	Procure Data Acquisition System	40	23FEB06	19APR06			⚠Procure Data Acquisition System			
UN362_0110	REQD: Undulator Mag Assy - 02	0		13MAR06			◆REQD: Undulator Mag Assy - 02			
UN601_0465	Develop Control System Connection	20	13MAR06	07APR06			⚠Develop Control System Connection			
UN362_0120	Adjust to Temperature - 02	10	14MAR06	27MAR06			⚠Adjust to Temperature - 02			
UN601_0560	Modify Wire Monitor Drawings	8	17MAR06	28MAR06			⚠Modify Wire Monitor Drawings			
UN362_0210	REQD: Undulator Mag Assy - 03	0		28MAR06			◆REQD: Undulator Mag Assy - 03			
UN601_0610	Specify Wire Monitors	1	29MAR06	29MAR06			⚠Specify Wire Monitors			
UN362_0220	Adjust to Temperature - 03	10	29MAR06	11APR06			⚠Adjust to Temperature - 03			
UN601_0615	Specify Wire Monitor Supports	1	30MAR06	30MAR06			⚠Specify Wire Monitor Supports			
UN601_0620	Specify Wire Tubes	1	31MAR06	31MAR06			⚠Specify Wire Tubes			
UN601_0625	Specify Wire Tube Support System	1	03APR06	03APR06			⚠Specify Wire Tube Support System			
UN362_0020	Adjust to Temperature - 01	10	04APR06	17APR06			⚠Adjust to Temperature - 01			
UN36_00030	Install and Test Quad Fiducialization System	20	04APR06*	01MAY06			⚠Install and Test Quad Fiducialization System			
UN36_00070	Install and Test Undulator Fiducialization Sys	20	04APR06*	01MAY06			⚠Install and Test Undulator Fiducialization Sys			
UN36_00110	Install and Test Quad Strength and Field Quality	20	04APR06*	01MAY06			⚠Install and Test Quad Strength and Field Quality			
UN36_00150	Install and Test Undulator Test Stand	20	04APR06	01MAY06			⚠Install and Test Undulator Test Stand			
UN36_00190	Install and Test Hall Probe Calibration System	20	04APR06	01MAY06			⚠Install and Test Hall Probe Calibration System			
UN36_00230	Install and Test Undulator Test Stand Proto	20	04APR06*	01MAY06			⚠Install and Test Undulator Test Stand Proto			
UN36_00270	Install and Test Undulator Handling	40	04APR06	30MAY06			⚠Install and Test Undulator Handling			
UN601_0670	Procure Wire Monitors	120	04APR06	21SEP06			⚠Procure Wire Monitors			
UN601_0675	Procure Wire Monitor Supports	120	04APR06	21SEP06			⚠Procure Wire Monitor Supports			
UN601_0680	Procure Wire Tubes	120	04APR06	21SEP06			⚠Procure Wire Tubes			
UN601_0685	Procure Wire Tube Supports	120	04APR06	21SEP06			⚠Procure Wire Tube Supports			
UN601_0365	Procure Data Analysis Software Extension	80	12APR06*	03AUG06			⚠Procure Data Analysis Software Extension			
UN601_0369	HLS Systems Engineering (CNST)	484	18APR06	15APR08			HLS Systems Engineering (CNST)			
UN362_0310	REQD: Undulator Mag Assy - 04	0		26APR06			◆REQD: Undulator Mag Assy - 04			
UN362_0410	REQD: Undulator Mag Assy - 05	0		27APR06			◆REQD: Undulator Mag Assy - 05			
UN362_0320	Adjust to Temperature - 04	10	27APR06	10MAY06			⚠Adjust to Temperature - 04			
UN362_0420	Adjust to Temperature - 05	10	28APR06	11MAY06			⚠Adjust to Temperature - 05			

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					2004	2005	2006	2007	2008	2009
UN36_00040	Quad Fiducialization System Complete	0		01MAY06				◆ Quad Fiducialization System Complete		
UN36_00080	Undulator Fiducialization System Complete	0		01MAY06				◆ Undulator Fiducialization System Complete		
UN36_00120	Quad Strength and Field Quality Complete	0		01MAY06				◆ Quad Strength and Field Quality Complete		
UN36_00160	Undulator Test Stand Complete	0		01MAY06				◆ Undulator Test Stand Complete		
UN36_00240	Undulator Test Stand Proto Complete	0		01MAY06				◆ Undulator Test Stand Proto Complete		
UN36_02000	Quad Mag Measure/Fiducialization Facility Read	0		01MAY06				◆ Quad Mag Measure/Fiducialization Facility Read		
UN36_00191	Commission Hall Probe Calibration System	19	02MAY06	26MAY06				▲ Commission Hall Probe Calibration System		
UN601_0355	Procure Misc Tools	60	10MAY06*	03AUG06				▲▲ Procure Misc Tools		
UN601_0360	Procure Fixturing	60	10MAY06*	03AUG06				▲▲ Procure Fixturing		
UN362_0610	REQD: Undulator Mag Assy - 07	0		19MAY06				◆ REQD: Undulator Mag Assy - 07		
UN362_0620	Adjust to Temperature - 07	10	22MAY06	05JUN06				▲ Adjust to Temperature - 07		
UN362_0510	REQD: Undulator Mag Assy - 06	0		26MAY06				◆ REQD: Undulator Mag Assy - 06		
UN36_00200	Hall Probe Calibration System Complete	0		26MAY06				◆ Hall Probe Calibration System Complete		
UN36_00280	Undulator Handling Complete	0		30MAY06				◆ Undulator Handling Complete		
UN36_00290	MMF Ready to Magnetic Measure/Fiducialize	0		30MAY06				◆ MMF Ready to Magnetic Measure/Fiducialize		
UN362_0520	Adjust to Temperature - 06	10	30MAY06	12JUN06				▲ Adjust to Temperature - 06		
UN362_0030	Undulator Setup and Alignment @ Test Bench - 01	2	31MAY06	01JUN06				▲ Undulator Setup and Alignment @ Test Bench - 01		
UN36_00390	Fiducialization Measurements - BPM	120	31MAY06	16NOV06				▲▲▲ Fiducialization Measurements - BPM		
UN36_00400	Data Evaluation - BPM	120	31MAY06	16NOV06				▲▲▲ Data Evaluation - BPM		
UN36_00510	Data Evaluation - Correctors	120	31MAY06	16NOV06				▲▲▲ Data Evaluation - Correctors		
UN36_00550	Magnetic Measurements - Correctors	120	31MAY06	16NOV06				▲▲▲ Magnetic Measurements - Correctors		
UN36_00560	Fiducialization Measurements - Vacuum Chamber	120	31MAY06	16NOV06				▲▲▲ Fiducialization Measurements - Vacuum Chamber		
UN36_00570	Data Evaluation - Vacuum Chamber	120	31MAY06	16NOV06				▲▲▲ Data Evaluation - Vacuum Chamber		
UN36_00600	Fiducialization Measurements - Photon Diagnostic	120	31MAY06	16NOV06				▲▲▲ Fiducialization Measurements - Photon Diagnostic		
UN36_00610	Data Evaluation - Photon Diagnostic	120	31MAY06	16NOV06				▲▲▲ Data Evaluation - Photon Diagnostic		
UN601_0325	Procure Retro Reflectors	44	01JUN06*	02AUG06				▲▲ Procure Retro Reflectors		
UN601_0330	Procure Reference Points	44	01JUN06*	02AUG06				▲▲ Procure Reference Points		
UN601_0335	Procure Wire Reference Fiducials	44	01JUN06*	02AUG06				▲▲ Procure Wire Reference Fiducials		
UN601_0340	Procure Digital Level	44	01JUN06*	02AUG06				▲▲ Procure Digital Level		
UN601_0345	Procure Absolute Wire Finder	44	01JUN06*	02AUG06				▲▲ Procure Absolute Wire Finder		
UN362_0040	Undulator Measurement and Set Gap - 01	5	02JUN06	08JUN06				▲ Undulator Measurement and Set Gap - 01		
UN362_0810	REQD: Undulator Mag Assy - 09	0		06JUN06				◆ REQD: Undulator Mag Assy - 09		
UN362_0820	Adjust to Temperature - 09	10	07JUN06	20JUN06				▲ Adjust to Temperature - 09		
UN362_0060	Undulator Measurement/Pre-fiducialization - 01	10	09JUN06	22JUN06				▲ Undulator Measurement/Pre-fiducialization - 01		
UN362_0710	REQD: Undulator Mag Assy - 08	0		20JUN06				◆ REQD: Undulator Mag Assy - 08		
UN362_1010	REQD: Undulator Mag Assy - 11	0		21JUN06				◆ REQD: Undulator Mag Assy - 11		
UN362_0720	Adjust to Temperature - 08	10	21JUN06	05JUL06				▲ Adjust to Temperature - 08		



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					2004	2005	2006	2007	2008	2009
UN362_1020	Adjust to Temperature - 11	10	22JUN06	06JUL06				▲ Adjust to Temperature - 11		
UN362_0070	Undulator Setup and Alignment @ CMM - 01	1	23JUN06	23JUN06				▲ Undulator Setup and Alignment @ CMM - 01		
UN362_0130	Undulator Setup and Alignment @ Test Bench - 02	2	23JUN06	26JUN06				▲ Undulator Setup and Alignment @ Test Bench - 02		
UN362_0080	Undulator Fiducialization - 01	5	26JUN06	30JUN06				▲ Undulator Fiducialization - 01		
UN362_0140	Undulator Measurement and Set Gap - 02	5	27JUN06	03JUL06				▲ Undulator Measurement and Set Gap - 02		
UN362_0085	Undulator Ready for Assembly - 01	5	03JUL06	10JUL06				▲ Undulator Ready for Assembly - 01		
UN362_0160	Undulator Measurement/Pre-fiducialization - 02	10	05JUL06	18JUL06				▲ Undulator Measurement/Pre-fiducialization - 02		
UN362_0910	REQD: Undulator Mag Assy - 10	0		06JUL06				◆ REQD: Undulator Mag Assy - 10		
UN362_1210	REQD: Undulator Mag Assy - 13	0		07JUL06				◆ REQD: Undulator Mag Assy - 13		
UN362_0920	Adjust to Temperature - 10	10	07JUL06	20JUL06				▲ Adjust to Temperature - 10		
UN362_1220	Adjust to Temperature - 13	10	10JUL06	21JUL06				▲ Adjust to Temperature - 13		
UN362_0170	Undulator Setup and Alignment @ CMM - 02	1	19JUL06	19JUL06				▲ Undulator Setup and Alignment @ CMM - 02		
UN362_0230	Undulator Setup and Alignment @ Test Bench - 03	1	19JUL06	19JUL06				▲ Undulator Setup and Alignment @ Test Bench - 03		
UN362_0240	Undulator Measurement and Set Gap - 03	4	20JUL06	25JUL06				▲ Undulator Measurement and Set Gap - 03		
UN362_0180	Undulator Fiducialization - 02	5	20JUL06	26JUL06				▲ Undulator Fiducialization - 02		
UN601_0455	Procure Cables	10	20JUL06	02AUG06				▲ Procure Cables		
UN362_1110	REQD: Undulator Mag Assy - 12	0		21JUL06				◆ REQD: Undulator Mag Assy - 12		
UN362_1410	REQD: Undulator Mag Assy - 15	0		24JUL06				◆ REQD: Undulator Mag Assy - 15		
UN362_1120	Adjust to Temperature - 12	10	24JUL06	04AUG06				▲ Adjust to Temperature - 12		
UN362_1420	Adjust to Temperature - 15	10	25JUL06	07AUG06				▲ Adjust to Temperature - 15		
UN362_0260	Undulator Measurement/Pre-fiducialization - 03	8	26JUL06	04AUG06				▲ Undulator Measurement/Pre-fiducialization - 03		
UN362_0185	Undulator Ready for Assembly - 02	5	27JUL06	02AUG06				▲ Undulator Ready for Assembly - 02		
UN362_0270	Undulator Setup and Alignment @ CMM - 03	1	07AUG06	07AUG06				▲ Undulator Setup and Alignment @ CMM - 03		
UN362_0330	Undulator Setup and Alignment @ Test Bench - 04	1	07AUG06	07AUG06				▲ Undulator Setup and Alignment @ Test Bench - 04		
UN362_1310	REQD: Undulator Mag Assy - 14	0		07AUG06				◆ REQD: Undulator Mag Assy - 14		
UN362_1610	REQD: Undulator Mag Assy - 17	0		08AUG06				◆ REQD: Undulator Mag Assy - 17		
UN362_0280	Undulator Fiducialization - 03	4	08AUG06	11AUG06				▲ Undulator Fiducialization - 03		
UN362_0340	Undulator Measurement and Set Gap - 04	4	08AUG06	11AUG06				▲ Undulator Measurement and Set Gap - 04		
UN362_1320	Adjust to Temperature - 14	10	08AUG06	21AUG06				▲ Adjust to Temperature - 14		
UN362_1620	Adjust to Temperature - 17	10	09AUG06	22AUG06				▲ Adjust to Temperature - 17		
UN362_0285	Undulator Ready for Assembly - 03	5	14AUG06	18AUG06				▲ Undulator Ready for Assembly - 03		
UN362_0360	Undulator Measurement/Pre-fiducialization - 04	8	14AUG06	23AUG06				▲ Undulator Measurement/Pre-fiducialization - 04		
UN362_1510	REQD: Undulator Mag Assy - 16	0		22AUG06				◆ REQD: Undulator Mag Assy - 16		
UN362_1520	Adjust to Temperature - 16	10	23AUG06	06SEP06				▲ Adjust to Temperature - 16		
UN362_0370	Undulator Setup and Alignment @ CMM - 04	1	24AUG06	24AUG06				▲ Undulator Setup and Alignment @ CMM - 04		
UN362_0430	Undulator Setup and Alignment @ Test Bench - 05	1	24AUG06	24AUG06				▲ Undulator Setup and Alignment @ Test Bench - 05		
UN362_0440	Undulator Measurement and Set Gap - 05	2	25AUG06	28AUG06				▲ Undulator Measurement and Set Gap - 05		

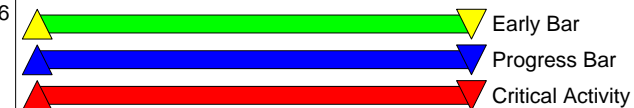
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					2004	2005	2006	2007	2008	2009
UN362_0380	Undulator Fiducialization - 04	4	25AUG06	30AUG06						⚠ Undulator Fiducialization - 04
UN601_0315	Alignment Hardware/Software Acceptance Testing	40	25AUG06	20OCT06						⚠ Alignment Hardware/Software Acceptance Testing
UN362_0460	Undulator Measurement/Pre-fiducialization - 05	4	29AUG06	01SEP06						⚠ Undulator Measurement/Pre-fiducialization - 05
UN362_1910	REQD: Undulator Mag Assy - 19	0		30AUG06						◆ REQD: Undulator Mag Assy - 19
UN362_0385	Undulator Ready for Assembly - 04	5	31AUG06	07SEP06						⚠ Undulator Ready for Assembly - 04
UN362_1920	Adjust to Temperature - 19	10	31AUG06	14SEP06						⚠ Adjust to Temperature - 19
UN362_0470	Undulator Setup and Alignment @ CMM - 05	1	05SEP06	05SEP06						⚠ Undulator Setup and Alignment @ CMM - 05
UN362_0530	Undulator Setup and Alignment @ Test Bench - 06	1	05SEP06	05SEP06						⚠ Undulator Setup and Alignment @ Test Bench - 06
UN362_0480	Undulator Fiducialization - 05	2	06SEP06	07SEP06						⚠ Undulator Fiducialization - 05
UN362_0540	Undulator Measurement and Set Gap - 06	3	06SEP06	08SEP06						⚠ Undulator Measurement and Set Gap - 06
UN362_1710	REQD: Undulator Mag Assy - 18	0		07SEP06						◆ REQD: Undulator Mag Assy - 18
UN362_0485	Undulator Ready for Assembly - 05	5	08SEP06	14SEP06						⚠ Undulator Ready for Assembly - 05
UN362_1720	Adjust to Temperature - 18	10	08SEP06	21SEP06						⚠ Adjust to Temperature - 18
UN362_0560	Undulator Measurement/Pre-fiducialization - 06	3	11SEP06	13SEP06						⚠ Undulator Measurement/Pre-fiducialization - 06
UN362_0570	Undulator Setup and Alignment @ CMM - 06	1	14SEP06	14SEP06						⚠ Undulator Setup and Alignment @ CMM - 06
UN362_0630	Undulator Setup and Alignment @ Test Bench - 07	1	14SEP06	14SEP06						⚠ Undulator Setup and Alignment @ Test Bench - 07
UN362_2110	REQD: Undulator Mag Assy - 21	0		15SEP06						◆ REQD: Undulator Mag Assy - 21
UN362_0580	Undulator Fiducialization - 06	2	15SEP06	18SEP06						⚠ Undulator Fiducialization - 06
UN362_0640	Undulator Measurement and Set Gap - 07	2	15SEP06	18SEP06						⚠ Undulator Measurement and Set Gap - 07
UN362_2120	Adjust to Temperature - 21	10	18SEP06	29SEP06						⚠ Adjust to Temperature - 21
UN362_0660	Undulator Measurement/Pre-fiducialization - 07	4	19SEP06	22SEP06						⚠ Undulator Measurement/Pre-fiducialization - 07
UN362_0585	Undulator Ready for Assembly - 06	5	19SEP06	25SEP06						⚠ Undulator Ready for Assembly - 06
UN601_0723	Stretched Wire Comp available for installation	0		21SEP06						◆ Stretched Wire Comp available for installation
UN362_2010	REQD: Undulator Mag Assy - 20	0		22SEP06						◆ REQD: Undulator Mag Assy - 20
UN362_0670	Undulator Setup and Alignment @ CMM - 07	1	25SEP06	25SEP06						⚠ Undulator Setup and Alignment @ CMM - 07
UN362_0730	Undulator Setup and Alignment @ Test Bench - 08	1	25SEP06	25SEP06						⚠ Undulator Setup and Alignment @ Test Bench - 08
UN362_2020	Adjust to Temperature - 20	10	25SEP06	06OCT06						⚠ Adjust to Temperature - 20
UN362_0680	Undulator Fiducialization - 07	2	26SEP06	27SEP06						⚠ Undulator Fiducialization - 07
UN362_0740	Undulator Measurement and Set Gap - 08	2	26SEP06	27SEP06						⚠ Undulator Measurement and Set Gap - 08
UN362_0760	Undulator Measurement/Pre-fiducialization - 08	4	28SEP06	03OCT06						⚠ Undulator Measurement/Pre-fiducialization - 08
UN362_0685	Undulator Ready for Assembly - 07	5	28SEP06	04OCT06						⚠ Undulator Ready for Assembly - 07
UN362_2310	REQD: Undulator Mag Assy - 23	0		02OCT06						◆ REQD: Undulator Mag Assy - 23
UN362_2320	Adjust to Temperature - 23	10	03OCT06	16OCT06						⚠ Adjust to Temperature - 23
UN362_0770	Undulator Setup and Alignment @ CMM - 08	1	04OCT06	04OCT06						⚠ Undulator Setup and Alignment @ CMM - 08
UN362_0830	Undulator Setup and Alignment @ Test Bench - 09	1	04OCT06	04OCT06						⚠ Undulator Setup and Alignment @ Test Bench - 09
UN601_0457	HLS Components available for Install	0		05OCT06						◆ HLS Components available for Install
UN362_0780	Undulator Fiducialization - 08	2	05OCT06	06OCT06						⚠ Undulator Fiducialization - 08

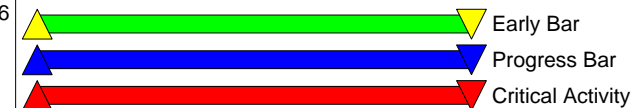


**LCLS
INTEGRATED SCHEDULE**

Undulator

Start Date	01JUN01
Finish Date	31MAR09
Data Date	01OCT04
Run Date	29APR05 13:44

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UN362_0840	Undulator Measurement and Set Gap - 09	2	05OCT06	06OCT06							⚠ Undulator Measurement and Set Gap - 09
UN362_2210	REQD: Undulator Mag Assy - 22	0		09OCT06							◆ REQD: Undulator Mag Assy - 22
UN362_0860	Undulator Measurement/Pre-fiducialization - 09	4	09OCT06	12OCT06							⚠ Undulator Measurement/Pre-fiducialization - 09
UN362_0785	Undulator Ready for Assembly - 08	5	09OCT06	13OCT06							⚠ Undulator Ready for Assembly - 08
UN362_2220	Adjust to Temperature - 22	10	10OCT06	23OCT06							⚠ Adjust to Temperature - 22
UN362_0870	Undulator Setup and Alignment @ CMM - 09	1	13OCT06	13OCT06							⚠ Undulator Setup and Alignment @ CMM - 09
UN362_0930	Undulator Setup and Alignment @ Test Bench - 10	1	13OCT06	13OCT06							⚠ Undulator Setup and Alignment @ Test Bench - 10
UN362_0880	Undulator Fiducialization - 09	2	16OCT06	17OCT06							⚠ Undulator Fiducialization - 09
UN362_0940	Undulator Measurement and Set Gap - 10	2	16OCT06	17OCT06							⚠ Undulator Measurement and Set Gap - 10
UN362_2510	REQD: Undulator Mag Assy - 25	0		17OCT06							◆ REQD: Undulator Mag Assy - 25
UN362_0960	Undulator Measurement/Pre-fiducialization - 10	4	18OCT06	23OCT06							⚠ Undulator Measurement/Pre-fiducialization - 10
UN362_0885	Undulator Ready for Assembly - 09	5	18OCT06	24OCT06							⚠ Undulator Ready for Assembly - 09
UN362_2520	Adjust to Temperature - 25	10	18OCT06	31OCT06							⚠ Adjust to Temperature - 25
UN362_0970	Undulator Setup and Alignment @ CMM - 10	1	24OCT06	24OCT06							⚠ Undulator Setup and Alignment @ CMM - 10
UN362_1030	Undulator Setup and Alignment @ Test Bench - 11	1	24OCT06	24OCT06							⚠ Undulator Setup and Alignment @ Test Bench - 11
UN362_2410	REQD: Undulator Mag Assy - 24	0		24OCT06							◆ REQD: Undulator Mag Assy - 24
UN362_0980	Undulator Fiducialization - 10	2	25OCT06	26OCT06							⚠ Undulator Fiducialization - 10
UN362_1040	Undulator Measurement and Set Gap - 11	2	25OCT06	26OCT06							⚠ Undulator Measurement and Set Gap - 11
UN362_2420	Adjust to Temperature - 24	10	25OCT06	07NOV06							⚠ Adjust to Temperature - 24
UN362_1060	Undulator Measurement/Pre-fiducialization - 11	4	27OCT06	01NOV06							⚠ Undulator Measurement/Pre-fiducialization - 11
UN362_0985	Undulator Ready for Assembly - 10	5	27OCT06	02NOV06							⚠ Undulator Ready for Assembly - 10
UN362_2710	REQD: Undulator Mag Assy - 27	0		01NOV06							◆ REQD: Undulator Mag Assy - 27
UN362_1070	Undulator Setup and Alignment @ CMM - 11	1	02NOV06	02NOV06							⚠ Undulator Setup and Alignment @ CMM - 11
UN362_1130	Undulator Setup and Alignment @ Test Bench - 12	1	02NOV06	02NOV06							⚠ Undulator Setup and Alignment @ Test Bench - 12
UN362_2720	Adjust to Temperature - 27	10	02NOV06	15NOV06							⚠ Adjust to Temperature - 27
UN362_1080	Undulator Fiducialization - 11	2	03NOV06	06NOV06							⚠ Undulator Fiducialization - 11
UN362_1140	Undulator Measurement and Set Gap - 12	2	03NOV06	06NOV06							⚠ Undulator Measurement and Set Gap - 12
UN362_1160	Undulator Measurement/Pre-fiducialization - 12	4	07NOV06	10NOV06							⚠ Undulator Measurement/Pre-fiducialization - 12
UN362_1085	Undulator Ready for Assembly - 11	5	07NOV06	13NOV06							⚠ Undulator Ready for Assembly - 11
UN362_2610	REQD: Undulator Mag Assy - 26	0		08NOV06							◆ REQD: Undulator Mag Assy - 26
UN362_2620	Adjust to Temperature - 26	10	09NOV06	22NOV06							⚠ Adjust to Temperature - 26
UN362_1170	Undulator Setup and Alignment @ CMM - 12	1	13NOV06	13NOV06							⚠ Undulator Setup and Alignment @ CMM - 12
UN362_1230	Undulator Setup and Alignment @ Test Bench - 13	1	13NOV06	13NOV06							⚠ Undulator Setup and Alignment @ Test Bench - 13
UN362_1180	Undulator Fiducialization - 12	2	14NOV06	15NOV06							⚠ Undulator Fiducialization - 12
UN362_1240	Undulator Measurement and Set Gap - 13	2	14NOV06	15NOV06							⚠ Undulator Measurement and Set Gap - 13
UN36_00620	F/MM for Vacuum and Diag Complete	0		16NOV06							◆ F/MM for Vacuum and Diag Complete
UN362_1260	Undulator Measurement/Pre-fiducialization - 13	4	16NOV06	21NOV06							⚠ Undulator Measurement/Pre-fiducialization - 13



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Undulator

Start Date 01JUN01
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN362_1185	Undulator Ready for Assembly - 12	5	16NOV06	22NOV06				⚠ Undulator Ready for Assembly - 12		
UN362_1270	Undulator Setup and Alignment @ CMM - 13	1	22NOV06	22NOV06				⚠ Undulator Setup and Alignment @ CMM - 13		
UN362_1330	Undulator Setup and Alignment @ Test Bench - 14	1	22NOV06	22NOV06				⚠ Undulator Setup and Alignment @ Test Bench - 14		
UN362_2810	REQD: Undulator Mag Assy - 28	0		27NOV06				◆ REQD: Undulator Mag Assy - 28		
UN362_1280	Undulator Fiducialization - 13	2	27NOV06	28NOV06				⚠ Undulator Fiducialization - 13		
UN362_1340	Undulator Measurement and Set Gap - 14	2	27NOV06	28NOV06				⚠ Undulator Measurement and Set Gap - 14		
UN362_2820	Adjust to Temperature - 28	10	28NOV06	11DEC06				⚠ Adjust to Temperature - 28		
UN362_1360	Undulator Measurement/Pre-fiducialization - 14	4	29NOV06	04DEC06				⚠ Undulator Measurement/Pre-fiducialization - 14		
UN362_1285	Undulator Ready for Assembly - 13	5	29NOV06	05DEC06				⚠ Undulator Ready for Assembly - 13		
UN362_2910	REQD: Undulator Mag Assy - 29	0		30NOV06				◆ REQD: Undulator Mag Assy - 29		
UN362_2920	Adjust to Temperature - 29	10	01DEC06	14DEC06				⚠ Adjust to Temperature - 29		
UN362_1370	Undulator Setup and Alignment @ CMM - 14	1	05DEC06	05DEC06				⚠ Undulator Setup and Alignment @ CMM - 14		
UN362_1430	Undulator Setup and Alignment @ Test Bench - 15	1	05DEC06	05DEC06				⚠ Undulator Setup and Alignment @ Test Bench - 15		
UN362_1380	Undulator Fiducialization - 14	2	06DEC06	07DEC06				⚠ Undulator Fiducialization - 14		
UN362_1440	Undulator Measurement and Set Gap - 15	2	06DEC06	07DEC06				⚠ Undulator Measurement and Set Gap - 15		
UN362_1460	Undulator Measurement/Pre-fiducialization - 15	4	08DEC06	13DEC06				⚠ Undulator Measurement/Pre-fiducialization - 15		
UN362_1385	Undulator Ready for Assembly - 14	5	08DEC06	14DEC06				⚠ Undulator Ready for Assembly - 14		
UN362_1470	Undulator Setup and Alignment @ CMM - 15	1	14DEC06	14DEC06				⚠ Undulator Setup and Alignment @ CMM - 15		
UN362_1530	Undulator Setup and Alignment @ Test Bench - 16	1	14DEC06	14DEC06				⚠ Undulator Setup and Alignment @ Test Bench - 16		
UN362_3010	REQD: Undulator Mag Assy - 30	0		14DEC06				◆ REQD: Undulator Mag Assy - 30		
UN362_1480	Undulator Fiducialization - 15	2	15DEC06	02JAN07				⚠ Undulator Fiducialization - 15		
UN362_1540	Undulator Measurement and Set Gap - 16	2	15DEC06	02JAN07				⚠ Undulator Measurement and Set Gap - 16		
UN362_3020	Adjust to Temperature - 30	10	15DEC06	12JAN07				⚠ Adjust to Temperature - 30		
UN362_1560	Undulator Measurement/Pre-fiducialization - 16	4	03JAN07	08JAN07				⚠ Undulator Measurement/Pre-fiducialization - 16		
UN362_1485	Undulator Ready for Assembly - 15	5	03JAN07	09JAN07				⚠ Undulator Ready for Assembly - 15		
UN362_1570	Undulator Setup and Alignment @ CMM - 16	1	09JAN07	09JAN07				⚠ Undulator Setup and Alignment @ CMM - 16		
UN362_1630	Undulator Setup and Alignment @ Test Bench - 17	1	09JAN07	09JAN07				⚠ Undulator Setup and Alignment @ Test Bench - 17		
UN362_1580	Undulator Fiducialization - 16	2	10JAN07	11JAN07				⚠ Undulator Fiducialization - 16		
UN362_1640	Undulator Measurement and Set Gap - 17	2	10JAN07	11JAN07				⚠ Undulator Measurement and Set Gap - 17		
UN36_02010	Magnetic Field Measurement #01 Article at SLAC	2	10JAN07	11JAN07				⚠ Magnetic Field Measurement #01 Article at SLAC		
UN36_02020	Quadrupole #01 Fiducialization	2	12JAN07	16JAN07				⚠ Quadrupole #01 Fiducialization		
UN362_1660	Undulator Measurement/Pre-fiducialization - 17	4	12JAN07	18JAN07				⚠ Undulator Measurement/Pre-fiducialization - 17		
UN362_1585	Undulator Ready for Assembly - 16	5	12JAN07	19JAN07				⚠ Undulator Ready for Assembly - 16		
UN362_1670	Undulator Setup and Alignment @ CMM - 17	1	19JAN07	19JAN07				⚠ Undulator Setup and Alignment @ CMM - 17		
UN362_1730	Undulator Setup and Alignment @ Test Bench - 18	1	19JAN07	19JAN07				⚠ Undulator Setup and Alignment @ Test Bench - 18		
UN362_3110	REQD: Undulator Mag Assy - 31	0		22JAN07				◆ REQD: Undulator Mag Assy - 31		
UN362_1680	Undulator Fiducialization - 17	2	22JAN07	23JAN07				⚠ Undulator Fiducialization - 17		

Undulator Setup and Alignment @ Test Bench - 18

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Undulator



Start Date 01JUN01
 Finish Date 31MAR09
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN362_1740	Undulator Measurement and Set Gap - 18	2	22JAN07	23JAN07				⚠ Undulator Measurement and Set Gap - 18		
UN362_3120	Adjust to Temperature - 31	10	23JAN07	05FEB07				⚠ Adjust to Temperature - 31		
UN362_1760	Undulator Measurement/Pre-fiducialization - 18	4	24JAN07	29JAN07				⚠ Undulator Measurement/Pre-fiducialization - 18		
UN362_1685	Undulator Ready for Assembly - 17	5	24JAN07	30JAN07				⚠ Undulator Ready for Assembly - 17		
UN362_1770	Undulator Setup and Alignment @ CMM - 18	1	30JAN07	30JAN07				⚠ Undulator Setup and Alignment @ CMM - 18		
UN362_1930	Undulator Setup and Alignment @ Test Bench - 19	1	30JAN07	30JAN07	Undulator Setup and Alignment @ Test Bench - 19			⚠		
UN362_1780	Undulator Fiducialization - 18	2	31JAN07	01FEB07				⚠ Undulator Fiducialization - 18		
UN362_1940	Undulator Measurement and Set Gap - 19	2	31JAN07	01FEB07				⚠ Undulator Measurement and Set Gap - 19		
UN362_1960	Undulator Measurement/Pre-fiducialization - 19	4	02FEB07	07FEB07				⚠ Undulator Measurement/Pre-fiducialization - 19		
UN362_1785	Undulator Ready for Assembly - 18	5	02FEB07	08FEB07				⚠ Undulator Ready for Assembly - 18		
UN362_3210	REQD: Undulator Mag Assy - 32	0		05FEB07				◆ REQD: Undulator Mag Assy - 32		
UN362_3220	Adjust to Temperature - 32	10	06FEB07	20FEB07				⚠ Adjust to Temperature - 32		
UN362_1970	Undulator Setup and Alignment @ CMM - 19	1	08FEB07	08FEB07				⚠ Undulator Setup and Alignment @ CMM - 19		
UN362_2030	Undulator Setup and Alignment @ Test Bench - 20	1	08FEB07	08FEB07	Undulator Setup and Alignment @ Test Bench - 20			⚠		
UN362_1980	Undulator Fiducialization - 19	2	09FEB07	12FEB07				⚠ Undulator Fiducialization - 19		
UN362_2040	Undulator Measurement and Set Gap - 20	2	09FEB07	12FEB07				⚠ Undulator Measurement and Set Gap - 20		
UN362_2060	Undulator Measurement/Pre-fiducialization - 20	4	13FEB07	16FEB07				⚠ Undulator Measurement/Pre-fiducialization - 20		
UN362_1985	Undulator Ready for Assembly - 19	5	13FEB07	20FEB07				⚠ Undulator Ready for Assembly - 19		
UN362_2070	Undulator Setup and Alignment @ CMM - 20	1	20FEB07	20FEB07				⚠ Undulator Setup and Alignment @ CMM - 20		
UN362_2130	Undulator Setup and Alignment @ Test Bench - 21	1	20FEB07	20FEB07	Undulator Setup and Alignment @ Test Bench - 21			⚠		
UN362_3310	REQD: Undulator Mag Assy - 33	0		20FEB07				◆ REQD: Undulator Mag Assy - 33		
UN362_2080	Undulator Fiducialization - 20	2	21FEB07	22FEB07				⚠ Undulator Fiducialization - 20		
UN362_2140	Undulator Measurement and Set Gap - 21	2	21FEB07	22FEB07				⚠ Undulator Measurement and Set Gap - 21		
UN362_3320	Adjust to Temperature - 33	10	21FEB07	06MAR07				⚠ Adjust to Temperature - 33		
UN362_2160	Undulator Measurement/Pre-fiducialization - 21	4	23FEB07	28FEB07				⚠ Undulator Measurement/Pre-fiducialization - 21		
UN362_2085	Undulator Ready for Assembly - 20	5	23FEB07	01MAR07				⚠ Undulator Ready for Assembly - 20		
UN362_2170	Undulator Setup and Alignment @ CMM - 21	1	01MAR07	01MAR07				⚠ Undulator Setup and Alignment @ CMM - 21		
UN362_2230	Undulator Setup and Alignment @ Test Bench - 22	1	01MAR07	01MAR07	Undulator Setup and Alignment @ Test Bench - 22			⚠		
UN362_2180	Undulator Fiducialization - 21	2	02MAR07	05MAR07				⚠ Undulator Fiducialization - 21		
UN362_2240	Undulator Measurement and Set Gap - 22	2	02MAR07	05MAR07				⚠ Undulator Measurement and Set Gap - 22		
UN362_2260	Undulator Measurement/Pre-fiducialization - 22	4	06MAR07	09MAR07				⚠ Undulator Measurement/Pre-fiducialization - 22		
UN362_2185	Undulator Ready for Assembly - 21	5	06MAR07	12MAR07				⚠ Undulator Ready for Assembly - 21		
UN362_2270	Undulator Setup and Alignment @ CMM - 22	1	12MAR07	12MAR07				⚠ Undulator Setup and Alignment @ CMM - 22		
UN362_2330	Undulator Setup and Alignment @ Test Bench - 23	1	12MAR07	12MAR07	Undulator Setup and Alignment @ Test Bench - 23			⚠		
UN362_2280	Undulator Fiducialization - 22	2	13MAR07	14MAR07				⚠ Undulator Fiducialization - 22		
UN362_2340	Undulator Measurement and Set Gap - 23	2	13MAR07	14MAR07				⚠ Undulator Measurement and Set Gap - 23		
UN362_2360	Undulator Measurement/Pre-fiducialization - 23	4	15MAR07	20MAR07				⚠ Undulator Measurement/Pre-fiducialization - 23		

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Undulator

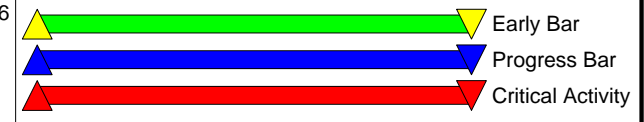


Start Date 01JUN01
 Finish Date 31MAR09
 Data Date 01OCT04
 Run Date 29APR05 13:44

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN362_2285	Undulator Ready for Assembly - 22	5	15MAR07	21MAR07				⚠ Undulator Ready for Assembly - 22		
UN362_2370	Undulator Setup and Alignment @ CMM - 23	1	21MAR07	21MAR07				⚠ Undulator Setup and Alignment @ CMM - 23		
UN362_2430	Undulator Setup and Alignment @ Test Bench - 24	1	21MAR07	21MAR07	Undulator Setup and Alignment @ Test Bench - 2⚠					
UN362_2380	Undulator Fiducialization - 23	2	22MAR07	23MAR07				⚠ Undulator Fiducialization - 23		
UN362_2440	Undulator Measurement and Set Gap - 24	2	22MAR07	23MAR07				⚠ Undulator Measurement and Set Gap - 24		
UN362_2460	Undulator Measurement/Pre-fiducialization - 24	4	26MAR07	29MAR07	Undulator Measurement/Pre-fiducialization - 2⚠					
UN362_2385	Undulator Ready for Assembly - 23	5	26MAR07	30MAR07				⚠ Undulator Ready for Assembly - 23		
UN362_2470	Undulator Setup and Alignment @ CMM - 24	1	30MAR07	30MAR07				⚠ Undulator Setup and Alignment @ CMM - 24		
UN362_2530	Undulator Setup and Alignment @ Test Bench - 25	1	30MAR07	30MAR07	Undulator Setup and Alignment @ Test Bench - 2⚠					
UN362_2480	Undulator Fiducialization - 24	2	02APR07	03APR07				⚠ Undulator Fiducialization - 24		
UN362_2540	Undulator Measurement and Set Gap - 25	2	02APR07	03APR07				⚠ Undulator Measurement and Set Gap - 25		
UN362_2560	Undulator Measurement/Pre-fiducialization - 25	4	04APR07	09APR07	Undulator Measurement/Pre-fiducialization - 2⚠					
UN362_2485	Undulator Ready for Assembly - 24	5	04APR07	10APR07				⚠ Undulator Ready for Assembly - 24		
UN362_2570	Undulator Setup and Alignment @ CMM - 25	1	10APR07	10APR07				⚠ Undulator Setup and Alignment @ CMM - 25		
UN362_2630	Undulator Setup and Alignment @ Test Bench - 26	1	10APR07	10APR07	Undulator Setup and Alignment @ Test Bench - 2⚠					
UN362_2580	Undulator Fiducialization - 25	2	11APR07	12APR07				⚠ Undulator Fiducialization - 25		
UN362_2640	Undulator Measurement and Set Gap - 26	2	11APR07	12APR07				⚠ Undulator Measurement and Set Gap - 26		
UN362_2660	Undulator Measurement/Pre-fiducialization - 26	4	13APR07	18APR07	Undulator Measurement/Pre-fiducialization - 2⚠					
UN362_2585	Undulator Ready for Assembly - 25	5	13APR07	19APR07				⚠ Undulator Ready for Assembly - 25		
UN362_2670	Undulator Setup and Alignment @ CMM - 26	1	19APR07	19APR07				⚠ Undulator Setup and Alignment @ CMM - 26		
UN362_2730	Undulator Setup and Alignment @ Test Bench - 27	1	19APR07	19APR07	Undulator Setup and Alignment @ Test Bench - 2⚠					
UN362_2680	Undulator Fiducialization - 26	2	20APR07	23APR07				⚠ Undulator Fiducialization - 26		
UN362_2740	Undulator Measurement and Set Gap - 27	2	20APR07	23APR07				⚠ Undulator Measurement and Set Gap - 27		
UN362_2760	Undulator Measurement/Pre-fiducialization - 27	4	24APR07	27APR07	Undulator Measurement/Pre-fiducialization - 2⚠					
UN362_2685	Undulator Ready for Assembly - 26	5	24APR07	30APR07				⚠ Undulator Ready for Assembly - 26		
UN362_2770	Undulator Setup and Alignment @ CMM - 27	1	30APR07	30APR07				⚠ Undulator Setup and Alignment @ CMM - 27		
UN362_2830	Undulator Setup and Alignment @ Test Bench - 28	1	30APR07	30APR07	Undulator Setup and Alignment @ Test Bench - 2⚠					
UN362_2780	Undulator Fiducialization - 27	2	01MAY07	02MAY07				⚠ Undulator Fiducialization - 27		
UN362_2840	Undulator Measurement and Set Gap - 28	2	01MAY07	02MAY07				⚠ Undulator Measurement and Set Gap - 28		
UN362_0087	REQD: Quad/Vac Chmbr/BPM/Cher Det - 01	0		02MAY07				◆ REQD: Quad/Vac Chmbr/BPM/Cher Det - 01		
UN362_0088	Assemble Cradle/Vacuum Chamber - 01	2	03MAY07	04MAY07				⚠ Assemble Cradle/Vacuum Chamber - 01		
UN362_2860	Undulator Measurement/Pre-fiducialization - 28	4	03MAY07	08MAY07	Undulator Measurement/Pre-fiducialization - 2⚠					
UN362_2785	Undulator Ready for Assembly - 27	5	03MAY07	09MAY07				⚠ Undulator Ready for Assembly - 27		
UN362_0089	Assemble Quad/Vac Chmbr/BPM/Cher Det - 01	4	07MAY07	10MAY07	Assemble Quad/Vac Chmbr/BPM/Cher Det - 0⚠					
UN362_0090	Undulator/QD/VacCh/BPM/Prealign - 01	4	07MAY07	10MAY07				⚠ Undulator/QD/VacCh/BPM/Prealign - 01		
UN362_2870	Undulator Setup and Alignment @ CMM - 28	1	09MAY07	09MAY07				⚠ Undulator Setup and Alignment @ CMM - 28		
UN362_2930	Undulator Setup and Alignment @ Test Bench - 29	1	09MAY07	09MAY07	Undulator Setup and Alignment @ Test Bench - 2⚠					

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INTEGRATED SCHEDULE**

Undulator



Start Date 01JUN01
 Finish Date 31MAR09
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN362_0100	Undulator Cradle RFI - 01	0		10MAY07					◆ Undulator Cradle RFI - 01	
UN362_2880	Undulator Fiducialization - 28	2	10MAY07	11MAY07					⚠ Undulator Fiducialization - 28	
UN362_2940	Undulator Measurement and Set Gap - 29	2	10MAY07	11MAY07					⚠ Undulator Measurement and Set Gap - 29	
UN362_2960	Undulator Measurement/Pre-fiducialization - 29	4	14MAY07	17MAY07					⚠ Undulator Measurement/Pre-fiducialization - 29	
UN362_2885	Undulator Ready for Assembly - 28	5	14MAY07	18MAY07					⚠ Undulator Ready for Assembly - 28	
UN362_2970	Undulator Setup and Alignment @ CMM - 29	1	18MAY07	18MAY07					⚠ Undulator Setup and Alignment @ CMM - 29	
UN362_3030	Undulator Setup and Alignment @ Test Bench - 30	1	18MAY07	18MAY07					⚠ Undulator Setup and Alignment @ Test Bench - 30	
UN362_2980	Undulator Fiducialization - 29	2	21MAY07	22MAY07					⚠ Undulator Fiducialization - 29	
UN362_3040	Undulator Measurement and Set Gap - 30	2	21MAY07	22MAY07					⚠ Undulator Measurement and Set Gap - 30	
UN362_3060	Undulator Measurement/Pre-fiducialization - 30	4	23MAY07	29MAY07					⚠ Undulator Measurement/Pre-fiducialization - 30	
UN362_2985	Undulator Ready for Assembly - 29	5	23MAY07	30MAY07					⚠ Undulator Ready for Assembly - 29	
UN362_3070	Undulator Setup and Alignment @ CMM - 30	1	30MAY07	30MAY07					⚠ Undulator Setup and Alignment @ CMM - 30	
UN362_3130	Undulator Setup and Alignment @ Test Bench - 31	1	30MAY07	30MAY07					⚠ Undulator Setup and Alignment @ Test Bench - 31	
UN36_02030	Magnetic Field Measurement #02 Article at SLAC	2	30MAY07	31MAY07					⚠ Magnetic Field Measurement #02 Article at SLAC	
UN362_3080	Undulator Fiducialization - 30	2	31MAY07	01JUN07					⚠ Undulator Fiducialization - 30	
UN362_3140	Undulator Measurement and Set Gap - 31	2	31MAY07	01JUN07					⚠ Undulator Measurement and Set Gap - 31	
UN36_02040	Quadrupole #02 Fiducialization	2	01JUN07	04JUN07					⚠ Quadrupole #02 Fiducialization	
UN362_0187	REQD: Quad/Vac Chmbr/BPM/Cher Det - 02	0		04JUN07					◆ REQD: Quad/Vac Chmbr/BPM/Cher Det - 02	
UN362_3160	Undulator Measurement/Pre-fiducialization - 31	4	04JUN07	07JUN07					⚠ Undulator Measurement/Pre-fiducialization - 31	
UN362_3085	Undulator Ready for Assembly - 30	5	04JUN07	08JUN07					⚠ Undulator Ready for Assembly - 30	
UN362_0188	Assemble Cradle/Vacuum Chamber - 02	2	05JUN07	06JUN07					⚠ Assemble Cradle/Vacuum Chamber - 02	
UN36_02050	Magnetic Field Measurement #03 Article at SLAC	2	05JUN07	06JUN07					⚠ Magnetic Field Measurement #03 Article at SLAC	
UN36_02060	Quadrupole #03 Fiducialization	2	07JUN07	08JUN07					⚠ Quadrupole #03 Fiducialization	
UN362_0189	Assemble Quad/Vac Chmbr/BPM/Cher Det - 02	4	07JUN07	12JUN07					⚠ Assemble Quad/Vac Chmbr/BPM/Cher Det - 02	
UN362_0190	Undulator/QD/VacCh/BPM/Prealign - 02	4	07JUN07	12JUN07					⚠ Undulator/QD/VacCh/BPM/Prealign - 02	
UN362_0287	REQD: Quad/Vac Chmbr/BPM/Cher Det - 03	0		08JUN07					◆ REQD: Quad/Vac Chmbr/BPM/Cher Det - 03	
UN362_3170	Undulator Setup and Alignment @ CMM - 31	1	08JUN07	08JUN07					⚠ Undulator Setup and Alignment @ CMM - 31	
UN362_3230	Undulator Setup and Alignment @ Test Bench - 32	1	08JUN07	08JUN07					⚠ Undulator Setup and Alignment @ Test Bench - 32	
UN362_0288	Assemble Cradle/Quad Supt/Movers - 03	1	11JUN07	11JUN07					⚠ Assemble Cradle/Quad Supt/Movers - 03	
UN362_3180	Undulator Fiducialization - 31	2	11JUN07	12JUN07					⚠ Undulator Fiducialization - 31	
UN362_3240	Undulator Measurement and Set Gap - 32	2	11JUN07	12JUN07					⚠ Undulator Measurement and Set Gap - 32	
UN36_02070	Magnetic Field Measurement #04 Article at SLAC	2	11JUN07	12JUN07					⚠ Magnetic Field Measurement #04 Article at SLAC	
UN362_0200	Undulator Cradle RFI - 02	0		12JUN07					◆ Undulator Cradle RFI - 02	
UN362_0289	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 03	2	12JUN07	13JUN07					⚠ Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 03	
UN36_02080	Quadrupole #04 Fiducialization	2	13JUN07	14JUN07					⚠ Quadrupole #04 Fiducialization	
UN362_3260	Undulator Measurement/Pre-fiducialization - 32	4	13JUN07	18JUN07					⚠ Undulator Measurement/Pre-fiducialization - 32	
UN362_3185	Undulator Ready for Assembly - 31	5	13JUN07	19JUN07					⚠ Undulator Ready for Assembly - 31	

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN362_0290	Install Undulators on Cradle- 03	1	14JUN07	14JUN07				✘ Install Undulators on Cradle- 03		
UN362_0387	REQD: Quad/Vac Chmbr/BPM/Cher Det - 04	0		14JUN07				◆ REQD: Quad/Vac Chmbr/BPM/Cher Det - 04		
UN362_0291	Prealign Vacuum Chamber - 03	1	15JUN07	15JUN07				✘ Prealign Vacuum Chamber - 03		
UN362_0300	Undulator Cradle RFI - 03	0		15JUN07				◆ Undulator Cradle RFI - 03		
UN362_0388	Assemble Cradle/Quad Supt/Movers - 04	1	15JUN07	15JUN07				✘ Assemble Cradle/Quad Supt/Movers - 04		
UN36_02085	Magnetic Field Measurement #05 Article at SLAC	2	15JUN07	18JUN07				✘ Magnetic Field Measurement #05 Article at SLAC		
UN362_0389	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 04	2	18JUN07	19JUN07				✘ Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 04		
UN362_3270	Undulator Setup and Alignment @ CMM - 32	1	19JUN07	19JUN07				✘ Undulator Setup and Alignment @ CMM - 32		
UN362_3330	Undulator Setup and Alignment @ Test Bench - 33	1	19JUN07	19JUN07				✘ Undulator Setup and Alignment @ Test Bench - 33		
UN36_02090	Quadrupole #05 Fiducialization	2	19JUN07	20JUN07				✘ Quadrupole #05 Fiducialization		
UN362_0390	Install Undulators on Cradle- 04	1	20JUN07	20JUN07				✘ Install Undulators on Cradle- 04		
UN362_0487	REQD: Quad/Vac Chmbr/BPM/Cher Det - 05	0		20JUN07				◆ REQD: Quad/Vac Chmbr/BPM/Cher Det - 05		
UN362_3280	Undulator Fiducialization - 32	2	20JUN07	21JUN07				✘ Undulator Fiducialization - 32		
UN362_3340	Undulator Measurement and Set Gap - 33	2	20JUN07	21JUN07				✘ Undulator Measurement and Set Gap - 33		
UN362_0391	Prealign Vacuum Chamber - 04	1	21JUN07	21JUN07				✘ Prealign Vacuum Chamber - 04		
UN362_0400	Undulator Cradle RFI - 04	0		21JUN07				◆ Undulator Cradle RFI - 04		
UN362_0488	Assemble Cradle/Quad Supt/Movers - 05	1	21JUN07	21JUN07				✘ Assemble Cradle/Quad Supt/Movers - 05		
UN36_02100	Magnetic Field Measurement #06 Article at SLAC	2	21JUN07	22JUN07				✘ Magnetic Field Measurement #06 Article at SLAC		
UN362_0489	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 05	2	22JUN07	25JUN07				✘ Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 05		
UN362_3360	Undulator Measurement/Pre-fiducialization - 33	4	22JUN07	27JUN07				✘ Undulator Measurement/Pre-fiducialization - 33		
UN362_3285	Undulator Ready for Assembly - 32	5	22JUN07	28JUN07				✘ Undulator Ready for Assembly - 32		
UN36_02110	Quadrupole #06 Fiducialization	2	25JUN07	26JUN07				✘ Quadrupole #06 Fiducialization		
UN362_0490	Install Undulators on Cradle- 05	1	26JUN07	26JUN07				✘ Install Undulators on Cradle- 05		
UN362_0587	REQD: Quad/Vac Chmbr/BPM/Cher Det - 06	0		26JUN07				◆ REQD: Quad/Vac Chmbr/BPM/Cher Det - 06		
UN362_0491	Prealign Vacuum Chamber - 05	1	27JUN07	27JUN07				✘ Prealign Vacuum Chamber - 05		
UN362_0500	Undulator Cradle RFI - 05	0		27JUN07				◆ Undulator Cradle RFI - 05		
UN362_0588	Assemble Cradle/Quad Supt/Movers - 06	1	27JUN07	27JUN07				✘ Assemble Cradle/Quad Supt/Movers - 06		
UN36_02120	Magnetic Field Measurement #07 Article at SLAC	2	27JUN07	28JUN07				✘ Magnetic Field Measurement #07 Article at SLAC		
UN362_3370	Undulator Setup and Alignment @ CMM - 33	1	28JUN07	28JUN07				✘ Undulator Setup and Alignment @ CMM - 33		
UN362_0589	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 06	2	28JUN07	29JUN07				✘ Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 06		
UN362_3380	Undulator Fiducialization - 33	2	29JUN07	02JUL07				✘ Undulator Fiducialization - 33		
UN36_02130	Quadrupole #07 Fiducialization	2	29JUN07	02JUL07				✘ Quadrupole #07 Fiducialization		
UN362_0590	Install Undulators on Cradle- 06	1	02JUL07	02JUL07				✘ Install Undulators on Cradle- 06		
UN362_0687	REQD: Quad/Vac Chmbr/BPM/Cher Det - 07	0		02JUL07				◆ REQD: Quad/Vac Chmbr/BPM/Cher Det - 07		
UN362_0591	Prealign Vacuum Chamber - 06	1	03JUL07	03JUL07				✘ Prealign Vacuum Chamber - 06		
UN362_0600	Undulator Cradle RFI - 06	0		03JUL07				◆ Undulator Cradle RFI - 06		
UN362_0688	Assemble Cradle/Quad Supt/Movers - 07	1	03JUL07	03JUL07				✘ Assemble Cradle/Quad Supt/Movers - 07		

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UN36_02140	Magnetic Field Measurement #08 Article at SLAC	2	03JUL07	05JUL07							Magnetic Field Measurement #08 Article at SLAC
UN362_3385	Undulator Ready for Assembly - 33	5	03JUL07	10JUL07							Undulator Ready for Assembly - 33
UN362_0689	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 07	2	05JUL07	06JUL07							Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 07
UN36_02150	Quadrupole #08 Fiducialization	2	06JUL07	09JUL07							Quadrupole #08 Fiducialization
UN362_0690	Install Undulators on Cradle- 07	1	09JUL07	09JUL07							Install Undulators on Cradle- 07
UN362_0787	REQD: Quad/Vac Chmbr/BPM/Cher Det - 08	0		09JUL07							REQD: Quad/Vac Chmbr/BPM/Cher Det - 08
UN362_0691	Prealign Vacuum Chamber - 07	1	10JUL07	10JUL07							Prealign Vacuum Chamber - 07
UN362_0700	Undulator Cradle RFI - 07	0		10JUL07							Undulator Cradle RFI - 07
UN362_0788	Assemble Cradle/Quad Supt/Movers - 08	1	10JUL07	10JUL07							Assemble Cradle/Quad Supt/Movers - 08
UN36_02160	Magnetic Field Measurement #09 Article at SLAC	2	10JUL07	11JUL07							Magnetic Field Measurement #09 Article at SLAC
UN362_0789	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 08	2	11JUL07	12JUL07							Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 08
UN36_02170	Quadrupole #09 Fiducialization	2	12JUL07	13JUL07							Quadrupole #09 Fiducialization
UN362_0790	Install Undulators on Cradle- 08	1	13JUL07	13JUL07							Install Undulators on Cradle- 08
UN362_0887	REQD: Quad/Vac Chmbr/BPM/Cher Det - 09	0		13JUL07							REQD: Quad/Vac Chmbr/BPM/Cher Det - 09
UN362_0791	Prealign Vacuum Chamber - 08	1	16JUL07	16JUL07							Prealign Vacuum Chamber - 08
UN362_0800	Undulator Cradle RFI - 08	0		16JUL07							Undulator Cradle RFI - 08
UN362_0888	Assemble Cradle/Quad Supt/Movers - 09	1	16JUL07	16JUL07							Assemble Cradle/Quad Supt/Movers - 09
UN36_02180	Magnetic Field Measurement #10 Article at SLAC	2	16JUL07	17JUL07							Magnetic Field Measurement #10 Article at SLAC
UN362_0889	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 09	2	17JUL07	18JUL07							Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 09
UN36_02190	Quadrupole #10 Fiducialization	2	18JUL07	19JUL07							Quadrupole #10 Fiducialization
UN362_0890	Install Undulators on Cradle- 09	1	19JUL07	19JUL07							Install Undulators on Cradle- 09
UN362_0987	REQD: Quad/Vac Chmbr/BPM/Cher Det - 10	0		19JUL07							REQD: Quad/Vac Chmbr/BPM/Cher Det - 10
UN362_0891	Prealign Vacuum Chamber - 09	1	20JUL07	20JUL07							Prealign Vacuum Chamber - 09
UN362_0900	Undulator Cradle RFI - 09	0		20JUL07							Undulator Cradle RFI - 09
UN362_0988	Assemble Cradle/Quad Supt/Movers - 10	1	20JUL07	20JUL07							Assemble Cradle/Quad Supt/Movers - 10
UN36_02200	Magnetic Field Measurement #11 Article at SLAC	2	20JUL07	23JUL07							Magnetic Field Measurement #11 Article at SLAC
UN362_0989	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 10	2	23JUL07	24JUL07							Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 10
UN36_02210	Quadrupole #11 Fiducialization	2	24JUL07	25JUL07							Quadrupole #11 Fiducialization
UN362_0990	Install Undulators on Cradle- 10	1	25JUL07	25JUL07							Install Undulators on Cradle- 10
UN362_1087	REQD: Quad/Vac Chmbr/BPM/Cher Det - 11	0		25JUL07							REQD: Quad/Vac Chmbr/BPM/Cher Det - 11
UN362_0991	Prealign Vacuum Chamber - 10	1	26JUL07	26JUL07							Prealign Vacuum Chamber - 10
UN362_1000	Undulator Cradle RFI - 10	0		26JUL07							Undulator Cradle RFI - 10
UN362_1088	Assemble Cradle/Quad Supt/Movers - 11	1	26JUL07	26JUL07							Assemble Cradle/Quad Supt/Movers - 11
UN36_02220	Magnetic Field Measurement #12 Article at SLAC	2	26JUL07	27JUL07							Magnetic Field Measurement #12 Article at SLAC
UN362_1089	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 11	2	27JUL07	30JUL07							Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 11
UN36_02230	Quadrupole #12 Fiducialization	2	30JUL07	31JUL07							Quadrupole #12 Fiducialization
UN362_1090	Install Undulators on Cradle- 11	1	31JUL07	31JUL07							Install Undulators on Cradle- 11

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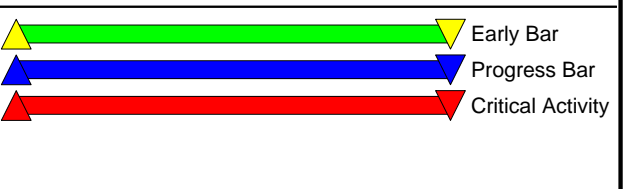
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					2004	2005	2006	2007	2008	2009	
UN362_1187	REQD: Quad/Vac Chmbr/BPM/Cher Det - 12	0		31JUL07		REQD: Quad/Vac Chmbr/BPM/Cher Det - 1					
UN362_1091	Prealign Vacuum Chamber - 11	1	01AUG07	01AUG07					⚠Prealign Vacuum Chamber - 11		
UN362_1100	Undulator Cradle RFI - 11	0		01AUG07					⚠Undulator Cradle RFI - 11		
UN362_1188	Assemble Cradle/Quad Supt/Movers - 12	1	01AUG07	01AUG07					⚠Assemble Cradle/Quad Supt/Movers - 12		
UN36_02240	Magnetic Field Measurement #13 Article at SLAC	2	01AUG07	02AUG07		Magnetic Field Measurement #13 Article at SLAC			⚠		
UN362_1189	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 12	2	02AUG07	03AUG07		Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det -			⚠		
UN36_02250	Quadrupole #13 Fiducialization	2	03AUG07	06AUG07					⚠Quadrupole #13 Fiducialization		
UN362_1190	Install Undulators on Cradle- 12	1	06AUG07	06AUG07					⚠Install Undulators on Cradle- 12		
UN362_1287	REQD: Quad/Vac Chmbr/BPM/Cher Det - 13	0		06AUG07		REQD: Quad/Vac Chmbr/BPM/Cher Det - 1					
UN362_1191	Prealign Vacuum Chamber - 12	1	07AUG07	07AUG07					⚠Prealign Vacuum Chamber - 12		
UN362_1200	Undulator Cradle RFI - 12	0		07AUG07					⚠Undulator Cradle RFI - 12		
UN362_1288	Assemble Cradle/Quad Supt/Movers - 13	1	07AUG07	07AUG07					⚠Assemble Cradle/Quad Supt/Movers - 13		
UN36_02260	Magnetic Field Measurement #14 Article at SLAC	2	07AUG07	08AUG07		Magnetic Field Measurement #14 Article at SLAC			⚠		
UN362_1289	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 13	2	08AUG07	09AUG07		Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det -			⚠		
UN36_02270	Quadrupole #14 Fiducialization	2	09AUG07	10AUG07					⚠Quadrupole #14 Fiducialization		
UN362_1290	Install Undulators on Cradle- 13	1	10AUG07	10AUG07					⚠Install Undulators on Cradle- 13		
UN362_1387	REQD: Quad/Vac Chmbr/BPM/Cher Det - 14	0		10AUG07		REQD: Quad/Vac Chmbr/BPM/Cher Det - 1					
UN362_1291	Prealign Vacuum Chamber - 13	1	13AUG07	13AUG07					⚠Prealign Vacuum Chamber - 13		
UN362_1300	Undulator Cradle RFI - 13	0		13AUG07					⚠Undulator Cradle RFI - 13		
UN362_1388	Assemble Cradle/Quad Supt/Movers - 14	1	13AUG07	13AUG07		Assemble Cradle/Quad Supt/Movers - 1			⚠		
UN36_02280	Magnetic Field Measurement #15 Article at SLAC	2	13AUG07	14AUG07		Magnetic Field Measurement #15 Article at SLAC			⚠		
UN362_1389	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 14	2	14AUG07	15AUG07		Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det -			⚠		
UN36_02290	Quadrupole #15 Fiducialization	2	15AUG07	16AUG07					⚠Quadrupole #15 Fiducialization		
UN362_1390	Install Undulators on Cradle- 14	1	16AUG07	16AUG07					⚠Install Undulators on Cradle- 14		
UN362_1487	REQD: Quad/Vac Chmbr/BPM/Cher Det - 15	0		16AUG07		REQD: Quad/Vac Chmbr/BPM/Cher Det - 1					
UN362_1391	Prealign Vacuum Chamber - 14	1	17AUG07	17AUG07					⚠Prealign Vacuum Chamber - 14		
UN362_1400	Undulator Cradle RFI - 14	0		17AUG07					⚠Undulator Cradle RFI - 14		
UN362_1488	Assemble Cradle/Quad Supt/Movers - 15	1	17AUG07	17AUG07		Assemble Cradle/Quad Supt/Movers - 1			⚠		
UN36_02300	Magnetic Field Measurement #16 Article at SLAC	2	17AUG07	20AUG07		Magnetic Field Measurement #16 Article at SLAC			⚠		
UN362_1489	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 15	2	20AUG07	21AUG07		Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det -			⚠		
UN36_02310	Quadrupole #16 Fiducialization	2	21AUG07	22AUG07					⚠Quadrupole #16 Fiducialization		
UN362_1490	Install Undulators on Cradle- 15	1	22AUG07	22AUG07					⚠Install Undulators on Cradle- 15		
UN362_1587	REQD: Quad/Vac Chmbr/BPM/Cher Det - 16	0		22AUG07		REQD: Quad/Vac Chmbr/BPM/Cher Det - 1					
UN362_1491	Prealign Vacuum Chamber - 15	1	23AUG07	23AUG07					⚠Prealign Vacuum Chamber - 15		
UN362_1500	Undulator Cradle RFI - 15	0		23AUG07					⚠Undulator Cradle RFI - 15		
UN362_1588	Assemble Cradle/Quad Supt/Movers - 16	1	23AUG07	23AUG07		Assemble Cradle/Quad Supt/Movers - 1			⚠		
UN36_02320	Magnetic Field Measurement #17 Article at SLAC	2	23AUG07	24AUG07		Magnetic Field Measurement #17 Article at SLAC			⚠		

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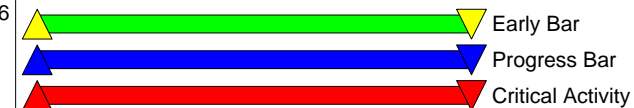
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN362_1589	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 16	2	24AUG07	27AUG07	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 1					
UN36_02330	Quadrupole #17 Fiducialization	2	27AUG07	28AUG07	Quadrupole #17 Fiducialization					
UN362_1590	Install Undulators on Cradle- 16	1	28AUG07	28AUG07	Install Undulators on Cradle- 16					
UN362_1687	REQD: Quad/Vac Chmbr/BPM/Cher Det - 17	0		28AUG07	REQD: Quad/Vac Chmbr/BPM/Cher Det - 1					
UN362_1591	Prealign Vacuum Chamber - 16	1	29AUG07	29AUG07	Prealign Vacuum Chamber - 16					
UN362_1600	Undulator Cradle RFI - 16	0		29AUG07	Undulator Cradle RFI - 16					
UN362_1688	Assemble Cradle/Quad Supt/Movers - 17	1	29AUG07	29AUG07	Assemble Cradle/Quad Supt/Movers - 1					
UN36_02340	Magnetic Field Measurement #18 Article at SLAC	2	29AUG07	30AUG07	Magnetic Field Measurement #18 Article at SLAC					
UN362_1689	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 17	2	30AUG07	31AUG07	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 1					
UN36_02350	Quadrupole #18 Fiducialization	2	31AUG07	04SEP07	Quadrupole #18 Fiducialization					
UN362_1690	Install Undulators on Cradle- 17	1	04SEP07	04SEP07	Install Undulators on Cradle- 17					
UN362_1787	REQD: Quad/Vac Chmbr/BPM/Cher Det - 18	0		04SEP07	REQD: Quad/Vac Chmbr/BPM/Cher Det - 1					
UN362_1691	Prealign Vacuum Chamber - 17	1	05SEP07	05SEP07	Prealign Vacuum Chamber - 17					
UN362_1700	Undulator Cradle RFI - 17	0		05SEP07	Undulator Cradle RFI - 17					
UN362_1788	Assemble Cradle/Quad Supt/Movers - 18	1	05SEP07	05SEP07	Assemble Cradle/Quad Supt/Movers - 1					
UN362_1789	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 18	2	06SEP07	07SEP07	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 1					
UN362_1790	Install Undulators on Cradle- 18	1	10SEP07	10SEP07	Install Undulators on Cradle- 18					
UN362_1791	Prealign Vacuum Chamber - 18	1	11SEP07	11SEP07	Prealign Vacuum Chamber - 18					
UN362_1800	Undulator Cradle RFI - 18	0		11SEP07	Undulator Cradle RFI - 18					
UN36_02360	Magnetic Field Measurement #19 Article at SLAC	2	05OCT07	08OCT07	Magnetic Field Measurement #19 Article at SLAC					
UN36_02370	Quadrupole #19 Fiducialization	2	09OCT07	10OCT07	Quadrupole #19 Fiducialization					
UN362_1987	REQD: Quad/Vac Chmbr/BPM/Cher Det - 19	0		10OCT07	REQD: Quad/Vac Chmbr/BPM/Cher Det - 1					
UN362_1988	Assemble Cradle/Quad Supt/Movers - 19	1	11OCT07	11OCT07	Assemble Cradle/Quad Supt/Movers - 1					
UN36_02375	Magnetic Field Measurement #20 Article at SLAC	2	11OCT07	12OCT07	Magnetic Field Measurement #20 Article at SLAC					
UN362_1989	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 19	2	12OCT07	15OCT07	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 1					
UN36_02380	Quadrupole #20 Fiducialization	2	15OCT07	16OCT07	Quadrupole #20 Fiducialization					
UN362_1990	Install Undulators on Cradle- 19	1	16OCT07	16OCT07	Install Undulators on Cradle- 19					
UN362_2087	REQD: Quad/Vac Chmbr/BPM/Cher Det - 20	0		16OCT07	REQD: Quad/Vac Chmbr/BPM/Cher Det - 2					
UN362_1991	Prealign Vacuum Chamber - 19	1	17OCT07	17OCT07	Prealign Vacuum Chamber - 19					
UN362_2000	Undulator Cradle RFI - 19	0		17OCT07	Undulator Cradle RFI - 19					
UN362_2088	Assemble Cradle/Quad Supt/Movers - 20	1	17OCT07	17OCT07	Assemble Cradle/Quad Supt/Movers - 2					
UN36_02390	Magnetic Field Measurement #21 Article at SLAC	2	17OCT07	18OCT07	Magnetic Field Measurement #21 Article at SLAC					
UN362_2089	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 20	2	18OCT07	19OCT07	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 1					
UN36_02400	Quadrupole #21 Fiducialization	2	19OCT07	22OCT07	Quadrupole #21 Fiducialization					
UN362_2090	Install Undulators on Cradle- 20	1	22OCT07	22OCT07	Install Undulators on Cradle- 20					
UN362_2187	REQD: Quad/Vac Chmbr/BPM/Cher Det - 21	0		22OCT07	REQD: Quad/Vac Chmbr/BPM/Cher Det - 2					
UN362_2091	Prealign Vacuum Chamber - 20	1	23OCT07	23OCT07	Prealign Vacuum Chamber - 20					



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Undulator

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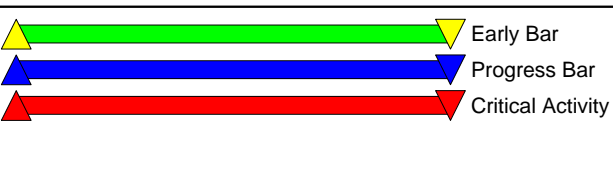
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN362_2100	Undulator Cradle RFI - 20	0		23OCT07					◆ Undulator Cradle RFI - 20	
UN362_2188	Assemble Cradle/Quad Supt/Movers - 21	1	23OCT07	23OCT07					✘ Assemble Cradle/Quad Supt/Movers - 21	
UN36_02410	Magnetic Field Measurement #22 Article at SLAC	2	23OCT07	24OCT07					✘ Magnetic Field Measurement #22 Article at SLAC	
UN362_2189	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 21	2	24OCT07	25OCT07					✘ Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 21	
UN36_02420	Quadrupole #22 Fiducialization	2	25OCT07	26OCT07					✘ Quadrupole #22 Fiducialization	
UN362_2190	Install Undulators on Cradle- 21	1	26OCT07	26OCT07					✘ Install Undulators on Cradle- 21	
UN362_2287	REQD: Quad/Vac Chmbr/BPM/Cher Det - 22	0		26OCT07					◆ REQD: Quad/Vac Chmbr/BPM/Cher Det - 22	
UN362_2191	Prealign Vacuum Chamber - 21	1	29OCT07	29OCT07					✘ Prealign Vacuum Chamber - 21	
UN362_2200	Undulator Cradle RFI - 21	0		29OCT07					◆ Undulator Cradle RFI - 21	
UN362_2288	Assemble Cradle/Quad Supt/Movers - 22	1	29OCT07	29OCT07					✘ Assemble Cradle/Quad Supt/Movers - 22	
UN36_02430	Magnetic Field Measurement #23 Article at SLAC	2	29OCT07	30OCT07					✘ Magnetic Field Measurement #23 Article at SLAC	
UN362_2289	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 22	2	30OCT07	31OCT07					✘ Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 22	
UN36_02440	Quadrupole #23 Fiducialization	2	31OCT07	01NOV07					✘ Quadrupole #23 Fiducialization	
UN362_2290	Install Undulators on Cradle- 22	1	01NOV07	01NOV07					✘ Install Undulators on Cradle- 22	
UN362_2387	REQD: Quad/Vac Chmbr/BPM/Cher Det - 23	0		01NOV07					◆ REQD: Quad/Vac Chmbr/BPM/Cher Det - 23	
UN362_2291	Prealign Vacuum Chamber - 22	1	02NOV07	02NOV07					✘ Prealign Vacuum Chamber - 22	
UN362_2300	Undulator Cradle RFI - 22	0		02NOV07					◆ Undulator Cradle RFI - 22	
UN362_2388	Assemble Cradle/Quad Supt/Movers - 23	1	02NOV07	02NOV07					✘ Assemble Cradle/Quad Supt/Movers - 23	
UN36_02450	Magnetic Field Measurement #24 Article at SLAC	2	02NOV07	05NOV07					✘ Magnetic Field Measurement #24 Article at SLAC	
UN362_2389	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 23	2	05NOV07	06NOV07					✘ Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 23	
UN36_02460	Quadrupole #24 Fiducialization	2	06NOV07	07NOV07					✘ Quadrupole #24 Fiducialization	
UN362_2390	Install Undulators on Cradle- 23	1	07NOV07	07NOV07					✘ Install Undulators on Cradle- 23	
UN362_2487	REQD: Quad/Vac Chmbr/BPM/Cher Det - 24	0		07NOV07					◆ REQD: Quad/Vac Chmbr/BPM/Cher Det - 24	
UN362_2391	Prealign Vacuum Chamber - 23	1	08NOV07	08NOV07					✘ Prealign Vacuum Chamber - 23	
UN362_2400	Undulator Cradle RFI - 23	0		08NOV07					◆ Undulator Cradle RFI - 23	
UN362_2488	Assemble Cradle/Quad Supt/Movers - 24	1	08NOV07	08NOV07					✘ Assemble Cradle/Quad Supt/Movers - 24	
UN36_02470	Magnetic Field Measurement #25 Article at SLAC	2	08NOV07	09NOV07					✘ Magnetic Field Measurement #25 Article at SLAC	
UN362_2489	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 24	2	09NOV07	12NOV07					✘ Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 24	
UN36_02480	Quadrupole #25 Fiducialization	2	12NOV07	13NOV07					✘ Quadrupole #25 Fiducialization	
UN362_2490	Install Undulators on Cradle- 24	1	13NOV07	13NOV07					✘ Install Undulators on Cradle- 24	
UN362_2587	REQD: Quad/Vac Chmbr/BPM/Cher Det - 25	0		13NOV07					◆ REQD: Quad/Vac Chmbr/BPM/Cher Det - 25	
UN362_2491	Prealign Vacuum Chamber - 24	1	14NOV07	14NOV07					✘ Prealign Vacuum Chamber - 24	
UN362_2500	Undulator Cradle RFI - 24	0		14NOV07					◆ Undulator Cradle RFI - 24	
UN362_2588	Assemble Cradle/Quad Supt/Movers - 25	1	14NOV07	14NOV07					✘ Assemble Cradle/Quad Supt/Movers - 25	
UN36_02490	Magnetic Field Measurement #26 Article at SLAC	2	14NOV07	15NOV07					✘ Magnetic Field Measurement #26 Article at SLAC	
UN362_2589	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 25	2	15NOV07	16NOV07					✘ Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 25	
UN36_02500	Quadrupole #26 Fiducialization	2	16NOV07	19NOV07					✘ Quadrupole #26 Fiducialization	

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN362_2590	Install Undulators on Cradle- 25	1	19NOV07	19NOV07						Install Undulators on Cradle- 25
UN362_2687	REQD: Quad/Vac Chmbr/BPM/Cher Det - 26	0		19NOV07						REQD: Quad/Vac Chmbr/BPM/Cher Det - 26
UN362_2591	Prealign Vacuum Chamber - 25	1	20NOV07	20NOV07						Prealign Vacuum Chamber - 25
UN362_2600	Undulator Cradle RFI - 25	0		20NOV07						Undulator Cradle RFI - 25
UN362_2688	Assemble Cradle/Quad Supt/Movers - 26	1	20NOV07	20NOV07						Assemble Cradle/Quad Supt/Movers - 26
UN36_02510	Magnetic Field Measurement #27 Article at SLAC	2	20NOV07	21NOV07						Magnetic Field Measurement #27 Article at SLAC
UN362_2689	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 26	2	21NOV07	26NOV07						Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 26
UN36_02520	Quadrupole #27 Fiducialization	2	26NOV07	27NOV07						Quadrupole #27 Fiducialization
UN362_2690	Install Undulators on Cradle- 26	1	27NOV07	27NOV07						Install Undulators on Cradle- 26
UN362_2787	REQD: Quad/Vac Chmbr/BPM/Cher Det - 27	0		27NOV07						REQD: Quad/Vac Chmbr/BPM/Cher Det - 27
UN362_2691	Prealign Vacuum Chamber - 26	1	28NOV07	28NOV07						Prealign Vacuum Chamber - 26
UN362_2700	Undulator Cradle RFI - 26	0		28NOV07						Undulator Cradle RFI - 26
UN362_2788	Assemble Cradle/Quad Supt/Movers - 27	1	28NOV07	28NOV07						Assemble Cradle/Quad Supt/Movers - 27
UN36_02530	Magnetic Field Measurement #28 Article at SLAC	2	28NOV07	29NOV07						Magnetic Field Measurement #28 Article at SLAC
UN362_2789	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 27	2	29NOV07	30NOV07						Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 27
UN36_02540	Quadrupole #28 Fiducialization	2	30NOV07	03DEC07						Quadrupole #28 Fiducialization
UN362_2790	Install Undulators on Cradle- 27	1	03DEC07	03DEC07						Install Undulators on Cradle- 27
UN362_2887	REQD: Quad/Vac Chmbr/BPM/Cher Det - 28	0		03DEC07						REQD: Quad/Vac Chmbr/BPM/Cher Det - 28
UN362_2791	Prealign Vacuum Chamber - 27	1	04DEC07	04DEC07						Prealign Vacuum Chamber - 27
UN362_2800	Undulator Cradle RFI - 27	0		04DEC07						Undulator Cradle RFI - 27
UN362_2888	Assemble Cradle/Quad Supt/Movers - 28	1	04DEC07	04DEC07						Assemble Cradle/Quad Supt/Movers - 28
UN36_02550	Magnetic Field Measurement #29 Article at SLAC	2	04DEC07	05DEC07						Magnetic Field Measurement #29 Article at SLAC
UN362_2889	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 28	2	05DEC07	06DEC07						Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 28
UN36_02560	Quadrupole #29 Fiducialization	2	06DEC07	07DEC07						Quadrupole #29 Fiducialization
UN362_2890	Install Undulators on Cradle- 28	1	07DEC07	07DEC07						Install Undulators on Cradle- 28
UN362_2891	Prealign Vacuum Chamber - 28	1	10DEC07	10DEC07						Prealign Vacuum Chamber - 28
UN362_2900	Undulator Cradle RFI - 28	0		10DEC07						Undulator Cradle RFI - 28
UN36_02570	Magnetic Field Measurement #30 Article at SLAC	2	10DEC07	11DEC07						Magnetic Field Measurement #30 Article at SLAC
UN36_02580	Quadrupole #30 Fiducialization	2	12DEC07	13DEC07						Quadrupole #30 Fiducialization
UN36_02590	Magnetic Field Measurement #31 Article at SLAC	2	14DEC07	02JAN08						Magnetic Field Measurement #31 Article at SLAC
UN36_02600	Quadrupole #31 Fiducialization	2	03JAN08	04JAN08						Quadrupole #31 Fiducialization
UN36_02610	Magnetic Field Measurement #32 Article at SLAC	2	07JAN08	08JAN08						Magnetic Field Measurement #32 Article at SLAC
UN36_02620	Quadrupole #32 Fiducialization	2	09JAN08	10JAN08						Quadrupole #32 Fiducialization
UN362_2987	REQD: Quad/Vac Chmbr/BPM/Cher Det - 29	0		11JAN08						REQD: Quad/Vac Chmbr/BPM/Cher Det - 29
UN362_3087	REQD: Quad/Vac Chmbr/BPM/Cher Det - 30	0		11JAN08						REQD: Quad/Vac Chmbr/BPM/Cher Det - 30
UN362_3187	REQD: Quad/Vac Chmbr/BPM/Cher Det - 31	0		11JAN08						REQD: Quad/Vac Chmbr/BPM/Cher Det - 31
UN36_02630	Magnetic Field Measurement #33 Article at SLAC	2	11JAN08	14JAN08						Magnetic Field Measurement #33 Article at SLAC

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UN362_2988	Assemble Cradle/Quad Supt/Movers - 29	1	14JAN08	14JAN08				Assemble Cradle/Quad Supt/Movers - 2			
UN362_3088	Assemble Cradle/Quad Supt/Movers - 30	1	14JAN08	14JAN08				Assemble Cradle/Quad Supt/Movers - 3			
UN362_3188	Assemble Cradle/Quad Supt/Movers - 31	1	14JAN08	14JAN08				Assemble Cradle/Quad Supt/Movers - 3			
UN362_3287	REQD: Quad/Vac Chmbr/BPM/Cher Det - 32	0		14JAN08				REQD: Quad/Vac Chmbr/BPM/Cher Det - 3			
UN362_3288	Assemble Cradle/Quad Supt/Movers - 32	1	15JAN08	15JAN08				Assemble Cradle/Quad Supt/Movers - 3			
UN362_2989	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 29	2	15JAN08	16JAN08				Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 2			
UN362_3089	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 30	2	15JAN08	16JAN08				Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 3			
UN362_3189	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 31	2	15JAN08	16JAN08				Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 3			
UN36_02640	Quadrupole #33 Fiducialization	2	15JAN08	16JAN08					Quadrupole #33 Fiducialization		
UN362_3387	REQD: Quad/Vac Chmbr/BPM/Cher Det - 33	0		16JAN08				REQD: Quad/Vac Chmbr/BPM/Cher Det - 3			
UN362_3289	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 32	2	16JAN08	17JAN08				Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 3			
UN362_2990	Install Undulators on Cradle- 29	1	17JAN08	17JAN08					Install Undulators on Cradle- 29		
UN362_3090	Install Undulators on Cradle- 30	1	17JAN08	17JAN08					Install Undulators on Cradle- 30		
UN362_3190	Install Undulators on Cradle- 31	1	17JAN08	17JAN08					Install Undulators on Cradle- 31		
UN362_3388	Assemble Cradle/Quad Supt/Movers - 33	1	17JAN08	17JAN08				Assemble Cradle/Quad Supt/Movers - 3			
UN362_2991	Prealign Vacuum Chamber - 29	1	18JAN08	18JAN08					Prealign Vacuum Chamber - 29		
UN362_3000	Undulator Cradle RFI - 29	0		18JAN08					Undulator Cradle RFI - 29		
UN362_3091	Prealign Vacuum Chamber - 30	1	18JAN08	18JAN08					Prealign Vacuum Chamber - 30		
UN362_3100	Undulator Cradle RFI - 30	0		18JAN08					Undulator Cradle RFI - 30		
UN362_3191	Prealign Vacuum Chamber - 31	1	18JAN08	18JAN08					Prealign Vacuum Chamber - 31		
UN362_3200	Undulator Cradle RFI - 31	0		18JAN08					Undulator Cradle RFI - 31		
UN362_3290	Install Undulators on Cradle- 32	1	18JAN08	18JAN08					Install Undulators on Cradle- 32		
UN362_3389	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 33	2	18JAN08	22JAN08				Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 3			
UN362_3291	Prealign Vacuum Chamber - 32	1	22JAN08	22JAN08					Prealign Vacuum Chamber - 32		
UN362_3300	Undulator Cradle RFI - 32	0		22JAN08					Undulator Cradle RFI - 32		
UN362_3390	Install Undulators on Cradle- 33	1	23JAN08	23JAN08					Install Undulators on Cradle- 33		
UN362_3391	Prealign Vacuum Chamber - 33	1	24JAN08	24JAN08					Prealign Vacuum Chamber - 33		
UN362_3400	Undulator Cradle RFI - 33	0		24JAN08					Undulator Cradle RFI - 33		
1.04.03.08 Fixed Supports											
UN38_00012	Produce Engineering Concept	64	01APR05*	30JUN05				Produce Engineering Concept			
UN38_00011	Project Oversight	128	01APR05*	30SEP05				Project Oversight			
UN601_0175	Engineer Foot Plates	2	01JUN05*	02JUN05				Engineer Foot Plates			
UN601_0233	Eng Temperature Data Acquisition System	15	01JUN05*	21JUN05				Eng Temperature Data Acquisition System			
UN38_00040	Perform Vibration Analysis	20	01JUN05*	28JUN05				Perform Vibration Analysis			
UN38_00020	Perform Thermal Stability Analysis	60	01JUN05*	24AUG05				Perform Thermal Stability Analysis			
UN38_00050	Coordinate Interface w/Undulator Syst Components	80	01JUN05*	22SEP05				Coordinate Interface w/Undulator Syst Components			
UN38_00030	Perform HVAC Design Integration	120	01JUN05*	17NOV05				Perform HVAC Design Integration			

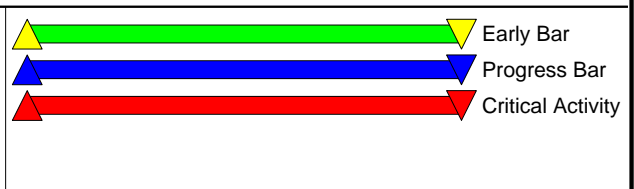
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UN601_0185	Engineer Granite Girder Adjustable Feet	5	03JUN05	09JUN05		⚠ Engineer Granite Girder Adjustable Feet					
UN601_0180	Design Foot Plates	10	03JUN05	16JUN05		⚠ Design Foot Plates					
UN601_0195	Engineer Granite Girders #2-31	5	10JUN05	16JUN05		⚠ Engineer Granite Girders #2-31					
UN601_0190	Design Granite Girder Adjustable Feet	20	10JUN05	08JUL05		⚠ Design Granite Girder Adjustable Feet					
UN601_0205	Engineer Granite Girder #1	1	17JUN05	17JUN05		⚠ Engineer Granite Girder #1					
UN601_0250	Specify Foot Plate Hardware	1	17JUN05	17JUN05		⚠ Specify Foot Plate Hardware					
UN601_0200	Design Granite Girders #2-31	20	17JUN05	15JUL05		⚠ Design Granite Girders #2-31					
UN601_0215	Engineer Granite Girders #32, #33	1	20JUN05	20JUN05		⚠ Engineer Granite Girders #32, #33					
UN601_0235	Des Temperature Data Acquisition System	5	22JUN05	28JUN05		⚠ Des Temperature Data Acquisition System					
UN601_0245	Specify Temperature Data Acq System	2	29JUN05	30JUN05		⚠ Specify Temperature Data Acq System					
UN601_0255	Specify Girder Adjustable Feet	1	11JUL05	11JUL05		⚠ Specify Girder Adjustable Feet					
UN601_0210	Design Granite Girder #1	2	11JUL05	12JUL05		⚠ Design Granite Girder #1					
UN601_0220	Design Granite Girders #32, #33	4	13JUL05	18JUL05		⚠ Design Granite Girders #32, #33					
UN601_0217	Engineer Granite Girder Transport Fixturing	10	18JUL05	29JUL05		⚠ Engineer Granite Girder Transport Fixturing					
UN601_0225	Engineer Manual Adjustment System	10	18JUL05	29JUL05		⚠ Engineer Manual Adjustment System					
UN601_0260	Specify Granite Girders	1	19JUL05	19JUL05		⚠ Specify Granite Girders					
UN601_0218	Design Granite Girder Transport Fixturing	20	01AUG05	26AUG05		⚠ Design Granite Girder Transport Fixturing					
UN601_0230	Design Manual Adjustment System	40	29AUG05	24OCT05		⚠ Design Manual Adjustment System					
UN38_00220	Procure Stabilized Chilled Water Lines	20	03OCT05	28OCT05		⚠ Procure Stabilized Chilled Water Lines					
UN38_00230	Procure Recirculating Pump	20	03OCT05	28OCT05		⚠ Procure Recirculating Pump					
UN38_00240	Procure Variable Flow Heat Exchangers	20	03OCT05	28OCT05		⚠ Procure Variable Flow Heat Exchangers					
UN38_00270	Procure Thermistors	20	03OCT05	28OCT05		⚠ Procure Thermistors					
UN38_00280	Procure Cabling	20	03OCT05	28OCT05		⚠ Procure Cabling					
UN38_00310	Procure Cast in Place Guides	20	03OCT05	28OCT05		⚠ Procure Cast in Place Guides					
UN38_00320	Procure Cylindrical Bearing	20	03OCT05	28OCT05		⚠ Procure Cylindrical Bearing					
UN38_00330	Procure Guided Bearings	20	03OCT05	28OCT05		⚠ Procure Guided Bearings					
UN38_00340	Procure Cast in Place Socket	20	03OCT05	28OCT05		⚠ Procure Cast in Place Socket					
UN38_00350	Procure Roller Ball	20	03OCT05	28OCT05		⚠ Procure Roller Ball					
UN38_00360	Procure Girder Socket	20	03OCT05	28OCT05		⚠ Procure Girder Socket					
UN38_00250	Procure Temperature Controls	40	03OCT05	29NOV05		⚠ Procure Temperature Controls					
UN38_00290	Procure Readout Electronics	40	03OCT05	29NOV05		⚠ Procure Readout Electronics					
UN38_00380	Procure Earthquake Bracing	40	03OCT05	29NOV05		⚠ Procure Earthquake Bracing					
UN38_00210	Procure Copper Screen Assemblies	80	03OCT05	09FEB06		⚠ Procure Copper Screen Assemblies					
UN601_0240	Engineer Granite Girder Insulation	2	25OCT05	26OCT05		⚠ Engineer Granite Girder Insulation					
UN601_0270	Specify Manual Adjustment System HW	2	25OCT05	26OCT05		⚠ Specify Manual Adjustment System HW					
UN601_0243	Design Granite Girder Insulation	5	27OCT05	02NOV05		⚠ Design Granite Girder Insulation					
UN38_00370	Kinematic Supports Ready for Installation	0		28OCT05		◆ Kinematic Supports Ready for Installation					

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INTEGRATED SCHEDULE
Undulator

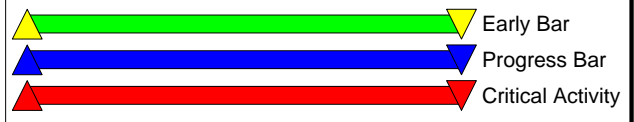
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN601_0265	Specify Granite Girder Insulation	1	03NOV05	03NOV05			⚠ Specify Granite Girder Insulation			
UN601_0275	Begin Component Acquisition	0	04NOV05				◆ Begin Component Acquisition			
UN38_00070	Prepare Bid Package - Granite Beams	10	04NOV05	17NOV05			⚠ Prepare Bid Package - Granite Beams			
UN38_00170	Procure Insulation	10	04NOV05	17NOV05			⚠ Procure Insulation			
UN38_00180	Procure Invar Platform Support Tubes	60	04NOV05	15FEB06			⚠ Procure Invar Platform Support Tubes			
UN38_00190	Procure Mounting Platforms	60	04NOV05	15FEB06			⚠ Procure Mounting Platforms			
UN38_00195	Procure Girder Transport Fixturing	60	04NOV05	15FEB06			⚠ Procure Girder Transport Fixturing			
MSC_UN030	CRIT: Release RFP - Fixed Supports	0		18NOV05			◆ CRIT: Release RFP - Fixed Supports			
UN38_00080	Release RFP - Granite Beams	1	18NOV05	18NOV05			⚠ Release RFP - Granite Beams			
UN38_00090	Vendor Prep Proposal - Granite Beams	20	21NOV05	04JAN06			⚠ Vendor Prep Proposal - Granite Beams			
UN38_00300	Thermometry Ready for Assembly	0		29NOV05			◆ Thermometry Ready for Assembly			
UN38_00100	Receive Proposals from Vendor - Granite Beams	1	05JAN06	05JAN06			⚠ Receive Proposals from Vendor - Granite Beams			
UN38_00110	Evaluate Proposals - Granite Beams	10	06JAN06	20JAN06			⚠ Evaluate Proposals - Granite Beams			
UN38_00130	Vendor Fab - Granite Beams	120	24JAN06	13JUL06			⚠ Vendor Fab - Granite Beams			
UN38_00260	Thermal Intercept Parts Ready for Assembly	0		09FEB06			◆ Thermal Intercept Parts Ready for Assembly			
UN38_00140	Receive Girder #1-4 - Granite Beams	1	22MAR06	22MAR06			⚠ Receive Girder #1-4 - Granite Beams			
UN38_00200	Granite Girder Parts Ready for Assembly #1-4	0		22MAR06			◆ Granite Girder Parts Ready for Assembly #1-4			
UN38_00410	REQD: Alignment Monitoring specifications	0		25APR06			◆ REQD: Alignment Monitoring specifications			
UN38_00390	Write Alignment Software	30	26APR06	07JUN06			⚠ Write Alignment Software			
UN38_00400	Fixed Support Controls Ready for Stabilization	0		07JUN06			◆ Fixed Support Controls Ready for Stabilization			
UN38_00150	Receive Last Girder - Granite Beams	1	14JUL06	14JUL06			⚠ Receive Last Girder - Granite Beams			
UN38_00205	Granite Girder Parts Ready for Assembly - Last	0		14JUL06			◆ Granite Girder Parts Ready for Assembly - Last			
1.04.04 Vacuum System										
UNMS4_0405	Prototype Chamber Design Complete	0		18JAN05*			◆ Prototype Chamber Design Complete			
UNMS4_D243	Vacuum System Requirements Frozen	0		18FEB05*			◆ Vacuum System Requirements Frozen			
UNMS4_0415	Vacuum Chamber Prototype Fabrication Complete	0		26MAY05			◆ Vacuum Chamber Prototype Fabrication Complete			
UNMS4_0420	Vacuum Chamber Prototype Testing Complete	0		27JUL05			◆ Vacuum Chamber Prototype Testing Complete			
UNMS4_0410	Prototype Bellows Fabrication Complete	0		10NOV05			◆ Prototype Bellows Fabrication Complete			
UNMS4_0425	Prototype Bellows Testing Complete	0		28FEB06			◆ Prototype Bellows Testing Complete			
UNMS4_0435	Bellows Final Design Complete	0		27APR06			◆ Bellows Final Design Complete			
UNMS4_0430	Production Chamber Design Complete	0		02JUN06			◆ Production Chamber Design Complete			
UNMS4_0450	Vacuum Chamber Ready for Installation	0		12FEB07			◆ Vacuum Chamber Ready for Installation			
UNMS4_0455	Bellows Ready for Installation	0		13MAR07			◆ Bellows Ready for Installation			
1.04.04.02 Undulator Vacuum Chamber Assembly										
UN42_D257	Preliminary prototype design UN chamber	30	10MAY05	21JUN05			⚠ Preliminary prototype design UN chamber			
UN42_D258	Prototype UN chamber tooling design	25	22JUN05	27JUL05			⚠ Prototype UN chamber tooling design			
UN42_D259	Prototype design review UN chamber	3	28JUL05	01AUG05			⚠ Prototype design review UN chamber			

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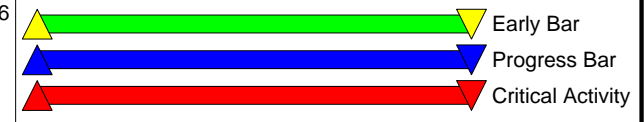


Start Date	01JUN01
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UN42_D260	Prototype final design UN chamber	15	02AUG05	22AUG05			▲▼ Prototype final design UN chamber				
UN42_D261	Prototype design complete	0		22AUG05			◆ Prototype design complete				
UN42_D262	Bid process prototype UN chamber	25	23AUG05	27SEP05			▲▼ Bid process prototype UN chamber				
UN42_D263	Bid process prototype UN chamber tooling	25	23AUG05	27SEP05			▲▼ Bid process prototype UN chamber tooling				
UN42_D264	Evaluate bid prototype UN chamber	5	03OCT05	07OCT05			▲ Evaluate bid prototype UN chamber				
UN42_D265	Procure Prototype undulator chamber (2)	3	10OCT05	12OCT05			▲ Procure Prototype undulator chamber (2)				
UN42_D266	Procure Prototype UN chamber tooling	3	10OCT05	12OCT05			▲ Procure Prototype UN chamber tooling				
UN42_D267	RCV Parts prototype UN chamber	60	13OCT05	10JAN06			▲▼ RCV Parts prototype UN chamber				
UN42_D268	Quality assurance prototype UN chamber	10	11JAN06	25JAN06			▲ Quality assurance prototype UN chamber				
UN42_D269	Procure Polish parts	20	26JAN06	23FEB06			▲ Procure Polish parts				
UN42_D270	Fabrication of prototype chamber weldment	15	24FEB06	16MAR06			▲ Fabrication of prototype chamber weldment				
UN42_D271	Measurement and test prototype UN chamber	25	17MAR06	20APR06			▲▼ Measurement and test prototype UN chamber				
UN42_D272	Prototype UN chamber testing complete	0		20APR06			◆ Prototype UN chamber testing complete				
UN42_00230	Receive Prd Un Cham Specs from Undulator Group	5	21APR06	27APR06			▲ Receive Prd Un Cham Specs from Undulator Group				
UN42_00240	Prelim Design Prd Un Chamber	15	21APR06	11MAY06			▲ Prelim Design Prd Un Chamber				
UN42_00480	Prelim Design Chamber Sup	30	28APR06	09JUN06			▲▼ Prelim Design Chamber Sup				
UN42_00250	Prelim Design Review Prd Un Chamber	3	12MAY06	16MAY06			▲ Prelim Design Review Prd Un Chamber				
UN42_00260	Final Design Prd Un Chamber	12	17MAY06	02JUN06			▲ Final Design Prd Un Chamber				
UN42_00270	Design Complete Prd Un Chamber	0		02JUN06			◆ Design Complete Prd Un Chamber				
UN42_00280	Bid Package- Prd Un Chamber	3	05JUN06	07JUN06			▲ Bid Package- Prd Un Chamber				
UN42_00281	Bid Package - Chamber Supports	3	05JUN06	07JUN06			▲ Bid Package - Chamber Supports				
UN42_00330	Bid Process Prd Un Chamber	25	08JUN06	13JUL06			▲▼ Bid Process Prd Un Chamber				
UN42_00490	Mechanical Analysis	8	12JUN06	21JUN06			▲ Mechanical Analysis				
UN42_00500	Final Design Chamber Sup	10	22JUN06	06JUL06			▲ Final Design Chamber Sup				
UN42_00510	Design Complete Chamber Sup	0		06JUL06			◆ Design Complete Chamber Sup				
UN42_00520	Bid Package-Chamber Supports	5	07JUL06	13JUL06			▲ Bid Package-Chamber Supports				
UN42_00710	Develop Installation Plan Prd Un Chamber	10	07JUL06	20JUL06			▲ Develop Installation Plan Prd Un Chamber				
UN42_00331	Evalute Bid Prd Un Chamber	3	14JUL06	18JUL06			▲ Evalute Bid Prd Un Chamber				
UN42_00550	Bid Process Chamber Supports	25	14JUL06	17AUG06			▲▼ Bid Process Chamber Supports				
UN42_00720	Review Installation Plan Prd Un Chamber	5	21JUL06	27JUL06			▲ Review Installation Plan Prd Un Chamber				
UN42_00400	Rec: First Lot Production Undulator Chamber (10)	40	21JUL06	15SEP06			▲▼ Rec: First Lot Production Undulator Chamber (10)				
UN42_00551	Evaluate Bid - Chamber Supports	1	18AUG06	18AUG06			▲ Evaluate Bid - Chamber Supports				
UN42_00600	RCV Chamber Supports (31)	40	23AUG06	18OCT06			▲▼ RCV Chamber Supports (31)				
UN42_00410	QA First Lot Prd Un Chamber	5	18SEP06	22SEP06			▲ QA First Lot Prd Un Chamber				
UN42_00430	Approve Continuation of Production Prd Un Cham	2	25SEP06	26SEP06			▲ Approve Continuation of Production Prd Un Cham				
UN42_00420	Fabrication of First Lot Prd Un Chamber	30	25SEP06	03NOV06			▲▼ Fabrication of First Lot Prd Un Chamber				
UN42_00440	RCV: Remain Lot Production Undulator Chamb (24)	50	27SEP06	07DEC06			▲▼ RCV: Remain Lot Production Undulator Chamb (24)				

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN42_00421	Assembly Test Prd Un Cham (10)	20	16OCT06	10NOV06				▲▼ Assembly Test Prd Un Cham (10)		
UN42_00422	Clean Prd Un Cham (10)	8	13NOV06	22NOV06				▲▼ Clean Prd Un Cham (10)		
UN42_00423	Bake Prd Un Cham (10)	15	27NOV06	15DEC06				▲▼ Bake Prd Un Cham (10)		
UN42_00610	Quality Assurance Chamber Sup	12	04DEC06	03JAN07				▲▼ Quality Assurance Chamber Sup		
UN42_00450	QA Production Lot Prd Un Chamber	10	02JAN07	16JAN07				▲▼ QA Production Lot Prd Un Chamber		
UN42_00424	Prep Chamber Assy & Support for Shipment (10)	5	04JAN07	10JAN07				▲▼ Prep Chamber Assy & Support for Shipment (10)		
UN42_00425	Pack Chamber Assembly & Supt for Shipping (10)	5	11JAN07	18JAN07				▲▼ Pack Chamber Assembly & Supt for Shipping (10)		
UN42_00460	Fabrication of Rem Production Lot Prd Un Chamber	30	17JAN07	28FEB07	Fabrication of Rem Production Lot Prd Un Chamber			▲▼		
UN42_00426	Ship Prd Un Chamber to SLAC (10)	0		18JAN07				◆ Ship Prd Un Chamber to SLAC (10)		
UN42_00427	Transmit Prd Un Cham Design & Drawings to SLAC	5	19JAN07	25JAN07	Transmit Prd Un Cham Design & Drawings to SLAC			▲▼		
UN42_00428	RFI: Undulator Vacuum Chamber Assembly (10)	0		25JAN07				◆ RFI: Undulator Vacuum Chamber Assembly (10)		
UN42_00730	Prd Un Cham Assembly Arrive at SLAC (10)	10	26JAN07	08FEB07				▲▼ Prd Un Cham Assembly Arrive at SLAC (10)		
UN42_00470	Approve Production Lot Prd Un Chamber	2	07FEB07	08FEB07				▲▼ Approve Production Lot Prd Un Chamber		
UN42_00640	Assembly Test Prd Un Cham (24)	20	09FEB07	09MAR07				▲▼ Assembly Test Prd Un Cham (24)		
UN42_00650	Clean Prd Un Cham (24)	8	12MAR07	21MAR07				▲▼ Clean Prd Un Cham (24)		
UN42_00660	Bake Prd Un Cham (24)	15	22MAR07	11APR07				▲▼ Bake Prd Un Cham (24)		
UN42_00670	Prep Chamber Assembly & Supt for Shipment (24)	5	12APR07	18APR07	Prep Chamber Assembly & Supt for Shipment (24)			▲▼		
UN42_00680	Pack Chamber Assembly & Supt for Shipping(24)	5	19APR07	25APR07	Pack Chamber Assembly & Supt for Shipping(24)			▲▼		
UN42_00690	Ship Prd Un Chamber to SLAC (24)	0		25APR07				◆ Ship Prd Un Chamber to SLAC (24)		
UN42_00702	RFI: Undulator Vacuum Chamber Assembly (24)	0		25APR07	RFI: Undulator Vacuum Chamber Assembly (24)			◆		
UN42_00732	Prd Un Cham Assembly Arrive at SLAC (24)	10	26APR07	09MAY07				▲▼ Prd Un Cham Assembly Arrive at SLAC (24)		
1.04.04.03 Beam-line Bellows Module Assembly										
UN43_00025	Prelim Prototype Design Prtp Bel Mod	35*	01OCT04A	18NOV04	▲▼ Prelim Prototype Design Prtp Bel Mod					
UN43_00032	Mechanical Analysis Prtp Bel Mod	47*	01OCT04A	08DEC04	▲▼ Mechanical Analysis Prtp Bel Mod					
UN43_00035	Prototype Bellows Physics Review	5	09DEC04	15DEC04	▲▼ Prototype Bellows Physics Review					
UN43_00050	Prtp Bel Mod Final Design	16	16DEC04	21JAN05	▲▼ Prtp Bel Mod Final Design					
UN43_00060	Prtp Bel Mod Design Complete	0		21JAN05	◆ Prtp Bel Mod Design Complete					
UN43_00201	Test Equipment Fab & Assy	2	24JAN05	25JAN05	▲▼ Test Equipment Fab & Assy					
UN43_10025	Prelim Revised Design Bel Mod	35	10MAY05	28JUN05	▲▼ Prelim Revised Design Bel Mod					
UN43_10035	Revised Bellows Physics Review	15	29JUN05	20JUL05	▲▼ Revised Bellows Physics Review					
UN43_10032	Mechanical Analysis Revised Bel Mod	20	29JUN05	27JUL05	▲▼ Mechanical Analysis Revised Bel Mod					
UN43_10050	Revised Bel Mod Final Design	15	28JUL05	17AUG05	▲▼ Revised Bel Mod Final Design					
UN43_10060	Revised Bel Mod Design Complete	0		17AUG05	◆ Revised Bel Mod Design Complete					
UN43_00070	Bid Package-Ag Plated RF Finger Prtp Bel Mod	3	18AUG05	22AUG05	▲▼ Bid Package-Ag Plated RF Finger Prtp Bel Mod					
UN43_00080	Bid Package-Rh Plated Stub Prtp Bel Mod	3	18AUG05	22AUG05	▲▼ Bid Package-Rh Plated Stub Prtp Bel Mod					
UN43_00090	Bid Package-Tubes Prtp Bel Mod	3	18AUG05	22AUG05	▲▼ Bid Package-Tubes Prtp Bel Mod					
UN43_00100	Bid Package- Prtp Bellows Module	3	18AUG05	22AUG05	▲▼ Bid Package- Prtp Bellows Module					

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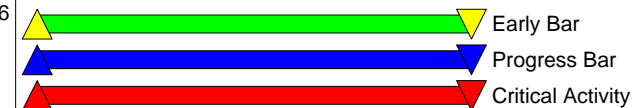


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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UN43_00110	Bid Package-Axial Restraints Prtp Bel Mod	3	18AUG05	22AUG05			⚠ Bid Package-Axial Restraints Prtp Bel Mod				
UN43_00120	Bid Process Prtp Bel Mod	25	23AUG05	27SEP05			⚠ Bid Process Prtp Bel Mod				
UN43_00130	Procure Ag Plated RF Finger Prtp Bel Mod	2	28SEP05	29SEP05			⚠ Procure Ag Plated RF Finger Prtp Bel Mod				
UN43_00140	Procure Rh Plated Stub Prtp Bel Mod	2	28SEP05	29SEP05			⚠ Procure Rh Plated Stub Prtp Bel Mod				
UN43_00150	Procure Tubes Prtp Bel Mod	2	28SEP05	29SEP05			⚠ Procure Tubes Prtp Bel Mod				
UN43_00160	Procure Bellows Prtp Bel Mod	2	28SEP05	29SEP05			⚠ Procure Bellows Prtp Bel Mod				
UN43_00170	Procure Axial Restraints Prtp Bel Mod	2	28SEP05	29SEP05			⚠ Procure Axial Restraints Prtp Bel Mod				
UN43_00190	RCV: Bellows Prtp Bel Mod	30	30SEP05	10NOV05			⚠ RCV: Bellows Prtp Bel Mod				
UN43_00200	Quality Assurance Prtp Bel Mod	2	11NOV05	14NOV05			⚠ Quality Assurance Prtp Bel Mod				
UN43_00220	Measurement and Test Prtp Bel Mod	2	15NOV05	16NOV05			⚠ Measurement and Test Prtp Bel Mod				
UN43_00230	Review and Report Prtp Bel Mod	2	17NOV05	18NOV05			⚠ Review and Report Prtp Bel Mod				
UN43_00240	Prototype Bel Mod Testing Complete	0		18NOV05			◆ Prototype Bel Mod Testing Complete				
UN43_00250	Prelim Standard Bellows Design	15	21NOV05	13DEC05			⚠ Prelim Standard Bellows Design				
UN43_00260	Bellows Physics Review	2	14DEC05	15DEC05			⚠ Bellows Physics Review				
UN43_00270	Final Standard Bellows Design	5	16DEC05	06JAN06			⚠ Final Standard Bellows Design				
UN43_00280	Design Complete FDR Std Bel Mod	0		06JAN06			◆ Design Complete FDR Std Bel Mod				
UN43_00283	Final Design Review Std Bel Mod	2	09JAN06	10JAN06			⚠ Final Design Review Std Bel Mod				
UN43_00290	Bid Package-Standard Bellows Module	3	11JAN06	13JAN06			⚠ Bid Package-Standard Bellows Module				
UN43_00340	Bid Process Std Bel Mod	25	17JAN06	21FEB06			⚠ Bid Process Std Bel Mod				
UN43_00342	Evaluate Bid Std Bel Mod	2	22FEB06	23FEB06			⚠ Evaluate Bid Std Bel Mod				
UN43_00355	Standard Bellows Module (47) Support	2	24FEB06	27FEB06			⚠ Standard Bellows Module (47) Support				
UN43_00410	Receive First Lot Standard Bellows Module (4)	30	28FEB06	10APR06			⚠ Receive First Lot Standard Bellows Module (4)				
UN43_00420	QA First Lot Std Bel Mod	8	11APR06	20APR06			⚠ QA First Lot Std Bel Mod				
UN43_00440	Approve Continuation of Production Std Bel Mod	2	21APR06	24APR06			⚠ Approve Continuation of Production Std Bel Mod				
UN43_00450	Receive Remain Prod Lot Std Bellows Module (43)	40	25APR06	20JUN06			⚠ Receive Remain Prod Lot Std Bellows Module (43)				
UN43_00460	QA Production Lot Std Bel Mod	15	21JUN06	12JUL06			⚠ QA Production Lot Std Bel Mod				
UN43_00500	Assembly Test Std Bel Mod	10	13JUL06	26JUL06			⚠ Assembly Test Std Bel Mod				
UN43_00510	Clean Std Bel Mod	8	27JUL06	07AUG06			⚠ Clean Std Bel Mod				
UN43_00520	Bake Std Bel Mod	5	08AUG06	14AUG06			⚠ Bake Std Bel Mod				
UN43_00530	Prepare Standard Bellows for Shipment	5	15AUG06	21AUG06			⚠ Prepare Standard Bellows for Shipment				
UN43_00540	Pack Standard Bellows for Shipping	5	22AUG06	28AUG06			⚠ Pack Standard Bellows for Shipping				
UN43_00550	Ship Std Bel Mod to Slac	0		28AUG06			◆ Ship Std Bel Mod to Slac				
UN43_00560	Transmit Std Bel Mod Design & Drawings to SLA	5	29AUG06	05SEP06			⚠ Transmit Std Bel Mod Design & Drawings to SLA				
UN43_00562	RFI: Beam-Line Bellows Module Assembly	0		05SEP06			◆ RFI: Beam-Line Bellows Module Assembly				
1.04.04.05 Short Diagnostic Break (SDB) Assembly											
UN45_00010	Specification SDB	5	09JAN06	13JAN06			⚠ Specification SDB				
UN45_00011	SDB Concept Schematic	5	17JAN06	23JAN06			⚠ SDB Concept Schematic				

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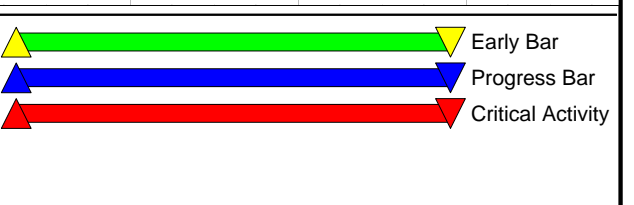
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
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UN45_00012	SDB Internal Profile Approval	10	24JAN06	06FEB06			⚠ SDB Internal Profile Approval			
UN45_00020	Prelim SDB Design	20	07FEB06	07MAR06			⚠ Prelim SDB Design			
UN45_00030	Mechanical Analysis SDB	7	08MAR06	16MAR06			⚠ Mechanical Analysis SDB			
UN45_00050	Final SDB Design	10	27APR06	10MAY06			⚠ Final SDB Design			
UN45_00052	Final SDB Design Review	5	11MAY06	17MAY06			⚠ Final SDB Design Review			
UN45_00060	SDB Design Complete	0		17MAY06			◆ SDB Design Complete			
UN45_00100	Ion Pump Bid Pkg	3	18MAY06	22MAY06			⚠ Ion Pump Bid Pkg			
UN45_00110	Ion Pump Power Supply Bid Pkg	3	18MAY06	22MAY06			⚠ Ion Pump Power Supply Bid Pkg			
UN45_00120	Ion Pump Cable Bid Package	3	18MAY06	22MAY06			⚠ Ion Pump Cable Bid Package			
UN45_00140	Chamber Support Bid Package	5	18MAY06	24MAY06			⚠ Chamber Support Bid Package			
UN45_00150	Pump Support Bid Package	5	18MAY06	24MAY06			⚠ Pump Support Bid Package			
UN45_00160	Bid Process SDB	25	11SEP06*	13OCT06			⚠ Bid Process SDB			
UN45_00161	Evaluate Bids: SDB	1	16OCT06	16OCT06			⚠ Evaluate Bids: SDB			
UN45_00320	Rec: SDB Chamber Weldment Assembly	30	23OCT06	05DEC06			⚠ Rec: SDB Chamber Weldment Assembly			
UN45_00322	Rec: SDB Pump Manifold	30	23OCT06	05DEC06			⚠ Rec: SDB Pump Manifold			
UN45_00324	Rec: SDB Ion Pump	30	23OCT06	05DEC06			⚠ Rec: SDB Ion Pump			
UN45_00326	Rec: SDB Ion Pump Power Supply	30	23OCT06	05DEC06			⚠ Rec: SDB Ion Pump Power Supply			
UN45_00328	Rec: SDB Ion Pump Cable	30	23OCT06	05DEC06			⚠ Rec: SDB Ion Pump Cable			
UN45_00330	Rec: SDB Chamber Supports	30	23OCT06	05DEC06			⚠ Rec: SDB Chamber Supports			
UN45_00332	Rec: SDB Pump Supports	30	23OCT06	05DEC06			⚠ Rec: SDB Pump Supports			
UN45_00335	Rec: SDB Pump Weld	30	23OCT06	05DEC06			⚠ Rec: SDB Pump Weld			
UN45_00336	Rec: SDB Ion Pump Support	30	23OCT06	05DEC06			⚠ Rec: SDB Ion Pump Support			
UN45_00339	QA Production Lot SDB	10	06DEC06	03JAN07			⚠ QA Production Lot SDB			
UN45_00340	Approve Production Lot SDB	3	04JAN07	08JAN07			⚠ Approve Production Lot SDB			
UN45_00350	Clean SDB	5	09JAN07	16JAN07			⚠ Clean SDB			
UN45_00360	Bake SDB	5	17JAN07	23JAN07			⚠ Bake SDB			
UN45_00390	Prepare Short Diagnostic Break for Shipment	5	24JAN07	30JAN07			⚠ Prepare Short Diagnostic Break for Shipment			
UN45_00400	Pack Short Diagnostic Break for Shipping	5	31JAN07	06FEB07			⚠ Pack Short Diagnostic Break for Shipping			
UN45_00410	Ship to Slac SDB	0		06FEB07			◆ Ship to Slac SDB			
UN45_00420	Transmit SDB Design & Drawings to SLAC	5	07FEB07	13FEB07			⚠ Transmit SDB Design & Drawings to SLAC			
UN45_00430	Develop Installation Plan SDB	10	07FEB07	21FEB07			⚠ Develop Installation Plan SDB			
UN45_00422	RFI: Short Diagnostic Break Assembly	0		13FEB07			◆ RFI: Short Diagnostic Break Assembly			
UN45_00440	Review installation Plan SDB	5	22FEB07	28FEB07			⚠ Review installation Plan SDB			
1.04.04.06 Long Diagnostic Break (LDB) Assembly										
UN46_00010	Specification LDB	10	09JAN06	23JAN06			⚠ Specification LDB			
UN46_00011	LDB Concept Schematic	1	24JAN06	24JAN06			⚠ LDB Concept Schematic			
UN46_00012	LDB Internal Profile Approval	10	25JAN06	07FEB06			⚠ LDB Internal Profile Approval			

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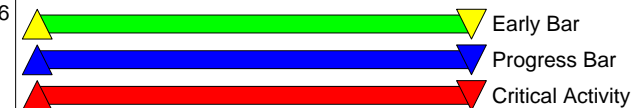


Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN46_00030	Mechanical Analysis LDB	10	08FEB06	22FEB06			▲ Mechanical Analysis LDB			
UN46_00050	LDB Final Design	10	27APR06	10MAY06			▲ LDB Final Design			
UN46_00052	Final LDB Design Review	5	11MAY06	17MAY06			▲ Final LDB Design Review			
UN46_00060	LDB Design Complete	0		17MAY06			◆ LDB Design Complete			
UN46_00200	Bid Process LDB	25	11SEP06*	13OCT06			▲ Bid Process LDB			
UN46_00202	Evaluate Bid LDB	2	16OCT06	17OCT06			▲ Evaluate Bid LDB			
UN46_00350	Rec: LDB Valve (2)	40	20OCT06	02JAN07			▲ Rec: LDB Valve (2)			
UN46_00400	Rec: LDB Chamber Weldment Assembly	40	20OCT06	02JAN07			▲ Rec: LDB Chamber Weldment Assembly			
UN46_00402	Rec: LDB Pump Manifold (11)	40	20OCT06	02JAN07			▲ Rec: LDB Pump Manifold (11)			
UN46_00404	Rec: LDB Ion Pump (11)	40	20OCT06	02JAN07			▲ Rec: LDB Ion Pump (11)			
UN46_00406	Rec: LDB Chamber Support (11)	40	20OCT06	02JAN07			▲ Rec: LDB Chamber Support (11)			
UN46_00408	Rec: LDB Ion Pump Support (11)	40	20OCT06	02JAN07			▲ Rec: LDB Ion Pump Support (11)			
UN46_00410	QA Production Lot LDB	10	03JAN07	17JAN07			▲ QA Production Lot LDB			
UN46_00420	Approve Production Lot LDB	3	18JAN07	22JAN07			▲ Approve Production Lot LDB			
UN46_00430	Clean LDB	8	23JAN07	01FEB07			▲ Clean LDB			
UN46_00440	Bake LDB	5	02FEB07	08FEB07			▲ Bake LDB			
UN46_00470	Prepare Long Diagnostic Break for Shipment	5	09FEB07	15FEB07			▲ Prepare Long Diagnostic Break for Shipment			
UN46_00480	Pack Long Diagnostic Break for Shipping	5	16FEB07	23FEB07			▲ Pack Long Diagnostic Break for Shipping			
UN46_00490	Ship to Slac LDB	0		23FEB07			◆ Ship to Slac LDB			
UN46_00500	Transmit Design and Drawings to SLAC	5	26FEB07	02MAR07			▲ Transmit Design and Drawings to SLAC			
UN46_00510	Develop Installation Plan LDB	7	26FEB07	06MAR07			▲ Develop Installation Plan LDB			
UN46_00502	RFI: Long Diagnostic Break Assembly	0		02MAR07			◆ RFI: Long Diagnostic Break Assembly			
UN46_00520	Review installation Plan LDB	5	07MAR07	13MAR07			▲ Review installation Plan LDB			
1.04.04.07 Entrance Section Assembly										
UN47_00010	Specification Ent Sec	10	25JAN06	07FEB06			▲ Specification Ent Sec			
UN47_00020	Prelim Design Ent Sec	25	08FEB06	15MAR06			▲ Prelim Design Ent Sec			
UN47_00030	Mechanical Analysis Ent Sec	10	16MAR06	29MAR06			▲ Mechanical Analysis Ent Sec			
UN47_00040	Prelim Design Review Ent Sec	5	30MAR06	05APR06			▲ Prelim Design Review Ent Sec			
UN47_00050	Final Design Ent Sec	10	27APR06	10MAY06			▲ Final Design Ent Sec			
UN47_00060	Design Complete Ent Sec	0		10MAY06			◆ Design Complete Ent Sec			
UN47_00250	Bid Process Bid Pkg	25	11SEP06*	13OCT06			▲ Bid Process Bid Pkg			
UN47_00251	Evaluate Bids - Entrance Section	3	16OCT06	18OCT06			▲ Evaluate Bids - Entrance Section			
UN47_00492	Rec: Turbo Pump	40	24OCT06	20DEC06			▲ Rec: Turbo Pump			
UN47_00493	Rec: Roughing Pump	40	24OCT06	20DEC06			▲ Rec: Roughing Pump			
UN47_00494	Rec: Pneumatic Gate Valve	40	24OCT06	20DEC06			▲ Rec: Pneumatic Gate Valve			
UN47_00460	Rec: Standard Entrance Chamber	40	24OCT06	04JAN07			▲ Rec: Standard Entrance Chamber			
UN47_00462	Rec: Entrance Bellows	40	24OCT06	04JAN07			▲ Rec: Entrance Bellows			

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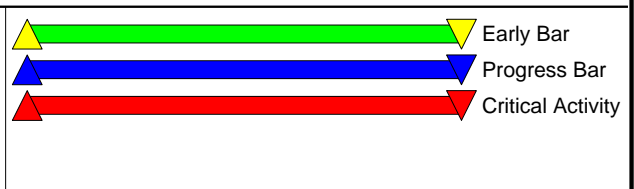
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN47_00464	Rec: Entrance Upstream Chamber	40	24OCT06	04JAN07				▲▼ Rec: Entrance Upstream Chamber		
UN47_00466	Rec: Pump Manifold	40	24OCT06	04JAN07				▲▼ Rec: Pump Manifold		
UN47_00468	Rec: Ion Pump	40	24OCT06	04JAN07				▲▼ Rec: Ion Pump		
UN47_00470	Rec: Ion Pump Controller	40	24OCT06	04JAN07				▲▼ Rec: Ion Pump Controller		
UN47_00472	Rec: Ion Pump Cable	40	24OCT06	04JAN07				▲▼ Rec: Ion Pump Cable		
UN47_00474	Rec: Gate Valve	40	24OCT06	04JAN07				▲▼ Rec: Gate Valve		
UN47_00476	Rec: Valve	40	24OCT06	04JAN07				▲▼ Rec: Valve		
UN47_00478	Rec: Vacuum Gauge	40	24OCT06	04JAN07				▲▼ Rec: Vacuum Gauge		
UN47_00480	Rec: RGA	40	24OCT06	04JAN07				▲▼ Rec: RGA		
UN47_00482	Rec: Entrance Chamber Support	40	24OCT06	04JAN07				▲▼ Rec: Entrance Chamber Support		
UN47_00484	Rec: Chamber Mount	40	24OCT06	04JAN07				▲▼ Rec: Chamber Mount		
UN47_00486	Rec: Ion Pump Support	40	24OCT06	04JAN07				▲▼ Rec: Ion Pump Support		
UN47_00488	Rec: Gate Valve Support	40	24OCT06	04JAN07				▲▼ Rec: Gate Valve Support		
UN47_00490	Rec: RGA Support	40	24OCT06	04JAN07				▲▼ Rec: RGA Support		
UN47_00498	QA of Entrance Section Components	7	05JAN07	16JAN07				▲ QA of Entrance Section Components		
UN47_00499	Clean Ent Sec	10	17JAN07	30JAN07				▲ Clean Ent Sec		
UN47_00500	Bake Ent Sec	10	31JAN07	13FEB07				▲ Bake Ent Sec		
UN47_00510	Assemble Entrance Section Components	20	14FEB07	14MAR07				▲ Assemble Entrance Section Components		
UN47_00520	Assembly Test Ent Sec	2	15MAR07	16MAR07				▲ Assembly Test Ent Sec		
UN47_00530	Prepare Ent Sec Assembly & Support for Shipme	5	19MAR07	23MAR07				▲ Prepare Ent Sec Assembly & Support for Shipme		
UN47_00540	Pack Ent Sec Assembly & Support for Shipment	5	26MAR07	30MAR07				▲ Pack Ent Sec Assembly & Support for Shipment		
UN47_00550	Ship Ent Sec to Slac	0		30MAR07				◆ Ship Ent Sec to Slac		
UN47_00560	Transmit Ent Sec Design a& Drawings to SLAC	5	02APR07	06APR07				▲ Transmit Ent Sec Design a& Drawings to SLAC		
UN47_00570	Develop Installation Plan Ent Sec	6	02APR07	09APR07				▲ Develop Installation Plan Ent Sec		
UN47_00562	RFI: Entrance Section Assembly and Support	0		06APR07				◆ RFI: Entrance Section Assembly and Support		
UN47_00580	Review installation Plan Ent Sec	5	10APR07	16APR07				▲ Review installation Plan Ent Sec		
1.04.04.08 Exit Section Assembly										
UN48_00010	Specification Exit Sec	10	25JAN06	07FEB06				▲ Specification Exit Sec		
UN48_00020	Prelim Prototype Design Exit Sec	20	08FEB06	08MAR06				▲▼ Prelim Prototype Design Exit Sec		
UN48_00030	Mechanical Analysis Exit Sec	10	09MAR06	22MAR06				▲ Mechanical Analysis Exit Sec		
UN48_00040	Prelim Prototype Design Review Exit Sec	5	23MAR06	29MAR06				▲ Prelim Prototype Design Review Exit Sec		
UN48_00050	Final Exit Sec Design	10	30MAR06	12APR06				▲ Final Exit Sec Design		
UN48_00060	Design Complete Exit Sec	0		12APR06				◆ Design Complete Exit Sec		
UN48_00250	Bid Process Exit Sec	25	11SEP06*	13OCT06				▲▼ Bid Process Exit Sec		
UN48_00471	Rec: Pneumatic Gate Valve	1	19OCT06	19OCT06				▲▼ Rec: Pneumatic Gate Valve		
UN48_00460	Rec: Standard Exit Chamber	40	19OCT06	15DEC06				▲▼ Rec: Standard Exit Chamber		
UN48_00462	Rec: Exit Bellows	40	19OCT06	15DEC06				▲▼ Rec: Exit Bellows		

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN48_00463	Rec: Exit Downstream Chamber	40	19OCT06	15DEC06				▲▼ Rec: Exit Downstream Chamber		
UN48_00465	Rec: Exit Pump Manifold	40	19OCT06	15DEC06				▲▼ Rec: Exit Pump Manifold		
UN48_00466	Rec: Ion Pump	40	19OCT06	15DEC06				▲▼ Rec: Ion Pump		
UN48_00467	Rec: Turbo Pump	40	19OCT06	15DEC06				▲▼ Rec: Turbo Pump		
UN48_00469	Rec: Roughing Pump	40	19OCT06	15DEC06				▲▼ Rec: Roughing Pump		
UN48_00472	Rec: Gate Valve	40	19OCT06	15DEC06				▲▼ Rec: Gate Valve		
UN48_00473	Rec: Valve	40	19OCT06	15DEC06				▲▼ Rec: Valve		
UN48_00474	Rec: Vacuum Gauge	40	19OCT06	15DEC06				▲▼ Rec: Vacuum Gauge		
UN48_00475	Rec: RGA	40	19OCT06	15DEC06				▲▼ Rec: RGA		
UN48_00476	Rec: Standard Exit Chamber Support	40	19OCT06	15DEC06				▲▼ Rec: Standard Exit Chamber Support		
UN48_00478	Rec: Exit Downstream Chamber Support	40	19OCT06	15DEC06				▲▼ Rec: Exit Downstream Chamber Support		
UN48_00480	Rec: Ion Pump Support	40	19OCT06	15DEC06				▲▼ Rec: Ion Pump Support		
UN48_00481	Rec: Gate Valve Support	40	19OCT06	15DEC06				▲▼ Rec: Gate Valve Support		
UN48_00482	Rec: RGA Support	40	19OCT06	15DEC06				▲▼ Rec: RGA Support		
UN48_00488	QA of Exit Section Components	7	02JAN07	10JAN07				▲ QA of Exit Section Components		
UN48_00489	Approve Production Exit Sec	1	11JAN07	11JAN07				▲ Approve Production Exit Sec		
UN48_00490	Clean Exit Sec	8	12JAN07	24JAN07				▲ Clean Exit Sec		
UN48_00500	Bake Exit Sec	10	25JAN07	07FEB07				▲ Bake Exit Sec		
UN48_00510	Assemble Exit Section Components	20	08FEB07	09MAR07				▲ Assemble Exit Section Components		
UN48_00520	Assembly Test Exit Sec	13	12MAR07	29MAR07				▲ Assembly Test Exit Sec		
UN48_00530	Prepare Exit Sec Assembly & Support for Ship	5	30MAR07	06APR07				▲ Prepare Exit Sec Assembly & Support for Ship		
UN48_00540	Pack Exit Sec Assembly and Support for Shipmen	5	09APR07	16APR07				▲ Pack Exit Sec Assembly and Support for Shipmen		
UN48_00550	Ship Exit Sec to Slac	0		16APR07				◆ Ship Exit Sec to Slac		
UN48_00560	Transmit Exit Sec Design & Drawings to SLAC	5	17APR07	24APR07				▲ Transmit Exit Sec Design & Drawings to SLAC		
UN48_00570	Develop Exit Sec Installation Plan	8	17APR07	27APR07				▲ Develop Exit Sec Installation Plan		
UN48_00562	RFI: Exit Section Assembly and Support	0		24APR07				◆ RFI: Exit Section Assembly and Support		
UN48_00580	Review Exit Sec Installation Plan	5	30APR07	07MAY07				▲ Review Exit Sec Installation Plan		
1.04.04.09 Baking System										
UN49_00010	Specification of Baking Station (System)	10	22JUN05	06JUL05				▲ Specification of Baking Station (System)		
UN49_00020	Prelim Design of Baking Station	15	07JUL05	27JUL05				▲ Prelim Design of Baking Station		
UN49_00030	Prelim Baking Station Design Review	2	28JUL05	29JUL05				▲ Prelim Baking Station Design Review		
UN49_00040	Final Design of Baking Station	5	01AUG05	05AUG05				▲ Final Design of Baking Station		
UN49_00050	Design Complete Baking Station	0		05AUG05				◆ Design Complete Baking Station		
UN49_00060	Bid Package-Baking Station	3	08AUG05	10AUG05				▲ Bid Package-Baking Station		
UN49_00070	Bid Package-Heater	3	08AUG05	10AUG05				▲ Bid Package-Heater		
UN49_00080	Bid Package-Thermal Insulation	3	08AUG05	10AUG05				▲ Bid Package-Thermal Insulation		
UN49_00100	Bid Pkg: Roughing Pump Baking Station	3	08AUG05	10AUG05				▲ Bid Pkg: Roughing Pump Baking Station		

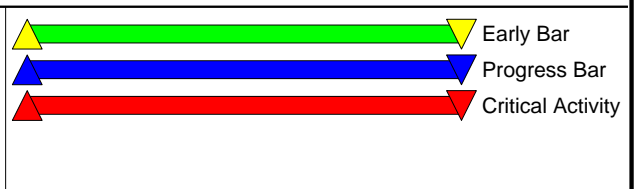
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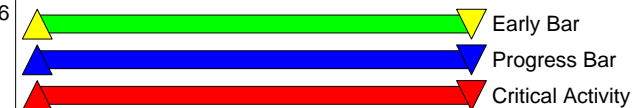
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN49_00110	Bid Package-Valves Baking Station	3	08AUG05	10AUG05			⚠ Bid Package-Valves Baking Station			
UN49_00120	Bid Pkg: Vacuum Gauge Baking Station	3	08AUG05	10AUG05			⚠ Bid Pkg: Vacuum Gauge Baking Station			
UN49_00090	Bid Pkg: Turbo Pump Baking Station	5	08AUG05	12AUG05			⚠ Bid Pkg: Turbo Pump Baking Station			
UN49_00140	Bid Pkg: RGA Baking Station	5	08AUG05	12AUG05			⚠ Bid Pkg: RGA Baking Station			
UN49_00150	Bid Process Baking Station	25	15AUG05	19SEP05			⚠ Bid Process Baking Station			
UN49_00151	Evaluate Bids: Baking Station	3	20SEP05	22SEP05			⚠ Evaluate Bids: Baking Station			
UN49_00260	Fabrication of Baking Components	20	06OCT05	02NOV05			⚠ Fabrication of Baking Components			
UN49_00270	Receive Baking Components	15	03NOV05	23NOV05			⚠ Receive Baking Components			
UN49_00280	QA of Baking Components	5	28NOV05	02DEC05			⚠ QA of Baking Components			
UN49_00290	Integration to Baking System	15	05DEC05	09JAN06			⚠ Integration to Baking System			
UN49_00300	Preform Bake System Testing	5	10JAN06	17JAN06			⚠ Preform Bake System Testing			
UN49_00310	Transmit Baking Sys Design & Drawings to SLAC	5	18JAN06*	24JAN06			⚠ Transmit Baking Sys Design & Drawings to SLAC			
UN49_00320	Complete Baking Sys	0		24JAN06			◆ Complete Baking Sys			
1.04.05 Diagnostics										
UNMS4_0500	Complete Fabrication of Wire Scanner Prototype	0		27APR05			◆ Complete Fabrication of Wire Scanner Prototype			
UNMS4_0505	Complete Fabrication of OTR Prototype	0		27APR05			◆ Complete Fabrication of OTR Prototype			
UNMS4_0510	Design of In Situ Diagnostics Test Station Compl	0		26MAY05			◆ Design of In Situ Diagnostics Test Station Compl			
UNMS4_0515	Prototype RFBPM Design Complete	0		12AUG05			◆ Prototype RFBPM Design Complete			
UNMS4_0520	In Situ Diag Test Station Ready for Installation	0		25AUG05			◆ In Situ Diag Test Station Ready for Installation			
UNMS4_0530	OTR Prototype Testing Complete	0		27MAR06			◆ OTR Prototype Testing Complete			
UNMS4_0525	Prototype RFBPM Fabrication Complete	0		04MAY06			◆ Prototype RFBPM Fabrication Complete			
UNMS4_0550	Prototype RFBPM Testing Complete	0		04MAY06			◆ Prototype RFBPM Testing Complete			
UNMS4_0535	Wire Scanner Prototype Testing Complete	0		23JUN06			◆ Wire Scanner Prototype Testing Complete			
UNMS4_0540	Diagnostics Prototype Testing Complete	0		25JUL06			◆ Diagnostics Prototype Testing Complete			
UNMS4_0545	OTR Final Production Design Complete	0		25JUL06			◆ OTR Final Production Design Complete			
UNMS4_0555	Wire Scanner Final Production Design Complete	0		23OCT06			◆ Wire Scanner Final Production Design Complete			
UNMS4_0575	RFBPMs Ready For Installation	0		20JUN07			◆ RFBPMs Ready For Installation			
UNMS4_0580	Intraundulator Diag Station Assemblies Complete	0		05OCT07			Intraundulator Diag Station Assemblies Complete◆			
1.04.05.02 Undulator Line Diagnostics (ULD)										
UN502_D124	Write eng spec for test station (Air)	20	03JAN05A	28FEB05A			⚠ Write eng spec for test station (Air)			
UN502_D148	Write engineering specification for OTR	3	01OCT04	05OCT04			⚠ Write engineering specification for OTR			
UN502_D149	Design in-vacuum OTR components	39	03JAN05*	28FEB05			⚠ Design in-vacuum OTR components			
UN502_D156	Design scanning mechanism	39	03JAN05*	28FEB05			⚠ Design scanning mechanism			
UN502_D157	Produce drawings for scanning mechanism	20	03JAN05*	28FEB05			⚠ Produce drawings for scanning mechanism			
UN502_D150	Produce drawings for in-vacuum OTR components	25	01MAR05	04APR05			⚠ Produce drawings for in-vacuum OTR components			
UN502_D165	Wire Breakage Analysis	25	01MAR05*	04APR05			⚠ Wire Breakage Analysis			
UN502_D134	Write specification of ULD test station (Vac)	34	01MAR05*	15APR05			⚠ Write specification of ULD test station (Vac)			



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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN502_D125	Design ULD test station (Air)	45	01MAR05*	02MAY05		▲▼ Design ULD test station (Air)				
UN502_D151	Produce bid package for OTR prototype	5	05APR05	11APR05		▲ Produce bid package for OTR prototype				
UN502_0300	Design Prototype Positioning Mechanism	20	06APR05*	04MAY05		▲▼ Design Prototype Positioning Mechanism				
UN502_D152	Collect OTR quotations	20	12APR05	09MAY05		▲▼ Collect OTR quotations				
UN502_D173	Wire Breakage Tests	45	18APR05*	20JUN05		▲▼ Wire Breakage Tests				
UN502_D179	Wire Sample Development	50	18APR05	27JUN05		▲▼ Wire Sample Development				
UN502_D135	Design ULD test station (Vac)	60	18APR05	12JUL05		▲▼ Design ULD test station (Vac)				
UN502_D126	Fabricate ULD frame and base (Air)	20	03MAY05	31MAY05		▲▼ Fabricate ULD frame and base (Air)				
UN502_D128	Procure ULD Laser Interferometer (Air)	40	03MAY05	28JUN05		▲▼ Procure ULD Laser Interferometer (Air)				
UN502_0310	Mechanical Analysis - ULD-PM	9	05MAY05	17MAY05		▲ Mechanical Analysis - ULD-PM				
UN502_D153	Purchase OTR components	5	10MAY05	16MAY05		▲ Purchase OTR components				
UN502_0170	Preliminary Vacuum Chamber Design	15	18MAY05	08JUN05		▲ Preliminary Vacuum Chamber Design				
UN502_0321	Procure Prototype Positioning Mechanism Parts	20	18MAY05	15JUN05		▲ Procure Prototype Positioning Mechanism Parts				
UN502_0320	Fabricate Prototype Positioning Mechanism	26	18MAY05	23JUN05		▲▼ Fabricate Prototype Positioning Mechanism				
UN502_D158	Design wire holder assembly WS	35	23MAY05	12JUL05		▲▼ Design wire holder assembly WS				
UN502_D154	OTR prototype parts arrive	0		24MAY05		◆ OTR prototype parts arrive				
UN502_D127	Procure ULD optical test stand (Air)	30	01JUN05	13JUL05		▲▼ Procure ULD optical test stand (Air)				
UN502_0171	Preliminary Vacuum Support Design	10	09JUN05	22JUN05		▲ Preliminary Vacuum Support Design				
UN502_D159	Produce drawings for wire holder assembly WS	15	14JUN05	05JUL05		▲ Produce drawings for wire holder assembly WS				
UN502_D160	Perform thermal and stress analysis on WS	15	21JUN05	12JUL05		▲ Perform thermal and stress analysis on WS				
UN502_0180	Mechanical Analysis - ULD -VC	6	23JUN05	30JUN05		▲ Mechanical Analysis - ULD -VC				
UN502_D180	Final Report	10	28JUN05	12JUL05		▲ Final Report				
UN502_0190	Design Review - ULD-VC	9	01JUL05	14JUL05		▲ Design Review - ULD-VC				
UN502_D161	Produce bid package for wire scanning prototype	10	13JUL05	26JUL05		▲ Produce bid package for wire scanning prototype				
UN502_D137	Fabricate ULD-TSV parts (Vac)	20	13JUL05	09AUG05		▲▼ Fabricate ULD-TSV parts (Vac)				
UN502_D138	Procure ULD test station controllers (Vac)	30	13JUL05	23AUG05		▲▼ Procure ULD test station controllers (Vac)				
UN502_D139	Procure ULD observation station (Vac)	30	13JUL05	23AUG05		▲▼ Procure ULD observation station (Vac)				
UN502_D136	Procure ULD test chamber (Vac)	40	13JUL05	07SEP05		▲▼ Procure ULD test chamber (Vac)				
UN502_D129	Write test plan (Air)	10	14JUL05	27JUL05		▲ Write test plan (Air)				
UN502_0201	Final Support Design - ULD-VC	10	15JUL05	28JUL05		▲ Final Support Design - ULD-VC				
UN502_0200	Final Chamber Design - ULD -VC	16	15JUL05	05AUG05		▲ Final Chamber Design - ULD -VC				
UN502_D162	Collect WS quotations	20	27JUL05	23AUG05		▲ Collect WS quotations				
UN502_D130	Assemble test station (Air)	15	28JUL05	17AUG05		▲ Assemble test station (Air)				
UN502_1400	Prelim Design ULD station	16	08AUG05	29AUG05		▲ Prelim Design ULD station				
UN502_0322	Assemble Prototype Positioning Mechanism	10	18AUG05	31AUG05		▲ Assemble Prototype Positioning Mechanism				
UN502_0642	Assemble Prototype ULD-OTR	10	18AUG05	31AUG05		▲ Assemble Prototype ULD-OTR				
UN502_D131	Assemble test w/SWA, OTR, Pos Mech (Air)	15	18AUG05	08SEP05		▲ Assemble test w/SWA, OTR, Pos Mech (Air)				

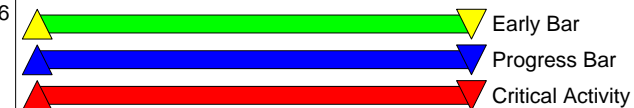
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN502_D163	Purchase write scanner components	5	24AUG05	30AUG05				⚠ Purchase write scanner components		
UN502_1410	Prelim Design ULD Packaging for Shipment	11	30AUG05	14SEP05				⚠ Prelim Design ULD Packaging for Shipment		
UN502_1420	Prelim Design ULD Supports	16	30AUG05	21SEP05				⚠ Prelim Design ULD Supports		
UN502_0330	Test Prototype Positioning Mechanism	5	01SEP05	09SEP05				⚠ Test Prototype Positioning Mechanism		
UN502_0650	Test Prototype LEBXPD-OTR	6	01SEP05	09SEP05				⚠ Test Prototype LEBXPD-OTR		
UN502_D140	Write test plan (Vac)	10	08SEP05	21SEP05				⚠ Write test plan (Vac)		
UN502_D132	Perform Testing (Air)	10	09SEP05	22SEP05				⚠ Perform Testing (Air)		
UN502_0340	Preliminary Positioning Mechanism Design	21	12SEP05	10OCT05				⚠ Preliminary Positioning Mechanism Design		
UN502_0660	Preliminary ULD-OTR Design	46	12SEP05	14NOV05				⚠ Preliminary ULD-OTR Design		
UN502_D146	Testing complete (Air)	0		22SEP05				◆ Testing complete (Air)		
UN502_1430	Design Review - ULD	8	22SEP05	03OCT05				⚠ Design Review - ULD		
UN502_D141	Assemble test station (Vac)	20	22SEP05	19OCT05				⚠ Assemble test station (Vac)		
UN502_1450	Final Design ULD Packaging for Shipment	6	04OCT05	11OCT05				⚠ Final Design ULD Packaging for Shipment		
UN502_1460	Final Design ULD Supports	13	04OCT05	20OCT05				⚠ Final Design ULD Supports		
UN502_1440	Final Design ULD station	16	04OCT05	25OCT05				⚠ Final Design ULD station		
UN502_0350	Design Review	9	11OCT05	21OCT05				⚠ Design Review		
UN502_D164	Wire scanner parts arrive	0		12OCT05				◆ Wire scanner parts arrive		
UN502_0482	Assemble Prototype SWA	10	13OCT05	26OCT05				⚠ Assemble Prototype SWA		
UN502_D142	Integrate controls (Vac)	10	20OCT05	02NOV05				⚠ Integrate controls (Vac)		
UN502_1650	Develop ULD Installation Plan	11	26OCT05	09NOV05				⚠ Develop ULD Installation Plan		
UN502_0490	Test Prototype SWA	9	27OCT05	08NOV05				⚠ Test Prototype SWA		
UN502_D143	Perform testing (Vac)	10	03NOV05	16NOV05				⚠ Perform testing (Vac)		
UN502_0500	Preliminary SWA Design	31	09NOV05	09JAN06				⚠ Preliminary SWA Design		
UN502_1660	Review ULD installation Plan	6	10NOV05	17NOV05				⚠ Review ULD installation Plan		
UN502_0670	Design Review - ULD-OTR	9	15NOV05	29NOV05				⚠ Design Review - ULD-OTR		
UN502_D144	Test measurements review meeting (Vac)	10	17NOV05	02DEC05				⚠ Test measurements review meeting (Vac)		
UN502_0360	Final Positioning Mechanism Design	16	17NOV05	12DEC05				⚠ Final Positioning Mechanism Design		
UN502_0680	Final ULD-OTR Design	21	30NOV05	12JAN06				⚠ Final ULD-OTR Design		
UN502_D145	Testing complete (Vac)	0		02DEC05				◆ Testing complete (Vac)		
UN502_0510	Design Review - SWA	8	10JAN06	20JAN06				⚠ Design Review - SWA		
UN502_0520	Final SWA Design	21	23JAN06	21FEB06				⚠ Final SWA Design		
UN502_0530	Procurement Bid Package - Motorized scanner	6	01AUG06*	08AUG06				⚠ Procurement Bid Package - Motorized scanner		
UN502_0540	Procurement Bid Package - Wire mounting rack	6	01AUG06*	08AUG06				⚠ Procurement Bid Package - Wire mounting rack		
UN502_0550	Procurement Bid Package - Photo electron detect	6	01AUG06*	08AUG06				⚠ Procurement Bid Package - Photo electron detect		
UN502_0560	Bid Process - Scanning Wire Assembly	25	09AUG06	13SEP06				⚠ Bid Process - Scanning Wire Assembly		
UN502_0370	Procurement Bid Package - Beam tube and spring	4	11SEP06*	14SEP06				⚠ Procurement Bid Package - Beam tube and spring		
UN502_0380	Procurement Bid Package - Main translation stag	4	11SEP06*	14SEP06				⚠ Procurement Bid Package - Main translation stag		



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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN502_1470	Prepare Bid Package - ULD	9	11SEP06*	21SEP06				▲▲▲ Prepare Bid Package - ULD		
UN502_0210	Procurement Bid Package -ULD Vacuum chamber	11	11SEP06*	25SEP06				▲▲▲ Procurement Bid Package -ULD Vacuum chamber		
UN502_0220	Procurement Bid Package -ULD Support stand	11	11SEP06*	25SEP06				▲▲▲ Procurement Bid Package -ULD Support stand		
UN502_0740	Bid Process - ULD-OTR	25	11SEP06*	13OCT06				▲▲▲ Bid Process - ULD-OTR		
UN502_0561	Evaluate SWA Bids	1	14SEP06	14SEP06				▲▲▲ Evaluate SWA Bids		
UN502_1480	Bid Process ULD	25	22SEP06	26OCT06				▲▲▲ Bid Process ULD		
UN502_0390	Bid Process	25	04OCT06	07NOV06				▲▲▲ Bid Process		
UN502_0610	Rec: Motorized Scanner (11)	40	04OCT06	30NOV06				▲▲▲ Rec: Motorized Scanner (11)		
UN502_0614	Rec: Wire Rack (11)	40	04OCT06	30NOV06				▲▲▲ Rec: Wire Rack (11)		
UN502_0618	Rec: Photo electron detector (11)	40	04OCT06	30NOV06				▲▲▲ Rec: Photo electron detector (11)		
UN502_0741	Evaluate Bids - ULD-OTR	1	16OCT06	16OCT06				▲▲▲ Evaluate Bids - ULD-OTR		
UN502_0810	Rec: Mirrors (11)	40	19OCT06	15DEC06				▲▲▲ Rec: Mirrors (11)		
UN502_0812	Rec: Motorized Shutter (upstream) (11)	40	19OCT06	15DEC06				▲▲▲ Rec: Motorized Shutter (upstream) (11)		
UN502_0814	Rec: Light transport/imaging optics (vac) (11)	40	19OCT06	15DEC06				▲▲▲ Rec: Light transport/imaging optics (vac) (11)		
UN502_0816	Rec: Motorized filter/aperture changer (11)	40	19OCT06	15DEC06				▲▲▲ Rec: Motorized filter/aperture changer (11)		
UN502_0818	Rec: Camera assembly and shielding (11)	40	19OCT06	15DEC06				▲▲▲ Rec: Camera assembly and shielding (11)		
UN502_1540	Receive ULD	40	31OCT06	11JAN07				▲▲▲ Receive ULD		
UN502_0391	Evaluate Bids	1	08NOV06	08NOV06				▲▲▲ Evaluate Bids		
UN502_0230	Bid Process - ULD-VC	25	13NOV06	03JAN07				▲▲▲ Bid Process - ULD-VC		
UN502_0820	QA ULD OTR	5	02JAN07	08JAN07				▲▲▲ QA ULD OTR		
UN502_0231	Evaluate Bids - ULD-VC	1	04JAN07	04JAN07				▲▲▲ Evaluate Bids - ULD-VC		
UN502_0830	AVAIL: ULD OTR	0		08JAN07				◆ AVAIL: ULD OTR		
UN502_1550	QA ULD	18	12JAN07	07FEB07				▲▲▲ QA ULD		
UN502_0430	Rec: Beam Tube and Spring Contact (11)	30	26JAN07	09MAR07				▲▲▲ Rec: Beam Tube and Spring Contact (11)		
UN502_0434	Rec: Main translation stage (11)	30	26JAN07	09MAR07				▲▲▲ Rec: Main translation stage (11)		
UN502_1560	Approve ULD	1	08FEB07	08FEB07				▲▲▲ Approve ULD		
UN502_0440	QA ULD Positioning Mechanism	5	12MAR07	16MAR07				▲▲▲ QA ULD Positioning Mechanism		
UN502_0270	Rec: ULD Vacuum Chamber (11)	40	13MAR07	07MAY07				▲▲▲ Rec: ULD Vacuum Chamber (11)		
UN502_0274	Rec: ULD Support Stand (11)	40	13MAR07	07MAY07				▲▲▲ Rec: ULD Support Stand (11)		
UN502_0450	AVAIL: ULD Positioning Mechanism	0		16MAR07				◆ AVAIL: ULD Positioning Mechanism		
UN502_0280	QA ULD Vacuum Chamber	5	08MAY07	14MAY07				▲▲▲ QA ULD Vacuum Chamber		
UN502_0290	AVAIL: ULD Vacuum Chamber	0		14MAY07				◆ AVAIL: ULD Vacuum Chamber		
UN502_1570	Organize Parts for Assembly - ULD	5	15MAY07	21MAY07				▲▲▲ Organize Parts for Assembly - ULD		
UN502_1580	Assemble ULD Package	25	22MAY07	26JUN07				▲▲▲ Assemble ULD Package		
UN502_1590	Integrate Controls into ULD	15	27JUN07	18JUL07				▲▲▲ Integrate Controls into ULD		
UN502_1610	Assemble ULD into Shipping Package	10	19JUL07	01AUG07				▲▲▲ Assemble ULD into Shipping Package		
UN502_1620	Write Shipping Paper Work - ULD	2	02AUG07	03AUG07				▲▲▲ Write Shipping Paper Work - ULD		



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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN502_1640	Transmit ULD Engineering Data to Slac	5	02AUG07	08AUG07						▲ Transmit ULD Engineering Data to Slac
UN502_1630	Ship ULD to SLAC	0		03AUG07						◆ Ship ULD to SLAC
UN502_1661	RFI: ULD	0		08AUG07						◆ RFI: ULD
1.04.05.04 End-of-Undulator(EOU) X-ray and Profile diagnost										
UN504_0080	BLM Prototype Specification	15	23SEP05	14OCT05						▲ BLM Prototype Specification
UN504_1260	PD: EOU Major Assembly Design	30	05OCT05	16NOV05						▲▼ PD: EOU Major Assembly Design
UN504_0010	Specification EOU	44	05OCT05	07DEC05						▲▼ Specification EOU
UN504_0090	BLM Prototype Design	25	17OCT05	21NOV05						▲▼ BLM Prototype Design
UN504_1270	PD: EOU Shipping Containers	5	17NOV05	28NOV05						▲ PD: EOU Shipping Containers
UN504_1280	PD: EOU Supports	12	17NOV05	07DEC05						▲ PD: EOU Supports
UN504_0100	BLM Prototype Fabrication	25	22NOV05	13JAN06						▲▼ BLM Prototype Fabrication
UN504_1290	EOU Design Review	7	08DEC05	03JAN06						▲ EOU Design Review
UN504_0470	EOU-OTR Prototype Specification	10	08DEC05	06JAN06						▲ EOU-OTR Prototype Specification
UN504_0700	EOU-XRM Prototype Specification	10	08DEC05	06JAN06						▲ EOU-XRM Prototype Specification
UN504_0015	Design test Fixtures	15	08DEC05	13JAN06						▲▼ Design test Fixtures
UN504_0017	Design Test Device	15	08DEC05	13JAN06						▲▼ Design Test Device
UN504_0300	Upstream corrector / separator Specification	15	08DEC05	13JAN06						▲▼ Upstream corrector / separator Specification
UN504_0950	EOU-XRID Prototype Specification	15	08DEC05	13JAN06						▲▼ EOU-XRID Prototype Specification
UN504_1330	EOU Design Complete	0		03JAN06						◆ EOU Design Complete
UN504_1340	Prepare EOU Bid Package	5	04JAN06	11JAN06						▲ Prepare EOU Bid Package
UN504_1520	Develop Installation Plan	13	04JAN06	24JAN06						▲ Develop Installation Plan
UN504_0480	EOU-OTR Prototype Design	30	09JAN06	21FEB06						▲▼ EOU-OTR Prototype Design
UN504_1350	EOU Bid Process	25	12JAN06	17FEB06						▲▼ EOU Bid Process
UN504_0030	EOU Test Device Fabrication	20	17JAN06	14FEB06						▲▼ EOU Test Device Fabrication
UN504_0110	Procurement Bid Package -Streak Camera Station	20	17JAN06	14FEB06						▲▼ Procurement Bid Package -Streak Camera Station
UN504_0020	Procure and Fabrication test Fixtures	25	17JAN06	22FEB06						▲▼ Procure and Fabrication test Fixtures
UN504_1530	Review installation Plan	5	25JAN06	01FEB06						▲ Review installation Plan
UN504_0040	Define EOU Device Testing Facility	8	15FEB06	28FEB06						▲ Define EOU Device Testing Facility
UN504_0485	EOU-OTR Prototype Design Review	1	22FEB06	22FEB06						▲ EOU-OTR Prototype Design Review
UN504_0310	Upstream corrector / separator Design	25	22FEB06	29MAR06						▲▼ Upstream corrector / separator Design
UN504_0490	EOU-OTR Prototype Fabrication	25	23FEB06	30MAR06						▲▼ EOU-OTR Prototype Fabrication
UN504_1410	Receive EOU Package	7	27FEB06	08MAR06						▲ Receive EOU Package
UN504_0050	Assemble Test Equipment and Station	10	01MAR06	15MAR06						▲ Assemble Test Equipment and Station
UN504_1420	QA EOU Package	15	09MAR06	30MAR06						▲ QA EOU Package
UN504_0060	Integrate Controls into Test station	10	16MAR06	30MAR06						▲ Integrate Controls into Test station
UN504_0320	Upstream corrector / separator Prototype Fabri	25	30MAR06	04MAY06						▲▼ Upstream corrector / separator Prototype Fabri
UN504_0710	EOU-XRM Prototype Design	35	30MAR06	18MAY06						▲▼ EOU-XRM Prototype Design

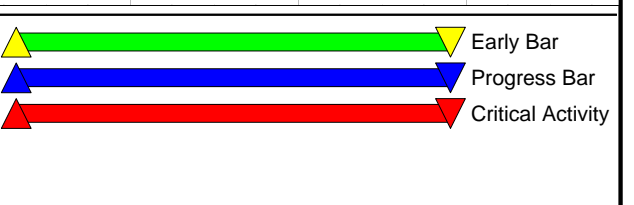
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN504_1430	Approve EOU Package	3	31MAR06	05APR06			⚠ Approve EOU Package			
UN504_0140	BLM Prototype Testing	8	31MAR06	12APR06			⚠ BLM Prototype Testing			
UN504_0500	EOU-OTR Prototype Testing	10	31MAR06	14APR06			⚠ EOU-OTR Prototype Testing			
UN504_1440	Organize Parts for Assembly	5	06APR06	13APR06			⚠ Organize Parts for Assembly			
UN504_0150	Review of PRT BLM Testing	8	13APR06	25APR06			⚠ Review of PRT BLM Testing			
UN504_0510	Review of Testing	8	17APR06	27APR06			⚠ Review of Testing			
UN504_0330	Upstream corrector / separator Prototype Testi	10	05MAY06	19MAY06			⚠ Upstream corrector / separator Prototype Testi			
UN504_0960	EOU-XRID Prototype Design	25	19MAY06	26JUN06			⚠ EOU-XRID Prototype Design			
UN504_0720	EOU-XRM Prototype Fabrication	30	19MAY06	03JUL06			⚠ EOU-XRM Prototype Fabrication			
UN504_0340	Review of Testing	5	22MAY06	30MAY06			⚠ Review of Testing			
UN504_0380	Procurement Bid Package -3 mrad kicker	8	31MAY06	12JUN06			⚠ Procurement Bid Package -3 mrad kicker			
UN504_0390	Procurement Bid Package -Kicker power supply	10	31MAY06	14JUN06			⚠ Procurement Bid Package -Kicker power supply			
UN504_0400	Bid Process	25	15JUN06	21JUL06			⚠ Bid Process			
UN504_0970	EOU-XRID Prototype Fabrication	30	27JUN06	09AUG06			⚠ EOU-XRID Prototype Fabrication			
UN504_0730	EOU-XRM Prototype Testing	12	05JUL06	21JUL06			⚠ EOU-XRM Prototype Testing			
UN504_0740	Review of Testing	8	24JUL06	03AUG06			⚠ Review of Testing			
UN504_0580	Procurement Bid Package -Support Table	4	26JUL06	01AUG06			⚠ Procurement Bid Package -Support Table			
UN504_0550	Procurement Bid Package -Translation Assembly	5	26JUL06	02AUG06			⚠ Procurement Bid Package -Translation Assembly			
UN504_0560	Procurement Bid Package -Optical parts	5	26JUL06	02AUG06			⚠ Procurement Bid Package -Optical parts			
UN504_0570	Procurement Bid Package -Vacuum Vessel	5	26JUL06	02AUG06			⚠ Procurement Bid Package -Vacuum Vessel			
UN504_0590	Procurement Bid Package -Hardware	10	26JUL06	09AUG06			⚠ Procurement Bid Package -Hardware			
UN504_0440	Receive Packages	40	28JUL06	25SEP06			⚠ Receive Packages			
UN504_0780	Procurement Bid Package -Translation Assembly	5	04AUG06	11AUG06			⚠ Procurement Bid Package -Translation Assembly			
UN504_0790	Procurement Bid Package -Rotary Assembly	7	04AUG06	15AUG06			⚠ Procurement Bid Package -Rotary Assembly			
UN504_0800	Procurement Bid Package -X-Ray Optics	7	04AUG06	15AUG06			⚠ Procurement Bid Package -X-Ray Optics			
UN504_0810	Procurement Bid Package -Detector & Visible Op	7	04AUG06	15AUG06			⚠ Procurement Bid Package -Detector & Visible Op			
UN504_0820	Procurement Bid Package -Vacuum Vessel	8	04AUG06	16AUG06			⚠ Procurement Bid Package -Vacuum Vessel			
UN504_0980	EOU-XRID Prototype Testing	13	10AUG06	29AUG06			⚠ EOU-XRID Prototype Testing			
UN504_0600	Bid Process	30	10AUG06	22SEP06			⚠ Bid Process			
UN504_0830	Procurement Bid Package -Support Table & H/W	6	17AUG06	24AUG06			⚠ Procurement Bid Package -Support Table & H/W			
UN504_0840	Bid Process	25	25AUG06	02OCT06			⚠ Bid Process			
UN504_0990	Review of Testing	8	30AUG06	12SEP06			⚠ Review of Testing			
UN504_0210	Procurement Bid Package -Misc Parts & Vac Chmbr	5	11SEP06*	18SEP06			⚠ Procurement Bid Package -Misc Parts & Vac Chmbr			
UN504_0200	Procurement Bid Package -Timing System	10	11SEP06*	25SEP06			⚠ Procurement Bid Package -Timing System			
UN504_0070	Prototype Testing Complete	0		12SEP06			◆ Prototype Testing Complete			
UN504_1030	Procurement Bid Package of Ion / electron gun	5	13SEP06	20SEP06			⚠ Procurement Bid Package of Ion / electron gun			
UN504_1050	Procurement Bid Package of Ion/electron detect	5	13SEP06	20SEP06			⚠ Procurement Bid Package of Ion/electron detect			

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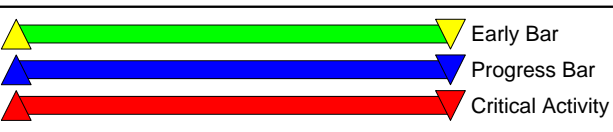
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN504_1040	Procurement Bid Pkg of Ion/electron accel/optics	8	13SEP06	25SEP06				▲▼ Procurement Bid Pkg of Ion/electron accel/optics		
UN504_1060	Procurement Bid Package of Vacuum vessel	10	13SEP06	27SEP06				▲▼ Procurement Bid Package of Vacuum vessel		
UN504_0190	Procurement Bid Package -Electro Optics Measur	3	14SEP06*	19SEP06				▲▼ Procurement Bid Package -Electro Optics Measur		
UN504_0450	QA Upstream Corrector/Separator	5	26SEP06	02OCT06				▲▼ QA Upstream Corrector/Separator		
UN504_0220	Procurement Bid Process - BLM	25	26SEP06	31OCT06				▲▼ Procurement Bid Process - BLM		
UN504_1070	Procurement Bid Package of Translation stage	39	28SEP06	22NOV06				▲▼ Procurement Bid Package of Translation stage		
UN504_0460	AVAIL: Upstream Corrector/Separator	0		02OCT06				◆ AVAIL: Upstream Corrector/Separator		
UN504_0920	Receive Packages	40	09OCT06	06DEC06				▲▼ Receive Packages		
UN504_0670	Receive Packages	50	09OCT06	04JAN07				▲▼ Receive Packages		
UN504_0116	Evaluate Bids - Streak Camera Station	5	01NOV06	07NOV06				▲▼ Evaluate Bids - Streak Camera Station		
UN504_0225	Evaluate Bids - BLM	5	01NOV06	07NOV06				▲▼ Evaluate Bids - BLM		
UN504_0270	Receive Packages	50	16NOV06	13FEB07				▲▼ Receive Packages		
UN504_1080	Procurement Bid Package of Support Table & H/W	39	27NOV06	07FEB07	Procurement Bid Package of Support Table & H/W					
UN504_0930	QA EOU XRM Assembly	5	07DEC06	13DEC06				▲▼ QA EOU XRM Assembly		
UN504_0940	AVAIL: EOU XRM Assembly	0		13DEC06				◆ AVAIL: EOU XRM Assembly		
UN504_0680	QA EOU ODR Assembly	5	05JAN07	11JAN07				▲▼ QA EOU ODR Assembly		
UN504_0690	AVAIL: EOU ODR Assembly	0		11JAN07				◆ AVAIL: EOU ODR Assembly		
UN504_1090	Bid Process	25	08FEB07	16MAR07				▲▼ Bid Process		
UN504_0280	QA BLM	5	14FEB07	21FEB07				▲▼ QA BLM		
UN504_0290	AVAIL: BLM	0		21FEB07				◆ AVAIL: BLM		
UN504_1170	Receive Packages	50	26MAR07	05JUN07				▲▼ Receive Packages		
UN504_1180	QA EOU XRID Assembly	5	06JUN07	12JUN07				▲▼ QA EOU XRID Assembly		
UN504_1190	AVAIL: EOU XRID Assembly	0		12JUN07				◆ AVAIL: EOU XRID Assembly		
UN504_1450	Assemble EOU Package	20	13JUN07	12JUL07				▲▼ Assemble EOU Package		
UN504_1460	Integrate Controls onto Assembly	18	13JUL07	08AUG07				▲▼ Integrate Controls onto Assembly		
UN504_1470	Validation Testing of EOU	10	09AUG07	23AUG07				▲▼ Validation Testing of EOU		
UN504_1480	Pack EOU for Shipping	8	24AUG07	06SEP07				▲▼ Pack EOU for Shipping		
UN504_1490	Write Shipping Paper Work - EOU	3	07SEP07	12SEP07				▲▼ Write Shipping Paper Work - EOU		
UN504_1510	Transmit Engineering Data to SLAC	5	07SEP07	14SEP07				▲▼ Transmit Engineering Data to SLAC		
UN504_1500	Ship to SLAC	0		12SEP07				◆ Ship to SLAC		
1.04.05.05 RFBPM										
UN505_0010	Specification and Requirements RFBPM	10	02MAY05*	13MAY05				▲▼ Specification and Requirements RFBPM		
UN505_0020	Design RFBPM Test Device	25	11JUL05	12AUG05				▲▼ Design RFBPM Test Device		
UN505_0030	Locate Suitable Facility	15	15AUG05	02SEP05				▲▼ Locate Suitable Facility		
UN505_0040	Build Test Device (3)	105	15AUG05	27JAN06				▲▼ Build Test Device (3)		
UN505_0050	Assemble RFBPM	5	30JAN06	03FEB06				▲▼ Assemble RFBPM		
UN505_0060	Integrate RFBPM	5	06FEB06	10FEB06				▲▼ Integrate RFBPM		

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN505_0070	RFBPM Device Testing	40	13FEB06	10APR06			RFBPM Device Testing			
UN505_0080	RFBPM Prototype Testing Complete	0		10APR06			RFBPM Prototype Testing Complete			
UN505_0090	RFBPM Preliminary Design	15	11APR06	01MAY06			RFBPM Preliminary Design			
UN505_0100	RFBPM Design Review	5	02MAY06	08MAY06			RFBPM Design Review			
UN505_0110	RFBPM Final Design	10	09MAY06	22MAY06			RFBPM Final Design			
UN505_0120	RFBPM Design Complete	0		22MAY06			RFBPM Design Complete			
UN505_0150	Prepare Bid of RF Cabling	2	23MAY06	24MAY06			Prepare Bid of RF Cabling			
UN505_0130	Prepare Bid of Copper Body Brazement	5	23MAY06	30MAY06			Prepare Bid of Copper Body Brazement			
UN505_0140	Prepare Bid of Support & Alignment Mechanism	10	23MAY06	06JUN06			Prepare Bid of Support & Alignment Mechanism			
UN505_0160	Bid Process - RFBPM	2	07JUN06	08JUN06			Bid Process - RFBPM			
UN505_0390	Evaluate Bids - RFBPM	1	09JUN06	09JUN06			Evaluate Bids - RFBPM			
UN505_0216	Rec: 1st Art.Support & Alignment Mechanism	25	15JUN06	20JUL06			Rec: 1st Art.Support & Alignment Mechanism			
UN505_0212	Rec: Support & Alignment Mechanism (34)	60	15JUN06	08SEP06			Rec: Support & Alignment Mechanism (34)			
UN505_0214	Rec: RF Cabling (35)	60	15JUN06	08SEP06			Rec: RF Cabling (35)			
UN505_0209	Rec: 1st Article Copper Body Brazement	100	15JUN06	03NOV06			Rec: 1st Article Copper Body Brazement			
UN505_0217	QA: 1st Articles Copper Body Brazement/Supt	2	06NOV06	07NOV06			QA: 1st Articles Copper Body Brazement/Supt			
UN505_0218	Approve: 1st Articles Copper Body Brazement/Supt	2	08NOV06	09NOV06			Approve: 1st Articles Copper Body Brazement/Supt			
UN505_0210	Rec: Copper Body Brazement (34)	20	10NOV06	11DEC06			Rec: Copper Body Brazement (34)			
UN505_0220	QA Production Lot	15	12DEC06	17JAN07			QA Production Lot			
UN505_0230	Approve Production Lot	2	18JAN07	19JAN07			Approve Production Lot			
UN505_0240	Pack RFBPM for Shipping	5	22JAN07	26JAN07			Pack RFBPM for Shipping			
UN505_0250	Write Shipping Paper Work-RFBPM	2	29JAN07	30JAN07			Write Shipping Paper Work-RFBPM			
UN505_0260	Transmit Engineering Data to SLAC-RFBPM	5	29JAN07	02FEB07			Transmit Engineering Data to SLAC-RFBPM			
UN505_0270	Develop Installation Plan-RFBPM	10	05FEB07	16FEB07			Develop Installation Plan-RFBPM			
UN505_0280	Review installation Plan-RFBPM	2	20FEB07	21FEB07			Review installation Plan-RFBPM			
UN505_0281	RFI: RFBPM	0		21FEB07			RFI: RFBPM			
1.04.05.07 Charge Monitor (CM)										
UN507_0010	Specification and Requirements - CM	10	30NOV05	13DEC05			Specification and Requirements - CM			
UN507_0040	Preliminary Design - CM	15	14DEC05	19JAN06			Preliminary Design - CM			
UN507_0020	Specification and Requirements - Cable	10	14DEC05	20JAN06			Specification and Requirements - Cable			
UN507_0050	Design Review - CM	5	20JAN06	26JAN06			Design Review - CM			
UN507_0030	Purchase Cable	30	23JAN06	06MAR06			Purchase Cable			
UN507_0060	Final Design - CM	15	27JAN06	16FEB06			Final Design - CM			
UN507_0070	Design Complete - CM	0		16FEB06			Design Complete - CM			
UN507_0080	Prepare Bid of Charge Monitor Package	5	17FEB06	24FEB06			Prepare Bid of Charge Monitor Package			
UN507_0180	Develop Installation Plan	13	17FEB06	08MAR06			Develop Installation Plan			
UN507_0090	Bid Process - CM	25	27FEB06	31MAR06			Bid Process - CM			

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UN507_0190	Review installation Plan	7	09MAR06	17MAR06			Review installation Plan				
UN507_0120	Rec: Charge Monitor Package (2)	30	09OCT06	17NOV06			Rec: Charge Monitor Package (2)				
UN507_0130	QA Production Lot	10	20NOV06	05DEC06			QA Production Lot				
UN507_0140	Approve Production Lot	2	06DEC06	08DEC06			Approve Production Lot				
UN507_0141	Assemble Charge Monitor	3	11DEC06	13DEC06			Assemble Charge Monitor				
UN507_0142	Clean Charge Monitor	2	14DEC06	15DEC06			Clean Charge Monitor				
UN507_0143	Leak Check Charge Monitor	2	02JAN07	03JAN07			Leak Check Charge Monitor				
UN507_0144	Test Charge Monitor	2	04JAN07	05JAN07			Test Charge Monitor				
UN507_0150	Pack Charge Monitor for Shipping	7	08JAN07	18JAN07			Pack Charge Monitor for Shipping				
UN507_0160	Write Shipping Paper Work	5	19JAN07	26JAN07			Write Shipping Paper Work				
UN507_0170	Transmit Engineering Data to Slac	5	19JAN07	26JAN07			Transmit Engineering Data to Slac				
UN507_0280	RFI - Charge Monitor	1	29JAN07	29JAN07			RFI - Charge Monitor				
1.04.05.08 Cherenkov Detector											
UN508_0010	Specification and Requirements - Ch-D	10	19SEP05	30SEP05			Specification and Requirements - Ch-D				
UN508_0020	Preliminary Design - Ch-D	40	03OCT05	29NOV05			Preliminary Design - Ch-D				
UN508_0030	Design Review - Ch-D	5	30NOV05	06DEC05			Design Review - Ch-D				
UN508_0170	Develop Installation Plan - Ch-D	10	07DEC05	04JAN06			Develop Installation Plan - Ch-D				
UN508_0040	Final Design - Ch-D	30	07DEC05	02FEB06			Final Design - Ch-D				
UN508_0180	Review installation Plan - Ch-D	8	05JAN06	17JAN06			Review installation Plan - Ch-D				
UN508_0050	Design Complete - Ch-D	0		02FEB06			Design Complete - Ch-D				
UN508_0060	Prepare Bid of Cherenkov Detector Package	8	11SEP06*	20SEP06			Prepare Bid of Cherenkov Detector Package				
UN508_0070	Bid Process - Ch-D	25	21SEP06	25OCT06			Bid Process - Ch-D				
UN508_0072	Evaluate Bids - Ch-D	3	26OCT06	30OCT06			Evaluate Bids - Ch-D				
UN508_0160	Transmit Engineering Data to Slac-Ch-D	5	07NOV06	13NOV06			Transmit Engineering Data to Slac-Ch-D				
UN508_0182	RFI: Cherenkov Detector	0		13NOV06			RFI: Cherenkov Detector				
UN508_0095	Rec: 1st Article Cherenkov Detector	1	14NOV06	14NOV06			Rec: 1st Article Cherenkov Detector				
UN508_0100	Rec: Cherenkov Detector (34)	75	14NOV06	19MAR07			Rec: Cherenkov Detector (34)				
UN508_0096	QA: 1st Article Cherenkov Detector	1	15NOV06	15NOV06			QA: 1st Article Cherenkov Detector				
UN508_0097	Approve: 1st Article Cherenkov Detector	1	16NOV06	16NOV06			Approve: 1st Article Cherenkov Detector				
UN508_0110	QA Production Lot - Ch-D	10	20MAR07	02APR07			QA Production Lot - Ch-D				
UN508_0120	Approve Production Lot-Ch-D	2	03APR07	04APR07			Approve Production Lot-Ch-D				
UN508_0130	Pack Cherenkov Detector for Shipping	5	05APR07	11APR07			Pack Cherenkov Detector for Shipping				
UN508_0140	Write Shipping Paper Work-Ch-D	5	12APR07	18APR07			Write Shipping Paper Work-Ch-D				
UN508_0150	Ship to SLAC-Ch-D	0		18APR07			Ship to SLAC-Ch-D				
1.04.05.09 Radiation Detection Monitor (RDM)											
UN509_0010	Specification and Requirements - RDM	10	28JUL05	11AUG05			Specification and Requirements - RDM				
UN509_0090	Preliminary Design - RDM	25	12AUG05	16SEP05			Preliminary Design - RDM				

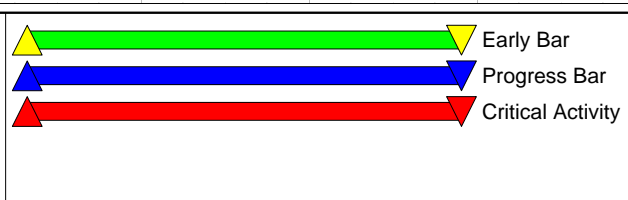
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UN509_0100	Design Review - RDM	5	19SEP05	23SEP05			⚠ Design Review - RDM				
UN509_0110	Final Design - RDM	20	26SEP05	21OCT05			⚠ Final Design - RDM				
UN509_0120	Design Complete - RDM	0		21OCT05			◆ Design Complete - RDM				
UN509_0240	Develop Installation Plan - RDM	15	24OCT05	11NOV05			⚠ Develop Installation Plan - RDM				
UN509_0250	Review installation Plan - RDM	5	14NOV05	18NOV05			⚠ Review installation Plan - RDM				
UN509_0130	Prepare Bid of RDM Package	10	11SEP06*	22SEP06				⚠ Prepare Bid of RDM Package			
UN509_0140	Bid Process - RDM	30	25SEP06	03NOV06				⚠ Bid Process - RDM			
UN509_0141	Evaluate Bid - RDM	3	06NOV06	08NOV06				⚠ Evaluate Bid - RDM			
UN509_0170	Receive - RDM (1)	30	16NOV06	16JAN07				⚠ Receive - RDM (1)			
UN509_0180	QA - RDM	10	17JAN07	30JAN07				⚠ QA - RDM			
UN509_0190	Approve - RDM	3	31JAN07	02FEB07				⚠ Approve - RDM			
UN509_0200	Pack RDM for Shipping	10	05FEB07	16FEB07				⚠ Pack RDM for Shipping			
UN509_0210	Write Shipping Paper Work - RDM	5	20FEB07	26FEB07				⚠ Write Shipping Paper Work - RDM			
UN509_0230	Transmit Engineering Data to Slac - RDM	5	20FEB07	26FEB07				⚠ Transmit Engineering Data to Slac - RDM			
UN509_0220	Ship RDM to SLAC	0		26FEB07				◆ Ship RDM to SLAC			
UN509_0232	RFI: Radiation Detection Monitor	0		26FEB07				◆ RFI: Radiation Detection Monitor			
1.04.05.11 Supplemental Shielding											
UN511_0010	Specification and Requirements - Sup S	10	03FEB06	17FEB06				⚠ Specification and Requirements - Sup S			
UN511_0020	Preliminary Design - Sup S	40	21FEB06	18APR06				⚠ Preliminary Design - Sup S			
UN511_0030	Design Review - Sup S	5	17OCT06	24OCT06				⚠ Design Review - Sup S			
UN511_0040	Final Design - Sup S	18	25OCT06	20NOV06				⚠ Final Design - Sup S			
UN511_0050	Design Complete - Sup S	0		20NOV06				◆ Design Complete - Sup S			
UN511_0190	Develop Installation Plan - Sup S	20	21NOV06	05JAN07				⚠ Develop Installation Plan - Sup S			
UN511_0200	Review installation Plan - Sup S	5	08JAN07	16JAN07				⚠ Review installation Plan - Sup S			
UN511_0205	RFI Supplemental Shielding	0		16JAN07				◆ RFI Supplemental Shielding			
UN511_0060	Prepare Bid of Misc Shielding	10	05FEB07	20FEB07				⚠ Prepare Bid of Misc Shielding			
UN511_0070	Prepare Bid of Shielding Supports	8	21FEB07	05MAR07				⚠ Prepare Bid of Shielding Supports			
UN511_0080	Bid Process - Sup S	25	06MAR07	10APR07				⚠ Bid Process - Sup S			
UN511_0120	Receive Production Lot - Sup S	30	19APR07	01JUN07				⚠ Receive Production Lot - Sup S			
UN511_0130	QA Production Lot - Sup S	10	04JUN07	18JUN07				⚠ QA Production Lot - Sup S			
UN511_0140	Approve Production Lot - Sup S	2	19JUN07	21JUN07				⚠ Approve Production Lot - Sup S			
UN511_0150	Pack Supplemental Shielding for Shipping-Sup	10	22JUN07	09JUL07				⚠ Pack Supplemental Shielding for Shipping-Sup			
UN511_0180	Transmit Engineering Data to Slac - Sup S	5	10JUL07	17JUL07				⚠ Transmit Engineering Data to Slac - Sup S			
UN511_0160	Write Shipping Paper Work - Sup S	10	10JUL07	24JUL07				⚠ Write Shipping Paper Work - Sup S			
UN511_0182	RFI: Supplemental Shielding	0		17JUL07				◆ RFI: Supplemental Shielding			
UN511_0170	Ship to SLAC - Sup S	0		24JUL07				◆ Ship to SLAC - Sup S			

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▶ Early Bar
▶ Progress Bar
▶ Critical Activity

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
1.04.06 Undulator System Installation and Alignment										
1.04.06.01 Undulator System Installation and Alignment Inte										
UN601_0755	Set Up Girder	1	08JUN06	08JUN06			⚠Set Up Girder			
UN601_0760	Mount Adjustable Feet	1	08JUN06	08JUN06			⚠Mount Adjustable Feet			
UN601_0750	GIRDER #1 SUMMARY	7*	08JUN06	16JUN06			⚠GIRDER #1 SUMMARY			
UN601_0740	ASSY & PREALIGN GRANITE GIRDERS SUMMARY	63*	08JUN06	06SEP06			⚠ASSY & PREALIGN GRANITE GIRDERS SUMMARY			
UN601_0765	Mount Mechanical Adjustment System	1	09JUN06	09JUN06			⚠Mount Mechanical Adjustment System			
UN601_0770	Mount CAM Movers	1	12JUN06	12JUN06			⚠Mount CAM Movers			
UN601_0775	Mount Temp Acq Sys Components	1	12JUN06	12JUN06			⚠Mount Temp Acq Sys Components			
UN601_0780	HLS Pipe Installation & Welding	1	13JUN06	13JUN06			⚠HLS Pipe Installation & Welding			
UN601_0785	Align Support Girder wrt Feet	2	14JUN06	15JUN06			⚠Align Support Girder wrt Feet			
UN601_0805	Set Up Girder	1	15JUN06	15JUN06			⚠Set Up Girder			
UN601_0810	Mount Adjustable Feet	1	15JUN06	15JUN06			⚠Mount Adjustable Feet			
UN601_0800	GIRDER #2 SUMMARY	7*	15JUN06	23JUN06			⚠GIRDER #2 SUMMARY			
UN601_0790	Attach Insulation	1	16JUN06	16JUN06			⚠Attach Insulation			
UN601_0795	Girder #1 RFI	0		16JUN06			◆Girder #1 RFI			
UN601_0815	Mount Mechanical Adjustment System	1	16JUN06	16JUN06			⚠Mount Mechanical Adjustment System			
UN601_0820	Mount CAM Movers	1	19JUN06	19JUN06			⚠Mount CAM Movers			
UN601_0825	Mount Temp Acq Sys Components	1	19JUN06	19JUN06			⚠Mount Temp Acq Sys Components			
UN601_0830	HLS Pipe Installation & Welding	1	20JUN06	20JUN06			⚠HLS Pipe Installation & Welding			
UN601_0835	Align Support Girder wrt Feet	2	21JUN06	22JUN06			⚠Align Support Girder wrt Feet			
UN601_0855	Set Up Girder	1	22JUN06	22JUN06			⚠Set Up Girder			
UN601_0860	Mount Adjustable Feet	1	22JUN06	22JUN06			⚠Mount Adjustable Feet			
UN601_0850	GIRDER #3 SUMMARY	7*	22JUN06	30JUN06			⚠GIRDER #3 SUMMARY			
UN601_0840	Attach Insulation	1	23JUN06	23JUN06			⚠Attach Insulation			
UN601_0845	Girder #2 RFI	0		23JUN06			◆Girder #2 RFI			
UN601_0865	Mount Mechanical Adjustment System	1	23JUN06	23JUN06			⚠Mount Mechanical Adjustment System			
UN601_0870	Mount CAM Movers	1	26JUN06	26JUN06			⚠Mount CAM Movers			
UN601_0875	Mount Temp Acq Sys Components	1	26JUN06	26JUN06			⚠Mount Temp Acq Sys Components			
UN601_0880	HLS Pipe Installation & Welding	1	27JUN06	27JUN06			⚠HLS Pipe Installation & Welding			
UN601_0885	Align Support Girder wrt Feet	2	28JUN06	29JUN06			⚠Align Support Girder wrt Feet			
UN601_0905	Set Up Girder	1	29JUN06	29JUN06			⚠Set Up Girder			
UN601_0910	Mount Adjustable Feet	1	29JUN06	29JUN06			⚠Mount Adjustable Feet			
UN601_0900	GIRDER #4 SUMMARY	7*	29JUN06	10JUL06			⚠GIRDER #4 SUMMARY			
UN601_0890	Attach Insulation	1	30JUN06	30JUN06			⚠Attach Insulation			
UN601_0895	Girder #3 RFI	0		30JUN06			◆Girder #3 RFI			
UN601_0915	Mount Mechanical Adjustment System	1	30JUN06	30JUN06			⚠Mount Mechanical Adjustment System			

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▶ Early Bar

▶ Progress Bar

▶ Critical Activity

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN601_0920	Mount CAM Movers	1	03JUL06	03JUL06				⚠ Mount CAM Movers		
UN601_0925	Mount Temp Acq Sys Components	1	03JUL06	03JUL06				⚠ Mount Temp Acq Sys Components		
UN601_0930	HLS Pipe Installation & Welding	1	05JUL06	05JUL06				⚠ HLS Pipe Installation & Welding		
UN601_0935	Align Support Girder wrt Feet	2	06JUL06	07JUL06				⚠ Align Support Girder wrt Feet		
UN601_0940	Attach Insulation	1	10JUL06	10JUL06				⚠ Attach Insulation		
UN601_0945	Girder #4 RFI	0		10JUL06				◆ Girder #4 RFI		
UN601_0955	Set Up Girder	1	17JUL06	17JUL06				⚠ Set Up Girder		
UN601_0960	Mount Adjustable Feet	1	17JUL06	17JUL06				⚠ Mount Adjustable Feet		
UN601_0950	GIRDER #5 SUMMARY	7*	17JUL06	25JUL06				⚠ GIRDER #5 SUMMARY		
UN601_0965	Mount Mechanical Adjustment System	1	18JUL06	18JUL06				⚠ Mount Mechanical Adjustment System		
UN601_0970	Mount CAM Movers	1	19JUL06	19JUL06				⚠ Mount CAM Movers		
UN601_0975	Mount Temp Acq Sys Components	1	19JUL06	19JUL06				⚠ Mount Temp Acq Sys Components		
UN601_0980	HLS Pipe Installation & Welding	1	20JUL06	20JUL06				⚠ HLS Pipe Installation & Welding		
UN601_0985	Align Support Girder wrt Feet	2	21JUL06	24JUL06				⚠ Align Support Girder wrt Feet		
UN601_1005	Set Up Girder	1	24JUL06	24JUL06				⚠ Set Up Girder		
UN601_1010	Mount Adjustable Feet	1	24JUL06	24JUL06				⚠ Mount Adjustable Feet		
UN601_1000	GIRDER #6 SUMMARY	7*	24JUL06	01AUG06				⚠ GIRDER #6 SUMMARY		
UN601_0990	Attach Insulation	1	25JUL06	25JUL06				⚠ Attach Insulation		
UN601_0995	Girder #5 RFI	0		25JUL06				◆ Girder #5 RFI		
UN601_1015	Mount Mechanical Adjustment System	1	25JUL06	25JUL06				⚠ Mount Mechanical Adjustment System		
UN601_1020	Mount CAM Movers	1	26JUL06	26JUL06				⚠ Mount CAM Movers		
UN601_1025	Mount Temp Acq Sys Components	1	26JUL06	26JUL06				⚠ Mount Temp Acq Sys Components		
UN601_1030	HLS Pipe Installation & Welding	1	27JUL06	27JUL06				⚠ HLS Pipe Installation & Welding		
UN601_1035	Align Support Girder wrt Feet	2	28JUL06	31JUL06				⚠ Align Support Girder wrt Feet		
UN601_1055	Set Up Girder	1	31JUL06	31JUL06				⚠ Set Up Girder		
UN601_1060	Mount Adjustable Feet	1	31JUL06	31JUL06				⚠ Mount Adjustable Feet		
UN601_1050	GIRDER #7 SUMMARY	7*	31JUL06	08AUG06				⚠ GIRDER #7 SUMMARY		
UN601_1040	Attach Insulation	1	01AUG06	01AUG06				⚠ Attach Insulation		
UN601_1045	Girder #6 RFI	0		01AUG06				◆ Girder #6 RFI		
UN601_1065	Mount Mechanical Adjustment System	1	01AUG06	01AUG06				⚠ Mount Mechanical Adjustment System		
UN601_1070	Mount CAM Movers	1	02AUG06	02AUG06				⚠ Mount CAM Movers		
UN601_1075	Mount Temp Acq Sys Components	1	02AUG06	02AUG06				⚠ Mount Temp Acq Sys Components		
UN601_1080	HLS Pipe Installation & Welding	1	03AUG06	03AUG06				⚠ HLS Pipe Installation & Welding		
UN601_1085	Align Support Girder wrt Feet	2	04AUG06	07AUG06				⚠ Align Support Girder wrt Feet		
UN601_1305	Vertical Monitoring of Tunnel Floor	4	04AUG06	09AUG06				⚠ Vertical Monitoring of Tunnel Floor		
UN601_1300	ALIGNMT LAYOUT COMPUTATIONS & MONITORING	196*	04AUG06	29MAY07				⚠ ALIGNMT LAYOUT COMPUTATIONS & MO		
UN601_1105	Set Up Girder	1	07AUG06	07AUG06				⚠ Set Up Girder		



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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN601_1110	Mount Adjustable Feet	1	07AUG06	07AUG06				⚠ Mount Adjustable Feet		
UN601_1100	GIRDER #8 SUMMARY	7*	07AUG06	15AUG06				⚠ GIRDER #8 SUMMARY		
UN601_1090	Attach Insulation	1	08AUG06	08AUG06				⚠ Attach Insulation		
UN601_1095	Girder #7 RFI	0		08AUG06				◆ Girder #7 RFI		
UN601_1115	Mount Mechanical Adjustment System	1	08AUG06	08AUG06				⚠ Mount Mechanical Adjustment System		
UN601_1120	Mount CAM Movers	1	09AUG06	09AUG06				⚠ Mount CAM Movers		
UN601_1125	Mount Temp Acq Sys Components	1	09AUG06	09AUG06				⚠ Mount Temp Acq Sys Components		
UN601_1130	HLS Pipe Installation & Welding	1	10AUG06	10AUG06				⚠ HLS Pipe Installation & Welding		
UN601_1310	Vertical Monitoring of Tunnel Floor	4	10AUG06	15AUG06				⚠ Vertical Monitoring of Tunnel Floor		
UN601_1135	Align Support Girder wrt Feet	2	11AUG06	14AUG06				⚠ Align Support Girder wrt Feet		
UN601_1155	Set Up Girder	1	14AUG06	14AUG06				⚠ Set Up Girder		
UN601_1160	Mount Adjustable Feet	1	14AUG06	14AUG06				⚠ Mount Adjustable Feet		
UN601_1150	GIRDER #9 SUMMARY	7*	14AUG06	22AUG06				⚠ GIRDER #9 SUMMARY		
UN601_1140	Attach Insulation	1	15AUG06	15AUG06				⚠ Attach Insulation		
UN601_1145	Girder #8 RFI	0		15AUG06				◆ Girder #8 RFI		
UN601_1165	Mount Mechanical Adjustment System	1	15AUG06	15AUG06				⚠ Mount Mechanical Adjustment System		
UN601_1170	Mount CAM Movers	1	16AUG06	16AUG06				⚠ Mount CAM Movers		
UN601_1175	Mount Temp Acq Sys Components	1	16AUG06	16AUG06				⚠ Mount Temp Acq Sys Components		
UN601_1315	Vertical Monitoring of Tunnel Floor	4	16AUG06	21AUG06				⚠ Vertical Monitoring of Tunnel Floor		
UN601_1320	Vertical Monitoring of Tunnel Floor	4	16AUG06	21AUG06				⚠ Vertical Monitoring of Tunnel Floor		
UN601_1180	HLS Pipe Installation & Welding	1	17AUG06	17AUG06				⚠ HLS Pipe Installation & Welding		
UN601_1185	Align Support Girder wrt Feet	2	18AUG06	21AUG06				⚠ Align Support Girder wrt Feet		
UN601_1205	Set Up Girder	1	21AUG06	21AUG06				⚠ Set Up Girder		
UN601_1210	Mount Adjustable Feet	1	21AUG06	21AUG06				⚠ Mount Adjustable Feet		
UN601_1200	GIRDER #10 SUMMARY	7*	21AUG06	29AUG06				⚠ GIRDER #10 SUMMARY		
UN601_1190	Attach Insulation	1	22AUG06	22AUG06				⚠ Attach Insulation		
UN601_1195	Girder #9 RFI	0		22AUG06				◆ Girder #9 RFI		
UN601_1215	Mount Mechanical Adjustment System	1	22AUG06	22AUG06				⚠ Mount Mechanical Adjustment System		
UN601_1325	Vertical Monitoring of Tunnel Floor	4	22AUG06	25AUG06				⚠ Vertical Monitoring of Tunnel Floor		
UN601_1220	Mount CAM Movers	1	23AUG06	23AUG06				⚠ Mount CAM Movers		
UN601_1225	Mount Temp Acq Sys Components	1	23AUG06	23AUG06				⚠ Mount Temp Acq Sys Components		
UN601_1230	HLS Pipe Installation & Welding	1	24AUG06	24AUG06				⚠ HLS Pipe Installation & Welding		
UN601_1235	Align Support Girder wrt Feet	2	25AUG06	28AUG06				⚠ Align Support Girder wrt Feet		
UN601_1255	Set Up Girder	1	28AUG06	28AUG06				⚠ Set Up Girder		
UN601_1260	Mount Adjustable Feet	1	28AUG06	28AUG06				⚠ Mount Adjustable Feet		
UN601_1250	GIRDER #11 SUMMARY	7*	28AUG06	06SEP06				⚠ GIRDER #11 SUMMARY		
UN601_1240	Attach Insulation	1	29AUG06	29AUG06				⚠ Attach Insulation		

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					2004	2005	2006	2007	2008	2009
UN601_1245	Girder #10 RFI	0		29AUG06				◆ Girder #10 RFI		
UN601_1265	Mount Mechanical Adjustment System	1	29AUG06	29AUG06				⚠ Mount Mechanical Adjustment System		
UN601_1270	Mount CAM Movers	1	30AUG06	30AUG06				⚠ Mount CAM Movers		
UN601_1275	Mount Temp Acq Sys Components	1	30AUG06	30AUG06				⚠ Mount Temp Acq Sys Components		
UN601_1280	HLS Pipe Installation & Welding	1	31AUG06	31AUG06				⚠ HLS Pipe Installation & Welding		
UN601_1285	Align Support Girder wrt Feet	2	01SEP06	05SEP06				⚠ Align Support Girder wrt Feet		
UN601_1290	Attach Insulation	1	06SEP06	06SEP06				⚠ Attach Insulation		
UN601_1295	Girder #11 RFI	0		06SEP06				◆ Girder #11 RFI		
UN601_1875	WMS Sensor Installation	2	02OCT06	03OCT06				⚠ WMS Sensor Installation		
UN601_1877	WMS Wire Tube Installation	3	02OCT06	04OCT06				⚠ WMS Wire Tube Installation		
UN601_1870	WMS INSTALLATION	221*	02OCT06	29AUG07				⚠ WMS INSTALLATION		
UN601_1865	WIRE MONITORING SYSTEM	261*	02OCT06	25OCT07				⚠ WIRE MONITORING SYSTEM		
UN601_1812	HLS INSTALLATION	2*	06OCT06	09OCT06				⚠ HLS INSTALLATION		
UN601_1815	HLS Sensor Installation	2	06OCT06	09OCT06				⚠ HLS Sensor Installation		
UN601_1835	Cable Connections	2	06OCT06	09OCT06				⚠ Cable Connections		
UN601_1820	Pipe Interconnections w/Flexible Tubing	5	06OCT06	12OCT06				⚠ Pipe Interconnections w/Flexible Tubing		
UN601_1810	HYDROSTATIC LEVEL SYSTEM	32*	06OCT06	20NOV06				⚠ HYDROSTATIC LEVEL SYSTEM		
UN601_1825	Install Refill Station	5	13OCT06	19OCT06				⚠ Install Refill Station		
UN601_1830	Fill and Leak Testing	2	20OCT06	23OCT06				⚠ Fill and Leak Testing		
UN601_1845	HLS System Testing	10	24OCT06	06NOV06				⚠ HLS System Testing		
UN601_1840	HLS TESTING	20*	24OCT06	20NOV06				⚠ HLS TESTING		
UN601_1860	Software Changes	20	24OCT06	20NOV06				⚠ Software Changes		
UN601_1850	Mechanical Tuning	5	31OCT06	06NOV06				⚠ Mechanical Tuning		
UN601_1855	Electrical Tuning	5	31OCT06	06NOV06				⚠ Electrical Tuning		
UN601_1863	HLS ready for measurements	0		04JAN07				◆ HLS ready for measurements		
UN601_2015	HLS Measurements	5	05JAN07	11JAN07				⚠ HLS Measurements		
UN601_0756	Install Cable Tray	5	04MAY07	10MAY07				⚠ Install Cable Tray		
UN601_1330	Design Network	10	04MAY07	17MAY07				⚠ Design Network		
UN601_0000	REQD: Undulator #1 RFI	0		10MAY07				◆ REQD: Undulator #1 RFI		
UN601_0757	Pull Cables	5	11MAY07	17MAY07				⚠ Pull Cables		
UN601_1355	Layout Network Points	2	18MAY07	21MAY07				⚠ Layout Network Points		
UN601_0758	Install Quad Power Supplies	5	18MAY07	24MAY07				⚠ Install Quad Power Supplies		
UN601_1335	Computation of Layout Parameters	5	18MAY07	24MAY07				⚠ Computation of Layout Parameters		
UN601_1350	NETWORK INSTALLATION SUMMARY	5*	18MAY07	24MAY07				⚠ NETWORK INSTALLATION SUMMARY		
UN601_1360	Network Installation	5	18MAY07	24MAY07				⚠ Network Installation		
UN601_1345	INSTALLATION & ALIGNMENT SUMMARY	264*	18MAY07	18JUN08				⚠ INSTALLATION & ALIGNMENT SUMMARY		
UN601_1340	Quality Control	2	25MAY07	29MAY07				⚠ Quality Control		

INSTALLATION & ALIGNMENT SUMMARY



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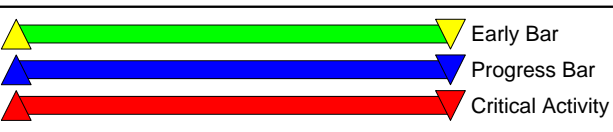
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN601_1370	Measurements(Laser Tracker,Level,Total Station)	10	25MAY07	08JUN07	Measurements(Laser Tracker,Level,Total Station)					
UN601_1365	ALIGNMENT REFERENCE NETWORK MSMTS	13*	25MAY07	13JUN07	ALIGNMENT REFERENCE NETWORK MSMTS SUMMARY					
UN601_1375	Data Evaluation	5	05JUN07	11JUN07	Data Evaluation					
UN601_0005	REQD: Undulator #2 RFI	0		12JUN07	REQD: Undulator #2 RFI					
UN601_1380	Quality Control	2	12JUN07	13JUN07	Quality Control					
UN601_1381	Mark Support Bolts on Floor	5	14JUN07	20JUN07	Mark Support Bolts on Floor					
UN601_0010	REQD: Undulator #3 RFI	0		15JUN07	REQD: Undulator #3 RFI					
UN601_1382	Quality Control	2	20JUN07	21JUN07	Quality Control					
UN601_0015	REQD: Undulator #4 RFI	0		21JUN07	REQD: Undulator #4 RFI					
UN601_1390	Drill Holes	5	22JUN07	28JUN07	Drill Holes					
UN601_1395	Set Studs	5	22JUN07	28JUN07	Set Studs					
UN601_1385	FOOT PLATE INSTALLATION SUMMARY	25*	22JUN07	27JUL07	FOOT PLATE INSTALLATION SUMMARY					
UN601_0020	REQD: Undulator #5 RFI	0		27JUN07	REQD: Undulator #5 RFI					
UN601_1400	Install Plates, Pre-Set Height	2	27JUN07	28JUN07	Install Plates, Pre-Set Height					
UN601_1405	Prealign Plates to 0.5mm	10	28JUN07	12JUL07	Prealign Plates to 0.5mm					
UN601_0030	REQD: Undulator #6 RFI	0		03JUL07	REQD: Undulator #6 RFI					
UN601_1410	Quality Control: Map Plate Positions	2	05JUL07	06JUL07	Quality Control: Map Plate Positions					
UN601_1415	Quality Control: Data Evaluation	1	09JUL07	09JUL07	Quality Control: Data Evaluation					
UN601_0025	REQD: Undulator #7 RFI	0		10JUL07	REQD: Undulator #7 RFI					
UN601_1420	Grout Plates	5	10JUL07	16JUL07	Grout Plates					
UN601_0040	REQD: Undulator #8 RFI	0		16JUL07	REQD: Undulator #8 RFI					
UN601_1425	Quality Control: Map Plate Positions	2	17JUL07	18JUL07	Quality Control: Map Plate Positions					
UN601_1430	Quality Control: Data Evaluation	1	19JUL07	19JUL07	Quality Control: Data Evaluation					
UN601_0035	REQD: Undulator #9 RFI	0		20JUL07	REQD: Undulator #9 RFI					
UN601_1435	Grout Plates	5	20JUL07	26JUL07	Grout Plates					
UN601_0050	REQD: Undulator #10 RFI	0		26JUL07	REQD: Undulator #10 RFI					
UN601_1440	Clean Tunnel	2	26JUL07	27JUL07	Clean Tunnel					
UN601_1500	Exit Section Supts Transport & Install	2	30JUL07	31JUL07	Exit Section Supts Transport & Install					
UN601_1490	GRANITE GIRDER & EXIT/ENTR SECTION SUPTS	13*	30JUL07	15AUG07	GRANITE GIRDER & EXIT/ENTR SECTION SUPTS INSTALL					
UN601_0045	REQD: Undulator #11 RFI	0		01AUG07	REQD: Undulator #11 RFI					
UN601_1510	Granite Girder #11 Transport & Install	3	01AUG07	03AUG07	Granite Girder #11 Transport & Install					
UN601_1515	Granite Girder #10 Transport & Install	1	06AUG07	06AUG07	Granite Girder #10 Transport & Install					
UN601_0060	REQD: Undulator #12 RFI	0		07AUG07	REQD: Undulator #12 RFI					
UN601_1520	Granite Girder #9 Transport & Install	1	07AUG07	07AUG07	Granite Girder #9 Transport & Install					
UN601_1525	Granite Girder #8 Transport & Install	1	07AUG07	07AUG07	Granite Girder #8 Transport & Install					
UN601_1530	Granite Girder #7 Transport & Install	1	08AUG07	08AUG07	Granite Girder #7 Transport & Install					
UN601_1535	Granite Girder #6 Transport & Install	1	09AUG07	09AUG07	Granite Girder #6 Transport & Install					

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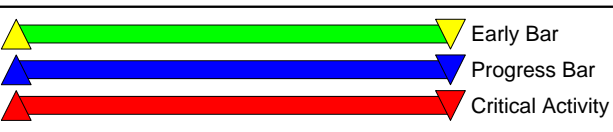
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN601_1540	Granite Girder #5 Transport & Install	1	10AUG07	10AUG07					⚠ Granite Girder #5 Transport & Install	
UN601_0055	REQD: Undulator #13 RFI	0		13AUG07					◆ REQD: Undulator #13 RFI	
UN601_1545	Granite Girder #4 Transport & Install	1	13AUG07	13AUG07					⚠ Granite Girder #4 Transport & Install	
UN601_1550	Granite Girder #3 Transport & Install	1	13AUG07	13AUG07					⚠ Granite Girder #3 Transport & Install	
UN601_1575	Measurements(Laser Tracker,Level,Total Station)	5	13AUG07	17AUG07	Measurements(Laser Tracker,Level,Total Station)				⚠	
UN601_1580	Stretched Wire Measurements	5	13AUG07	17AUG07					⚠ Stretched Wire Measurements	
UN601_1585	Data Evaluation	5	13AUG07	17AUG07					⚠ Data Evaluation	
UN601_1570	RE-MEASURE ALIGNMENT REFERENCE NETWORK	10*	13AUG07	24AUG07	RE-MEASURE ALIGNMENT REFERENCE NETWORK				⚠	
UN601_1555	Granite Girder #2 Transport & Install	1	14AUG07	14AUG07					⚠ Granite Girder #2 Transport & Install	
UN601_1560	Granite Girder #1 Transport & Install	1	14AUG07	14AUG07					⚠ Granite Girder #1 Transport & Install	
UN601_1565	Exit Section Supports Transport & Install	1	15AUG07	15AUG07					⚠ Exit Section Supports Transport & Install	
UN601_1635	Align Mech Undulator Supports to 250 Micron	10	15AUG07	28AUG07	Align Mech Undulator Supports to 250 Micro				⚠	
UN601_1880	WMS Electronics Installation	4	16AUG07	21AUG07					⚠ WMS Electronics Installation	
UN601_1895	Cable Termination	10	16AUG07	29AUG07					⚠ Cable Termination	
UN601_0070	REQD: Undulator #14 RFI	0		17AUG07					◆ REQD: Undulator #14 RFI	
UN601_1590	Quality Control	5	20AUG07	24AUG07					⚠ Quality Control	
UN601_0065	REQD: Undulator #15 RFI	0		23AUG07					◆ REQD: Undulator #15 RFI	
UN601_1595	PRE-ALIGNMENT	2*	27AUG07	28AUG07					⚠ PRE-ALIGNMENT	
UN601_1610	Set Cam Movers to Zero	2	27AUG07	28AUG07					⚠ Set Cam Movers to Zero	
UN601_1620	GIRDERS #1 - 5	2*	27AUG07	28AUG07					⚠ GIRDERS #1 - 5	
UN601_1630	Set Cam Movers to Zero	2	27AUG07	28AUG07					⚠ Set Cam Movers to Zero	
UN601_1605	Level Granite Girders	4	27AUG07	30AUG07					⚠ Level Granite Girders	
UN601_1625	Level Granite Girders	4	27AUG07	30AUG07					⚠ Level Granite Girders	
UN601_1600	TABLES #6 - 11	13*	27AUG07	13SEP07					⚠ TABLES #6 - 11	
UN601_0080	REQD: Undulator #16 RFI	0		29AUG07					◆ REQD: Undulator #16 RFI	
UN601_1615	Align Mech Undulator Supports to 250 Micron	10	30AUG07	13SEP07	Align Mech Undulator Supports to 250 Micro				⚠	
UN601_1905	WMS System Testing	10	30AUG07	13SEP07					⚠ WMS System Testing	
UN601_1900	WMS TESTING	40*	30AUG07	25OCT07					⚠ WMS TESTING	
UN601_1920	Software Changes	40	30AUG07	25OCT07					⚠ Software Changes	
UN601_0075	REQD: Undulator #17 RFI	0		05SEP07					◆ REQD: Undulator #17 RFI	
UN601_1910	Mechanical Tuning	5	07SEP07	13SEP07					⚠ Mechanical Tuning	
UN601_1915	Electrical Tuning	10	07SEP07	20SEP07					⚠ Electrical Tuning	
UN601_0090	REQD: Undulator #18 RFI	0		11SEP07					◆ REQD: Undulator #18 RFI	
UN601_1645	Cradle #1 Transport and Install	1	11SEP07	11SEP07					⚠ Cradle #1 Transport and Install	
UN601_1650	Cradle #2 Transport and Install	1	11SEP07	11SEP07					⚠ Cradle #2 Transport and Install	
UN601_1655	Set up Cradle on CMM - 03	1	11SEP07	11SEP07					⚠ Set up Cradle on CMM - 03	
UN601_1656	Align Cradle System - 03	2	12SEP07	13SEP07					⚠ Align Cradle System - 03	

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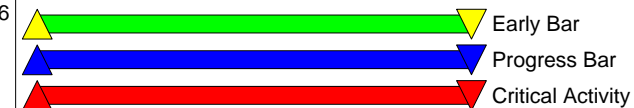


Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN601_1657	Component Handling - 03	1	14SEP07	14SEP07					⚠Component Handling - 03	
UN601_1661	Set up Cradle on CMM - 04	1	17SEP07	17SEP07					⚠Set up Cradle on CMM - 04	
UN601_1662	Align Cradle System - 04	2	18SEP07	19SEP07					⚠Align Cradle System - 04	
UN601_1663	Component Handling - 04	1	20SEP07	20SEP07					⚠Component Handling - 04	
UN601_1665	Set up Cradle on CMM - 05	1	21SEP07	21SEP07					⚠Set up Cradle on CMM - 05	
UN601_1666	Align Cradle System - 05	2	24SEP07	25SEP07					⚠Align Cradle System - 05	
UN601_1667	Component Handling - 05	1	26SEP07	26SEP07					⚠Component Handling - 05	
UN601_1670	Set up Cradle on CMM - 06	1	27SEP07	27SEP07					⚠Set up Cradle on CMM - 06	
UN601_1671	Align Cradle System - 06	2	28SEP07	01OCT07					⚠Align Cradle System - 06	
UN601_1672	Component Handling - 06	1	02OCT07	02OCT07					⚠Component Handling - 06	
UN601_1675	Set up Cradle on CMM - 07	1	03OCT07	03OCT07					⚠Set up Cradle on CMM - 07	
UN601_1676	Align Cradle System - 07	2	04OCT07	05OCT07					⚠Align Cradle System - 07	
UN601_0759	100% Quad Power Supplies Installed	5	05OCT07	11OCT07					⚠100% Quad Power Supplies Installed	
UN601_1677	Component Handling - 07	1	08OCT07	08OCT07					⚠Component Handling - 07	
UN601_1680	Set up Cradle on CMM - 08	1	09OCT07	09OCT07					⚠Set up Cradle on CMM - 08	
UN601_1681	Align Cradle System - 08	2	10OCT07	11OCT07					⚠Align Cradle System - 08	
UN601_1682	Component Handling - 08	1	12OCT07	12OCT07					⚠Component Handling - 08	
UN601_1685	Set up Cradle on CMM - 09	1	15OCT07	15OCT07					⚠Set up Cradle on CMM - 09	
UN601_1686	Align Cradle System - 09	2	16OCT07	17OCT07					⚠Align Cradle System - 09	
UN601_0085	REQD: Undulator #19 RFI	0		17OCT07					◆REQD: Undulator #19 RFI	
UN601_1687	Component Handling - 09	1	18OCT07	18OCT07					⚠Component Handling - 09	
UN601_1690	Set up Cradle on CMM - 10	1	19OCT07	19OCT07					⚠Set up Cradle on CMM - 10	
UN601_1691	Align Cradle System - 10	2	22OCT07	23OCT07					⚠Align Cradle System - 10	
UN601_0100	REQD: Undulator #20 RFI	0		23OCT07					◆REQD: Undulator #20 RFI	
UN601_1692	Component Handling - 10	1	24OCT07	24OCT07					⚠Component Handling - 10	
UN601_1695	Set up Cradle on CMM - 11	1	25OCT07	25OCT07					⚠Set up Cradle on CMM - 11	
UN601_1696	Align Cradle System - 11	2	26OCT07	29OCT07					⚠Align Cradle System - 11	
UN601_0095	REQD: Undulator #21 RFI	0		29OCT07					◆REQD: Undulator #21 RFI	
UN601_1697	Component Handling - 11	1	30OCT07	30OCT07					⚠Component Handling - 11	
UN601_1700	Set up Cradle on CMM - 12	1	31OCT07	31OCT07					⚠Set up Cradle on CMM - 12	
UN601_1701	Align Cradle System - 12	2	01NOV07	02NOV07					⚠Align Cradle System - 12	
UN601_0110	REQD: Undulator #22 RFI	0		02NOV07					◆REQD: Undulator #22 RFI	
UN601_1702	Component Handling - 12	1	05NOV07	05NOV07					⚠Component Handling - 12	
UN601_1705	Set up Cradle on CMM - 13	1	06NOV07	06NOV07					⚠Set up Cradle on CMM - 13	
UN601_1706	Align Cradle System - 13	2	07NOV07	08NOV07					⚠Align Cradle System - 13	
UN601_0105	REQD: Undulator #23 RFI	0		08NOV07					◆REQD: Undulator #23 RFI	
UN601_1707	Component Handling - 13	1	09NOV07	09NOV07					⚠Component Handling - 13	

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					2004	2005	2006	2007	2008	2009
UN601_1710	Set up Cradle on CMM - 14	1	12NOV07	12NOV07						⚠Set up Cradle on CMM - 14
UN601_1711	Align Cradle System - 14	2	13NOV07	14NOV07						⚠Align Cradle System - 14
UN601_0120	REQD: Undulator #24 RFI	0		14NOV07						◆REQD: Undulator #24 RFI
UN601_1712	Component Handling - 14	1	15NOV07	15NOV07						⚠Component Handling - 14
UN601_1715	Set up Cradle on CMM - 15	1	16NOV07	16NOV07						⚠Set up Cradle on CMM - 15
UN601_1716	Align Cradle System - 15	2	19NOV07	20NOV07						⚠Align Cradle System - 15
UN601_0115	REQD: Undulator #25 RFI	0		20NOV07						◆REQD: Undulator #25 RFI
UN601_1717	Component Handling - 15	1	21NOV07	21NOV07						⚠Component Handling - 15
UN601_1720	Set up Cradle on CMM - 16	1	26NOV07	26NOV07						⚠Set up Cradle on CMM - 16
UN601_1922	WMS ready for measurements	0		26NOV07						◆WMS ready for measurements
UN601_1721	Align Cradle System - 16	2	27NOV07	28NOV07						⚠Align Cradle System - 16
UN601_2010	Stretched Wire Measurements-along granite Girdrs	5	27NOV07	03DEC07						⚠Stretched Wire Measurements-along granite Girdr
UN601_0130	REQD: Undulator #26 RFI	0		28NOV07						◆REQD: Undulator #26 RFI
UN601_1722	Component Handling - 16	1	29NOV07	29NOV07						⚠Component Handling - 16
UN601_1725	Set up Cradle on CMM - 17	1	30NOV07	30NOV07						⚠Set up Cradle on CMM - 17
UN601_1726	Align Cradle System - 17	2	03DEC07	04DEC07						⚠Align Cradle System - 17
UN601_0125	REQD: Undulator #27 RFI	0		04DEC07						◆REQD: Undulator #27 RFI
UN601_1727	Component Handling - 17	1	05DEC07	05DEC07						⚠Component Handling - 17
UN601_1730	Set up Cradle on CMM - 18	1	06DEC07	06DEC07						⚠Set up Cradle on CMM - 18
UN601_1731	Align Cradle System - 18	2	07DEC07	10DEC07						⚠Align Cradle System - 18
UN601_0140	REQD: Undulator #28 RFI	0		10DEC07						◆REQD: Undulator #28 RFI
UN601_1732	Component Handling - 18	1	11DEC07	11DEC07						⚠Component Handling - 18
UN601_1735	Set up Cradle on CMM - 19	1	12DEC07	12DEC07						⚠Set up Cradle on CMM - 19
UN601_1736	Align Cradle System - 19	2	13DEC07	14DEC07						⚠Align Cradle System - 19
UN601_1737	Component Handling - 19	1	02JAN08	02JAN08						⚠Component Handling - 19
UN601_1740	Set up Cradle on CMM - 20	1	03JAN08	03JAN08						⚠Set up Cradle on CMM - 20
UN601_1741	Align Cradle System - 20	2	04JAN08	07JAN08						⚠Align Cradle System - 20
UN601_1742	Component Handling - 20	1	08JAN08	08JAN08						⚠Component Handling - 20
UN601_1745	Set up Cradle on CMM - 21	1	09JAN08	09JAN08						⚠Set up Cradle on CMM - 21
UN601_1746	Align Cradle System - 21	2	10JAN08	11JAN08						⚠Align Cradle System - 21
UN601_1747	Component Handling - 21	1	14JAN08	14JAN08						⚠Component Handling - 21
UN601_1750	Set up Cradle on CMM - 22	1	15JAN08	15JAN08						⚠Set up Cradle on CMM - 22
UN601_1751	Align Cradle System - 22	2	16JAN08	17JAN08						⚠Align Cradle System - 22
UN601_0135	REQD: Undulator #29 RFI	0		18JAN08						◆REQD: Undulator #29 RFI
UN601_0145	REQD: Undulator #31 RFI	0		18JAN08						◆REQD: Undulator #31 RFI
UN601_0150	REQD: Undulator #30 RFI	0		18JAN08						◆REQD: Undulator #30 RFI
UN601_1752	Component Handling - 22	1	18JAN08	18JAN08						⚠Component Handling - 22

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN601_0160	REQD: Undulator #32 RFI	0		22JAN08						◆REQD: Undulator #32 RFI
UN601_1755	Set up Cradle on CMM - 23	1	22JAN08	22JAN08						⚠Set up Cradle on CMM - 23
UN601_1756	Align Cradle System - 23	2	23JAN08	24JAN08						⚠Align Cradle System - 23
UN601_0155	REQD: Undulator #33 RFI	0		24JAN08						◆REQD: Undulator #33 RFI
UN601_1757	Component Handling - 23	1	25JAN08	25JAN08						⚠Component Handling - 23
UN601_1760	Set up Cradle on CMM - 24	1	28JAN08	28JAN08						⚠Set up Cradle on CMM - 24
UN601_1761	Align Cradle System - 24	2	29JAN08	30JAN08						⚠Align Cradle System - 24
UN601_1762	Component Handling - 24	1	31JAN08	31JAN08						⚠Component Handling - 24
UN601_1765	Set up Cradle on CMM - 25	1	01FEB08	01FEB08						⚠Set up Cradle on CMM - 25
UN601_1766	Align Cradle System - 25	2	04FEB08	05FEB08						⚠Align Cradle System - 25
UN601_1767	Component Handling - 25	1	06FEB08	06FEB08						⚠Component Handling - 25
UN601_1770	Set up Cradle on CMM - 26	1	07FEB08	07FEB08						⚠Set up Cradle on CMM - 26
UN601_1771	Align Cradle System - 26	2	08FEB08	11FEB08						⚠Align Cradle System - 26
UN601_1772	Component Handling - 26	1	12FEB08	12FEB08						⚠Component Handling - 26
UN601_1775	Set up Cradle on CMM - 27	1	13FEB08	13FEB08						⚠Set up Cradle on CMM - 27
UN601_1776	Align Cradle System - 27	2	14FEB08	15FEB08						⚠Align Cradle System - 27
UN601_1777	Component Handling - 27	1	19FEB08	19FEB08						⚠Component Handling - 27
UN601_1780	Set up Cradle on CMM - 28	1	20FEB08	20FEB08						⚠Set up Cradle on CMM - 28
UN601_1781	Align Cradle System - 28	2	21FEB08	22FEB08						⚠Align Cradle System - 28
UN601_1782	Component Handling - 28	1	25FEB08	25FEB08						⚠Component Handling - 28
UN601_1785	Set up Cradle on CMM - 29	1	26FEB08	26FEB08						⚠Set up Cradle on CMM - 29
UN601_1786	Align Cradle System - 29	2	27FEB08	28FEB08						⚠Align Cradle System - 29
UN601_1787	Component Handling - 29	1	29FEB08	29FEB08						⚠Component Handling - 29
UN601_1790	Set up Cradle on CMM - 30	1	03MAR08	03MAR08						⚠Set up Cradle on CMM - 30
UN601_1791	Align Cradle System - 30	2	04MAR08	05MAR08						⚠Align Cradle System - 30
UN601_1792	Component Handling - 30	1	06MAR08	06MAR08						⚠Component Handling - 30
UN601_1795	Set up Cradle on CMM - 31	1	07MAR08	07MAR08						⚠Set up Cradle on CMM - 31
UN601_1796	Align Cradle System - 31	2	10MAR08	11MAR08						⚠Align Cradle System - 31
UN601_1797	Component Handling - 31	1	12MAR08	12MAR08						⚠Component Handling - 31
UN601_1800	Set up Cradle on CMM - 32	1	13MAR08	13MAR08						⚠Set up Cradle on CMM - 32
UN601_1801	Align Cradle System - 32	2	14MAR08	17MAR08						⚠Align Cradle System - 32
UN601_1802	Component Handling - 32	1	18MAR08	18MAR08						⚠Component Handling - 32
UN601_1805	Set up Cradle on CMM - 33	1	19MAR08	19MAR08						⚠Set up Cradle on CMM - 33
UN601_1806	Align Cradle System - 33	2	20MAR08	21MAR08						⚠Align Cradle System - 33
UN601_1807	Component Handling - 33	1	24MAR08	24MAR08						⚠Component Handling - 33
UN601_2005	Remeasurement(Laser Tracker,Level,Total Station)	5	15MAY08	21MAY08						⚠Remeasurement(Laser Tracker,Level,Total Station)
UN601_2020	Data Evaluation	5	15MAY08	21MAY08						⚠Data Evaluation



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					2004	2005	2006	2007	2008	2009
UN601_2000	RE-MEASURE NETWORK	10*	15MAY08	29MAY08						RE-MEASURE NETWORK
UN601_2025	Quality Control	5	22MAY08	29MAY08						Quality Control
UN601_2035	Set Cradle X,Y Mechanical Adjustments	4	30MAY08	04JUN08						Set Cradle X,Y Mechanical Adjustments
UN601_2030	ALIGN CRADLES	14*	30MAY08	18JUN08						ALIGN CRADLES
UN601_2040	Quality Control	5	03JUN08	09JUN08						Quality Control
UN601_2045	Set Cradle X,Y Cam Mover Adjustments	4	10JUN08	13JUN08						Set Cradle X,Y Cam Mover Adjustments
UN601_2050	Quality Control	5	12JUN08	18JUN08						Quality Control
1.04.06.02 Control System Installation and Alignment										
UN462_0000	Equipment Available at SLAC & Und B.O.	0		17MAY07						Equipment Available at SLAC & Und B.O.
UN462_0005	Install Racks in Alcoves/End Stations	5	18MAY07	24MAY07						Install Racks in Alcoves/End Stations
UN462_0010	Install Cables from Racks to Tunnel Locations	5	25MAY07	01JUN07						Install Cables from Racks to Tunnel Locations
UN462_0020	Install Rack Mount Equipment	5	25MAY07	01JUN07						Install Rack Mount Equipment
UN462_0015	Terminate Cables	10	04JUN07	15JUN07						Terminate Cables
UN462_0430	Connect Devices @ Short Break Section	1	16AUG07	16AUG07						Connect Devices @ Short Break Section
UN462_0460	Connect Devices @ Exit Section	1	16AUG07	16AUG07						Connect Devices @ Exit Section
UN462_0435	Test Devices @ Short Break Section	1	17AUG07	17AUG07						Test Devices @ Short Break Section
UN462_0465	Test Devices @ Exit Section	1	17AUG07	17AUG07						Test Devices @ Exit Section
UN462_0450	Connect Devices @ Entrance Section	1	23AUG07	23AUG07						Connect Devices @ Entrance Section
UN462_0455	Test Devices @ Entrance Section	1	24AUG07	24AUG07						Test Devices @ Entrance Section
UN462_0410	Connect Devices @ Undulator #2	1	12SEP07	12SEP07						Connect Devices @ Undulator #2
UN462_0420	Connect Devices @ Undulator #1	1	12SEP07	12SEP07						Connect Devices @ Undulator #1
UN462_0415	Test Devices @ Undulator #2	1	13SEP07	13SEP07						Test Devices @ Undulator #2
UN462_0425	Test Devices @ Undulator #1	1	13SEP07	13SEP07						Test Devices @ Undulator #1
UN462_0400	Connect Devices @ Undulator #3	1	17SEP07	17SEP07						Connect Devices @ Undulator #3
UN462_0405	Test Devices @ Undulator #3	1	18SEP07	18SEP07						Test Devices @ Undulator #3
UN462_0390	Connect Devices @ Undulator #4	1	21SEP07	21SEP07						Connect Devices @ Undulator #4
UN462_0395	Test Devices @ Undulator #4	1	24SEP07	24SEP07						Test Devices @ Undulator #4
UN462_0380	Connect Devices @ Undulator #5	1	27SEP07	27SEP07						Connect Devices @ Undulator #5
UN462_0385	Test Devices @ Undulator #5	1	28SEP07	28SEP07						Test Devices @ Undulator #5
UN462_0370	Connect Devices @ Undulator #6	1	03OCT07	03OCT07						Connect Devices @ Undulator #6
UN462_0375	Test Devices @ Undulator #6	1	04OCT07	04OCT07						Test Devices @ Undulator #6
UN462_0360	Connect Devices @ Undulator #7	1	09OCT07	09OCT07						Connect Devices @ Undulator #7
UN462_0365	Test Devices @ Undulator #7	1	10OCT07	10OCT07						Test Devices @ Undulator #7
UN462_0350	Connect Devices @ Undulator #8	1	15OCT07	15OCT07						Connect Devices @ Undulator #8
UN462_0355	Test Devices @ Undulator #8	1	16OCT07	16OCT07						Test Devices @ Undulator #8
UN462_0340	Connect Devices @ Undulator #9	1	19OCT07	19OCT07						Connect Devices @ Undulator #9
UN462_0345	Test Devices @ Undulator #9	1	22OCT07	22OCT07						Test Devices @ Undulator #9

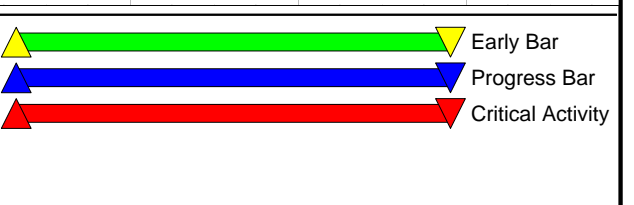
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN462_0330	Connect Devices @ Undulator #10	1	25OCT07	25OCT07						✘ Connect Devices @ Undulator #10
UN462_0335	Test Devices @ Undulator #10	1	26OCT07	26OCT07						✘ Test Devices @ Undulator #10
UN462_0320	Connect Devices @ Undulator #11	1	31OCT07	31OCT07						✘ Connect Devices @ Undulator #11
UN462_0325	Test Devices @ Undulator #11	1	01NOV07	01NOV07						✘ Test Devices @ Undulator #11
UN462_0310	Connect Devices @ Undulator #12	1	06NOV07	06NOV07						✘ Connect Devices @ Undulator #12
UN462_0315	Test Devices @ Undulator #12	1	07NOV07	07NOV07						✘ Test Devices @ Undulator #12
UN462_0300	Connect Devices @ Undulator #13	1	12NOV07	12NOV07						✘ Connect Devices @ Undulator #13
UN462_0305	Test Devices @ Undulator #13	1	13NOV07	13NOV07						✘ Test Devices @ Undulator #13
UN462_0290	Connect Devices @ Undulator #14	1	16NOV07	16NOV07						✘ Connect Devices @ Undulator #14
UN462_0295	Test Devices @ Undulator #14	1	19NOV07	19NOV07						✘ Test Devices @ Undulator #14
UN462_0280	Connect Devices @ Undulator #15	1	26NOV07	26NOV07						✘ Connect Devices @ Undulator #15
UN462_0285	Test Devices @ Undulator #15	1	27NOV07	27NOV07						✘ Test Devices @ Undulator #15
UN462_0270	Connect Devices @ Undulator #16	1	30NOV07	30NOV07						✘ Connect Devices @ Undulator #16
UN462_0275	Test Devices @ Undulator #16	1	03DEC07	03DEC07						✘ Test Devices @ Undulator #16
UN462_0260	Connect Devices @ Undulator #17	1	06DEC07	06DEC07						✘ Connect Devices @ Undulator #17
UN462_0265	Test Devices @ Undulator #17	1	07DEC07	07DEC07						✘ Test Devices @ Undulator #17
UN462_0250	Connect Devices @ Undulator #18	1	12DEC07	12DEC07						✘ Connect Devices @ Undulator #18
UN462_0440	Connect Devices @ Long Break Section	1	12DEC07	12DEC07						✘ Connect Devices @ Long Break Section
UN462_0255	Test Devices @ Undulator #18	1	13DEC07	13DEC07						✘ Test Devices @ Undulator #18
UN462_0445	Test Devices @ Long Break Section	1	13DEC07	13DEC07						✘ Test Devices @ Long Break Section
UN462_0240	Connect Devices @ Undulator #19	1	03JAN08	03JAN08						✘ Connect Devices @ Undulator #19
UN462_0245	Test Devices @ Undulator #19	1	04JAN08	04JAN08						✘ Test Devices @ Undulator #19
UN462_0230	Connect Devices @ Undulator #20	1	09JAN08	09JAN08						✘ Connect Devices @ Undulator #20
UN462_0235	Test Devices @ Undulator #20	1	10JAN08	10JAN08						✘ Test Devices @ Undulator #20
UN462_0220	Connect Devices @ Undulator #21	1	15JAN08	15JAN08						✘ Connect Devices @ Undulator #21
UN462_0225	Test Devices @ Undulator #21	1	16JAN08	16JAN08						✘ Test Devices @ Undulator #21
UN462_0210	Connect Devices @ Undulator #22	1	22JAN08	22JAN08						✘ Connect Devices @ Undulator #22
UN462_0215	Test Devices @ Undulator #22	1	23JAN08	23JAN08						✘ Test Devices @ Undulator #22
UN462_0200	Connect Devices @ Undulator #23	1	28JAN08	28JAN08						✘ Connect Devices @ Undulator #23
UN462_0205	Test Devices @ Undulator #23	1	29JAN08	29JAN08						✘ Test Devices @ Undulator #23
UN462_0190	Connect Devices @ Undulator #24	1	01FEB08	01FEB08						✘ Connect Devices @ Undulator #24
UN462_0195	Test Devices @ Undulator #24	1	04FEB08	04FEB08						✘ Test Devices @ Undulator #24
UN462_0180	Connect Devices @ Undulator #25	1	07FEB08	07FEB08						✘ Connect Devices @ Undulator #25
UN462_0185	Test Devices @ Undulator #25	1	08FEB08	08FEB08						✘ Test Devices @ Undulator #25
UN462_0170	Connect Devices @ Undulator #26	1	13FEB08	13FEB08						✘ Connect Devices @ Undulator #26
UN462_0175	Test Devices @ Undulator #26	1	14FEB08	14FEB08						✘ Test Devices @ Undulator #26
UN462_0160	Connect Devices @ Undulator #27	1	20FEB08	20FEB08						✘ Connect Devices @ Undulator #27

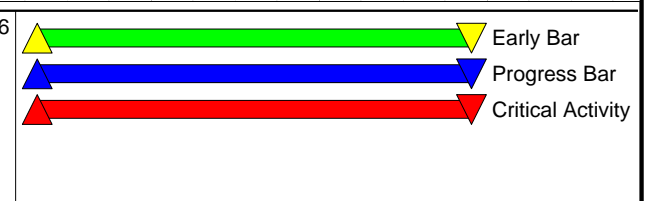
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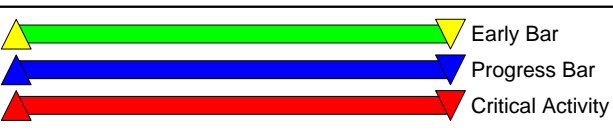
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN462_0165	Test Devices @ Undulator #27	1	21FEB08	21FEB08						⚠ Test Devices @ Undulator #27
UN462_0150	Connect Devices @ Undulator #28	1	26FEB08	26FEB08						⚠ Connect Devices @ Undulator #28
UN462_0155	Test Devices @ Undulator #28	1	27FEB08	27FEB08						⚠ Test Devices @ Undulator #28
UN462_0140	Connect Devices @ Undulator #29	1	03MAR08	03MAR08						⚠ Connect Devices @ Undulator #29
UN462_0145	Test Devices @ Undulator #29	1	04MAR08	04MAR08						⚠ Test Devices @ Undulator #29
UN462_0130	Connect Devices @ Undulator #30	1	07MAR08	07MAR08						⚠ Connect Devices @ Undulator #30
UN462_0135	Test Devices @ Undulator #30	1	10MAR08	10MAR08						⚠ Test Devices @ Undulator #30
UN462_0120	Connect Devices @ Undulator #31	1	13MAR08	13MAR08						⚠ Connect Devices @ Undulator #31
UN462_0125	Test Devices @ Undulator #31	1	14MAR08	14MAR08						⚠ Test Devices @ Undulator #31
UN462_0110	Connect Devices @ Undulator #32	1	19MAR08	19MAR08						⚠ Connect Devices @ Undulator #32
UN462_0115	Test Devices @ Undulator #32	1	20MAR08	20MAR08						⚠ Test Devices @ Undulator #32
UN462_0100	Connect Devices @ Undulator #33	1	25MAR08	25MAR08						⚠ Connect Devices @ Undulator #33
UN462_0105	Test Devices @ Undulator #33	1	26MAR08	26MAR08						⚠ Test Devices @ Undulator #33
UN462_0500	Test Devices Under Vacuum	1	17APR08	17APR08						⚠ Test Devices Under Vacuum
1.04.06.04 Vacuum System Installation and Alignment										
UN48_D200	Cell Conceptual Layout	20	21MAR05*	15APR05			⚠ Cell Conceptual Layout			
UN48_D201	System Conceptual Layout	30	18APR05	27MAY05			⚠ System Conceptual Layout			
UN48_D215	Update Undulator Magnet	15	31MAY05	20JUN05			⚠ Update Undulator Magnet			
UN48_D218	Update Quads	15	26SEP05	14OCT05			⚠ Update Quads			
UN48_D213	Update RDM	10	24OCT05	04NOV05			⚠ Update RDM			
UN48_D208	Update ULD Station	15	26OCT05	15NOV05			⚠ Update ULD Station			
UN48_D217	Update Fixed Support	15	04NOV05	28NOV05			⚠ Update Fixed Support			
UN48_D209	Update EOU	15	17NOV05	09DEC05			⚠ Update EOU			
UN48_D203	Update Bellows	15	09JAN06	30JAN06			⚠ Update Bellows			
UN48_D212	Update Cherenkov Detector	15	03FEB06	24FEB06			⚠ Update Cherenkov Detector			
UN48_D211	Update Charge Monitor	10	17FEB06	03MAR06			⚠ Update Charge Monitor			
UN48_D207	Update Exit Section	10	13APR06	26APR06			⚠ Update Exit Section			
UN48_D206	Update Entrance Section	10	11MAY06	24MAY06			⚠ Update Entrance Section			
UN48_D204	Update SDB	15	11MAY06	01JUN06			⚠ Update SDB			
UN48_D205	Update LDB	15	11MAY06	01JUN06			⚠ Update LDB			
UN48_D210	Update RFBPM	15	23MAY06	13JUN06			⚠ Update RFBPM			
UN48_D202	Update Vacuum Chamber	15	05JUN06	23JUN06			⚠ Update Vacuum Chamber			
UN48_D216	Update Movers	15	04OCT06	24OCT06			⚠ Update Movers			
UN48_D214	System Layout Clean-up	30	25OCT06	07DEC06			⚠ System Layout Clean-up			
UN47_00590	Entrance Section Assy & Support Arrive at SLAC	10	09APR07	20APR07*			⚠ Entrance Section Assy & Support Arrive at SLAC			
UN48_00590	Exit Section Assembly & Support Arrive at SLAC	8	17APR07	27APR07			⚠ Exit Section Assembly & Support Arrive at SLAC			
UN43_00570	Standard Bellows Arrive at SLAC	10	10MAY07	23MAY07						⚠ Standard Bellows Arrive at SLAC

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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UN45_00450	Short Diagnostic Break Assembly Arrive at SLAC	10	10MAY07	23MAY07				Short Diagnostic Break Assembly Arrive at SLAC			
UN46_00530	Long Diagnostic Break Assembly Arrive at SLAC	10	10MAY07	23MAY07				Long Diagnostic Break Assembly Arrive at SLAC			
UN45_00460	Install Short Break Section Components	5	09AUG07	15AUG07				Install Short Break Section Components			
UN48_00595	Install Exit Section Components	5	09AUG07	15AUG07					Install Exit Section Components		
UN47_00595	Install Entrance Section Components	5	16AUG07	22AUG07					Install Entrance Section Components		
UN48_00600	Install Pumps	5	16AUG07	22AUG07					Install Pumps		
UN48_00610	Make Up Vacuum	10	16AUG07	29AUG07					Make Up Vacuum		
UN46_00540	Install Long Break Section Components	10	28NOV07	11DEC07				Install Long Break Section Components			
UN48_00605	Make Up Vacuum	10	12DEC07	10JAN08					Make Up Vacuum		
UN48_00620	Pump Down	10	27MAR08	09APR08					Pump Down		
UN48_00625	Leak Test	5	10APR08	16APR08					Leak Test		
UN48_00630	Controls System Checkout	10	17APR08	30APR08					Controls System Checkout		
UN48_00635	System Checkout	10	01MAY08	14MAY08					System Checkout		
1.04.06.05 Diagnostics System Installation and Alignment											
UN507_0200	Charge Monitor Arrive at SLAC	10	30JAN07	13FEB07					Charge Monitor Arrive at SLAC		
UN505_0290	RFBPM Arrive at SLAC	10	22FEB07	07MAR07					RFBPM Arrive at SLAC		
UN509_0260	RDM Arrive at SLAC	10	27FEB07	12MAR07					RDM Arrive at SLAC		
UN508_0190	Cherenkov Detector Arrive at SLAC	10	19APR07	02MAY07					Cherenkov Detector Arrive at SLAC		
UN511_0210	Supplemental Shielding Arrive at SLAC	10	25JUL07	08AUG07					Supplemental Shielding Arrive at SLAC		
UN502_1670	ULD Arrive at SLAC	10	09AUG07	22AUG07					ULD Arrive at SLAC		
UN511_0220	Install Supplemental Shielding	20	09AUG07	07SEP07					Install Supplemental Shielding		
UN502_1675	ULD #1 Temperature Stabilization	3	23AUG07	27AUG07					ULD #1 Temperature Stabilization		
UN502_1680	Pre-Align ULD #1 at SLAC	3	28AUG07	30AUG07					Pre-Align ULD #1 at SLAC		
UN502_1685	RFI: ULD #1	0		30AUG07					RFI: ULD #1		
UN502_1690	EBXPD #2 Temperature Stabilization	3	31AUG07	05SEP07					EBXPD #2 Temperature Stabilization		
UN502_1695	Pre-Align EBXPD #2 at SLAC	3	06SEP07	10SEP07					Pre-Align EBXPD #2 at SLAC		
UN502_1700	RFI: EBXPD #2	0		10SEP07					RFI: EBXPD #2		
UN511_0230	Inspect Supplemental Shielding Placement and S	5	10SEP07	17SEP07				Inspect Supplemental Shielding Placement and S			
UN502_1705	EBXPD #3 Temperature Stabilization	3	11SEP07	13SEP07					EBXPD #3 Temperature Stabilization		
UN504_1540	EOU Arrive at SLAC	10	13SEP07	27SEP07					EOU Arrive at SLAC		
UN502_1710	Pre-Align EBXPD #3 at SLAC	3	14SEP07	18SEP07					Pre-Align EBXPD #3 at SLAC		
UN511_0240	Supplemental Shielding Available	0		17SEP07					Supplemental Shielding Available		
UN502_1715	RFI: EBXPD #3	0		18SEP07					RFI: EBXPD #3		
UN502_1720	EBXPD #4 Temperature Stabilization	3	19SEP07	21SEP07					EBXPD #4 Temperature Stabilization		
UN502_1725	Pre-Align EBXPD #4 at SLAC	3	24SEP07	26SEP07					Pre-Align EBXPD #4 at SLAC		
UN502_1730	RFI: EBXPD #4	0		26SEP07					RFI: EBXPD #4		
UN502_1735	EBXPD #5 Temperature Stabilization	3	27SEP07	01OCT07					EBXPD #5 Temperature Stabilization		

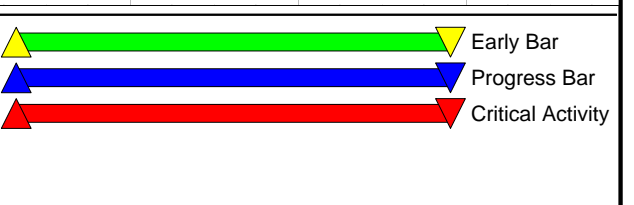
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN504_1550	Pre-Align EOU at SLAC	20	28SEP07	26OCT07					▲ Pre-Align EOU at SLAC	
UN502_1740	Pre-Align EBXPD #5 at SLAC	3	02OCT07	04OCT07					▲ Pre-Align EBXPD #5 at SLAC	
UN502_1745	RFI: EBXPD #5	0		04OCT07					◆ RFI: EBXPD #5	
UN502_1752	EBXPD #6 Temperature Stabilization	3	05OCT07	09OCT07					▲ EBXPD #6 Temperature Stabilization	
UN511_0260	Complete - Sup S Testing	0		09OCT07					◆ Complete - Sup S Testing	
UN502_1754	Pre-Align EBXPD #6 at SLAC	3	10OCT07	12OCT07					▲ Pre-Align EBXPD #6 at SLAC	
UN502_1757	RFI: EBXPD #6	0		12OCT07					◆ RFI: EBXPD #6	
UN502_1760	EBXPD #7 Temperature Stabilization	3	15OCT07	17OCT07					▲ EBXPD #7 Temperature Stabilization	
UN502_1765	Pre-Align EBXPD #7 at SLAC	3	18OCT07	22OCT07					▲ Pre-Align EBXPD #7 at SLAC	
UN502_1770	RFI: EBXPD #7	0		22OCT07					◆ RFI: EBXPD #7	
UN502_1775	EBXPD #8 Temperature Stabilization	3	23OCT07	25OCT07			EBXPD #8 Temperature Stabilization		▲ EBXPD #8 Temperature Stabilization	
UN502_1780	Pre-Align EBXPD #8 at SLAC	3	26OCT07	30OCT07					▲ Pre-Align EBXPD #8 at SLAC	
UN504_1560	Install EOU	20	29OCT07	28NOV07					▲ Install EOU	
UN502_1785	RFI: EBXPD #8	0		30OCT07					◆ RFI: EBXPD #8	
UN502_1790	EBXPD #9 Temperature Stabilization	3	31OCT07	02NOV07			EBXPD #9 Temperature Stabilization		▲ EBXPD #9 Temperature Stabilization	
UN502_1795	Pre-Align EBXPD #9 at SLAC	3	05NOV07	07NOV07					▲ Pre-Align EBXPD #9 at SLAC	
UN502_1800	RFI: EBXPD #9	0		07NOV07					◆ RFI: EBXPD #9	
UN502_1805	EBXPD #10 Temperature Stabilization	3	08NOV07	12NOV07			EBXPD #10 Temperature Stabilization		▲ EBXPD #10 Temperature Stabilization	
UN502_1810	Pre-Align EBXPD #10 at SLAC	3	13NOV07	15NOV07					▲ Pre-Align EBXPD #10 at SLAC	
UN502_1815	RFI: EBXPD #10	0		15NOV07					◆ RFI: EBXPD #10	
UN502_1820	EBXPD #11 (Spare) Temperature Stabilization	3	16NOV07	20NOV07			EBXPD #11 (Spare) Temperature Stabilization		▲ EBXPD #11 (Spare) Temperature Stabilization	
UN502_1825	Pre-Align EBXPD #11 at SLAC	3	21NOV07	27NOV07					▲ Pre-Align EBXPD #11 at SLAC	
UN502_1830	RFI: EBXPD #11	0		27NOV07					◆ RFI: EBXPD #11	
UN504_1570	Align EOU	15	29NOV07	07JAN08					▲ Align EOU	
UN504_1580	Validate EOU	7	08JAN08	17JAN08					▲ Validate EOU	
UN504_1590	EOU Available	0		17JAN08					◆ EOU Available	
UN504_1600	Integrate EOU	20	18JAN08	19FEB08					▲ Integrate EOU	
UN504_1610	Test EOU	15	20FEB08	12MAR08					▲ Test EOU	
UN504_1630	Complete EOU Testing	0		01APR08					◆ Complete EOU Testing	


2 LCLS PROJECT - R&D, SPARES, COMMISSIONING

2.04 UNDULATOR SYSTEM (OPC)

2.04.01 Undulator System Management & Integration

2.04.01.01 Undulator System Mgmt & Integration

UNOPS_0000	Undulator System Pre-Operations	150	18AUG08*	31MAR09
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Undulator System Pre-Operations 

Start Date 01JUN01
 Finish Date 31MAR09
 Data Date 01OCT04
 Run Date 29APR05 13:44

LCLS INTEGRATED SCHEDULE

Undulator



Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
2.04.02 Controls										
2.04.02.01 Controls Management and Integration										
UN21_J41	Procure cameras for imaging test stand	21	01MAR05	29MAR05						
UN21_J43	Procure image capture hardware-imaging test stand	21	01MAR05	29MAR05						
UN21_J45	Procure host for imaging test stand	21	01MAR05	29MAR05						
2.04.02.07 Machine Protection										
UN27_00092	Procure Spare MPS Hardware	1	03OCT06	03OCT06						
UN27_00532	Procure spare signal electronics	1	04OCT06	04OCT06						
UN27_00324	REC: spare signal electronics	1	05OCT06	05OCT06						
2.04.03 Undulator Magnet & Support										
2.04.03.02 First Prototype Undulator & Mfg Plan										
UN32_00500	Feasibility Study - double gap/change period	61*	04OCT04A	12JAN05						
UN32_M124	Magnet Measurement Development	23	03JAN05*	03FEB05						
2.04.03.04 Production Undulator										
UN33_20110	RCV: From Vendor - 2nd Half Magnet Blocks 7/20	1	03OCT06	03OCT06						
UN33_30110	RCV: From Vendor - 4th Lot Magnet Poles (34-40)	1	04OCT06	04OCT06						
UN34_10250	RCV: Support/Mover Lot 4 (5 units)	1	01OCT08*	01OCT08						
UN33_10400	Vendor Fab/Assy - Ti Strongback Article 34	10	01OCT08*	14OCT08						
UN33_10402	ACCEPT: Factory Acceptance - Ti S/B Article 34	1	14OCT08	14OCT08						
UN33_10404	Vendor Ship - Ti S/B Article 34	5	15OCT08	21OCT08						
UN33_10408	Vendor Fab/Assy - Ti Strongback Article 35	10	15OCT08	28OCT08						
UN33_10406	RCV: From Vendor - Ti Strongback Article 34	0		21OCT08						
UN34_10109	RCV: Ti Strongback - Vend B #34	0		21OCT08						
UN34_10110	Vendor B Fab/Assy - Magnet Assy Article 34	10	22OCT08	04NOV08						
UN33_10410	ACCEPT: Factory Acceptance - Ti S/B Article 35	1	28OCT08	28OCT08						
UN33_10412	Vendor Ship - Ti S/B Article 35	5	29OCT08	04NOV08						
UN33_10420	Vendor Fab/Assy - Ti Strongback Article 36	10	29OCT08	11NOV08						
UN33_10414	RCV: From Vendor - Ti Strongback Article 35	0		04NOV08						
UN34_00113	RCV: Ti Strongback - Vend A #35	0		04NOV08						
UN34_10112	RCV: From Vendor B - Magnet Assy Article 34	1	05NOV08	05NOV08						
UN34_00114	Vendor A Fab/Assy - Magnet Assy Article 35	10	05NOV08	18NOV08						
UN33_10422	ACCEPT: Factory Acceptance - Ti S/B Article 36	1	11NOV08	11NOV08						
UN33_10424	Vendor Ship - Ti S/B Article 36	5	12NOV08	18NOV08						
UN33_10428	Vendor Fab/Assy - Ti Strongback Article 37	10	12NOV08	25NOV08						
UN33_10426	RCV: From Vendor - Ti Strongback Article 36	0		18NOV08						
UN34_10113	RCV: Ti Strongback - Vend B #36	0		18NOV08						

Procure cameras for imaging test stand
 Procure image capture hardware-imaging test stand
 Procure host for imaging test stand

Procure Spare MPS Hardware
 Procure spare signal electronics
 REC: spare signal electronics

Feasibility Study - double gap/change period
 Magnet Measurement Development

RCV: From Vendor - 2nd Half Magnet Blocks 7/20
 RCV: From Vendor - 4th Lot Magnet Poles (34-40)
 RCV: Support/Mover Lot 4 (5 units)
 Vendor Fab/Assy - Ti Strongback Article 34
 ACCEPT: Factory Acceptance - Ti S/B Article 34
 Vendor Ship - Ti S/B Article 34
 Vendor Fab/Assy - Ti Strongback Article 35
 RCV: From Vendor - Ti Strongback Article 34
 RCV: Ti Strongback - Vend B #34
 Vendor B Fab/Assy - Magnet Assy Article 34
 ACCEPT: Factory Acceptance - Ti S/B Article 35
 Vendor Ship - Ti S/B Article 35
 Vendor Fab/Assy - Ti Strongback Article 36
 RCV: From Vendor - Ti Strongback Article 35
 RCV: Ti Strongback - Vend A #35
 RCV: From Vendor B - Magnet Assy Article 34
 Vendor A Fab/Assy - Magnet Assy Article 35
 ACCEPT: Factory Acceptance - Ti S/B Article 36
 Vendor Ship - Ti S/B Article 36
 Vendor Fab/Assy - Ti Strongback Article 37
 RCV: From Vendor - Ti Strongback Article 36
 RCV: Ti Strongback - Vend B #36



LCLS INTEGRATED SCHEDULE

Undulator

Start Date 01JUN01
 Finish Date 31MAR09
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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UN34_00116	RCV: From Vendor A - Magnet Assy Article 35	1	19NOV08	19NOV08						RCV: From Vendor A - Magnet Assy Article 35	
UN34_10114	Vendor B Fab/Assy - Magnet Assy Article 36	10	19NOV08	04DEC08						Vendor B Fab/Assy - Magnet Assy Article 36	
UN33_10430	ACCEPT: Factory Acceptance - Ti S/B Article 37	1	25NOV08	25NOV08						ACCEPT: Factory Acceptance - Ti S/B Article 37	
UN33_10432	Vendor Ship - Ti S/B Article 37	5	26NOV08	04DEC08						Vendor Ship - Ti S/B Article 37	
UN33_10440	Vendor Fab/Assy - Ti Strongback Article 38	10	26NOV08	11DEC08						Vendor Fab/Assy - Ti Strongback Article 38	
UN33_10434	RCV: From Vendor - Ti Strongback Article 37	0		04DEC08						RCV: From Vendor - Ti Strongback Article 37	
UN34_00117	RCV: Ti Strongback - Vend A #37	0		04DEC08						RCV: Ti Strongback - Vend A #37	
UN34_10116	RCV: From Vendor B - Magnet Assy Article 36	1	05DEC08	05DEC08						RCV: From Vendor B - Magnet Assy Article 36	
UN34_00118	Vendor A Fab/Assy - Magnet Assy Article 37	10	05DEC08	18DEC08						Vendor A Fab/Assy - Magnet Assy Article 37	
UN33_10442	ACCEPT: Factory Acceptance - Ti S/B Article 38	1	11DEC08	11DEC08						ACCEPT: Factory Acceptance - Ti S/B Article 38	
UN33_10444	Vendor Ship - Ti S/B Article 38	5	12DEC08	18DEC08						Vendor Ship - Ti S/B Article 38	
UN33_10448	Vendor Fab/Assy - Ti Strongback Article 39	10	12DEC08	07JAN09						Vendor Fab/Assy - Ti Strongback Article 39	
UN33_10446	RCV: From Vendor - Ti Strongback Article 38	0		18DEC08						RCV: From Vendor - Ti Strongback Article 38	
UN34_10117	RCV: Ti Strongback - Vend B #38	0		18DEC08						RCV: Ti Strongback - Vend B #38	
UN34_00120	RCV: From Vendor A - Magnet Assy Article 37	1	19DEC08	19DEC08						RCV: From Vendor A - Magnet Assy Article 37	
UN34_10118	Vendor B Fab/Assy - Magnet Assy Article 38	10	19DEC08	14JAN09						Vendor B Fab/Assy - Magnet Assy Article 38	
UN33_10450	ACCEPT: Factory Acceptance - Ti S/B Article 39	1	07JAN09	07JAN09						ACCEPT: Factory Acceptance - Ti S/B Article 39	
UN33_10452	Vendor Ship - Ti S/B Article 39	5	08JAN09	14JAN09						Vendor Ship - Ti S/B Article 39	
UN33_10460	Vendor Fab/Assy - Ti Strongback Article 40	10	08JAN09	21JAN09						Vendor Fab/Assy - Ti Strongback Article 40	
UN33_10454	RCV: From Vendor - Ti Strongback Article 39	0		14JAN09						RCV: From Vendor - Ti Strongback Article 39	
UN34_00121	RCV: Ti Strongback - Vend A #39	0		14JAN09						RCV: Ti Strongback - Vend A #39	
UN34_10120	RCV: From Vendor B - Magnet Assy Article 38	1	15JAN09	15JAN09						RCV: From Vendor B - Magnet Assy Article 38	
UN34_00122	Vendor A Fab/Assy - Magnet Assy Article 39	10	15JAN09	28JAN09						Vendor A Fab/Assy - Magnet Assy Article 39	
UN33_10462	ACCEPT: Factory Acceptance - Ti S/B Article 40	1	21JAN09	21JAN09						ACCEPT: Factory Acceptance - Ti S/B Article 40	
UN33_10464	Vendor Ship - Ti S/B Article 40	5	22JAN09	28JAN09						Vendor Ship - Ti S/B Article 40	
UN33_10466	RCV: From Vendor - Ti Strongback Article 40	0		28JAN09						RCV: From Vendor - Ti Strongback Article 40	
UN34_10121	RCV: Ti Strongback - Vend B #40	0		28JAN09						RCV: Ti Strongback - Vend B #40	
UN34_00124	RCV: From Vendor A - Magnet Assy Article 39	1	29JAN09	29JAN09						RCV: From Vendor A - Magnet Assy Article 39	
UN34_10122	Vendor B Fab/Assy - Magnet Assy Article 40	10	29JAN09	11FEB09						Vendor B Fab/Assy - Magnet Assy Article 40	
UN34_10124	RCV: From Vendor B - Magnet Assy Article 40	1	12FEB09	12FEB09						RCV: From Vendor B - Magnet Assy Article 40	
2.04.03.05 Focusing Magnets											
UN35_00150	Vendor Fab/Assy - Quad Stages, Stands, etc. (4)	10	03OCT06	16OCT06						Vendor Fab/Assy - Quad Stages, Stands, etc. (4)	
UN35_00151	Vendor Fab/Assy - Quad Cables (4)	10	04OCT06	17OCT06						Vendor Fab/Assy - Quad Cables (4)	
UN35_00132	Vendor Fab/Assy - Quads Spares (4-mag)	10	12MAR07	23MAR07						Vendor Fab/Assy - Quads Spares (4-mag)	
UN35_00133	Vendor Fab/Assy - Quad PS+ addl items (4)	6	21SEP07	28SEP07						Vendor Fab/Assy - Quad PS+ addl items (4)	
2.04.03.06 Undulator Magnetic Measurement Facility (SLAC)											
UN362_3305	HLS Systems Design	40	04OCT04A	30NOV04A						HLS Systems Design	




Start Date 01JUN01
Finish Date 31MAR09
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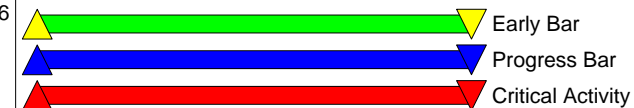
**LCLS
INTEGRATED SCHEDULE**

Undulator

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 Early Bar
 Progress Bar
 Critical Activity

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	Year						
					2004	2005	2006	2007	2008	2009	
UN362_3306	HLS Systems Design-Part II	146	03JAN05*	29JUL05			HLS Systems Design-Part II				
UN36_02650	Magnetic Field Measurement #34 Article at SLAC	2	01OCT08*	02OCT08			Magnetic Field Measurement #34 Article at SLAC				
UN36_02670	Magnetic Field Measurement #35 Article at SLAC	2	01OCT08*	02OCT08			Magnetic Field Measurement #35 Article at SLAC				
UN36_02660	Quadrupole #34 Fiducialization	2	03OCT08	06OCT08			Quadrupole #34 Fiducialization				
UN36_02690	Magnetic Field Measurement #36 Article at SLAC	2	03OCT08	06OCT08			Magnetic Field Measurement #36 Article at SLAC				
UN362_3487	REQD: Quad/Vac Chmbr/BPM/Cher Det - 34	0		06OCT08			REQD: Quad/Vac Chmbr/BPM/Cher Det - 34				
UN362_3488	Assemble Cradle/Quad Supt/Movers - 34	1	07OCT08	07OCT08			Assemble Cradle/Quad Supt/Movers - 34				
UN36_02680	Quadrupole #35 Fiducialization	2	07OCT08	08OCT08			Quadrupole #35 Fiducialization				
UN36_02710	Magnetic Field Measurement #37 Article at SLAC	2	07OCT08	08OCT08			Magnetic Field Measurement #37 Article at SLAC				
UN362_3587	REQD: Quad/Vac Chmbr/BPM/Cher Det - 35	0		08OCT08			REQD: Quad/Vac Chmbr/BPM/Cher Det - 35				
UN362_3489	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 34	2	08OCT08	09OCT08			Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 34				
UN362_3588	Assemble Cradle/Quad Supt/Movers - 35	1	09OCT08	09OCT08			Assemble Cradle/Quad Supt/Movers - 35				
UN36_02700	Quadrupole #36 Fiducialization	2	09OCT08	10OCT08			Quadrupole #36 Fiducialization				
UN36_02718	Magnetic Field Measurement #38 Article at SLAC	2	09OCT08	10OCT08			Magnetic Field Measurement #38 Article at SLAC				
UN362_3687	REQD: Quad/Vac Chmbr/BPM/Cher Det - 36	0		10OCT08			REQD: Quad/Vac Chmbr/BPM/Cher Det - 36				
UN362_3589	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 35	2	10OCT08	13OCT08			Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 35				
UN362_3688	Assemble Cradle/Quad Supt/Movers - 36	1	13OCT08	13OCT08			Assemble Cradle/Quad Supt/Movers - 36				
UN36_02715	Quadrupole #37 Fiducialization	2	13OCT08	14OCT08			Quadrupole #37 Fiducialization				
UN36_02730	Magnetic Field Measurement #39 Article at SLAC	2	13OCT08	14OCT08			Magnetic Field Measurement #39 Article at SLAC				
UN362_3787	REQD: Quad/Vac Chmbr/BPM/Cher Det - 37	0		14OCT08			REQD: Quad/Vac Chmbr/BPM/Cher Det - 37				
UN362_3689	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 36	2	14OCT08	15OCT08			Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 36				
UN362_3788	Assemble Cradle/Quad Supt/Movers - 37	1	15OCT08	15OCT08			Assemble Cradle/Quad Supt/Movers - 37				
UN36_02720	Quadrupole #38 Fiducialization	2	15OCT08	16OCT08			Quadrupole #38 Fiducialization				
UN36_02750	Magnetic Field Measurement #40 Article at SLAC	2	15OCT08	16OCT08			Magnetic Field Measurement #40 Article at SLAC				
UN362_3887	REQD: Quad/Vac Chmbr/BPM/Cher Det - 38	0		16OCT08			REQD: Quad/Vac Chmbr/BPM/Cher Det - 38				
UN362_3789	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 37	2	16OCT08	17OCT08			Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 37				
UN362_3888	Assemble Cradle/Quad Supt/Movers - 38	1	17OCT08	17OCT08			Assemble Cradle/Quad Supt/Movers - 38				
UN36_02740	Quadrupole #39 Fiducialization	2	17OCT08	20OCT08			Quadrupole #39 Fiducialization				
UN362_3987	REQD: Quad/Vac Chmbr/BPM/Cher Det - 39	0		20OCT08			REQD: Quad/Vac Chmbr/BPM/Cher Det - 39				
UN362_3889	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 38	2	20OCT08	21OCT08			Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 38				
UN362_3988	Assemble Cradle/Quad Supt/Movers - 39	1	21OCT08	21OCT08			Assemble Cradle/Quad Supt/Movers - 39				
UN36_02760	Quadrupole #40 Fiducialization	2	21OCT08	22OCT08			Quadrupole #40 Fiducialization				
UN362_4087	REQD: Quad/Vac Chmbr/BPM/Cher Det - 40	0		22OCT08			REQD: Quad/Vac Chmbr/BPM/Cher Det - 40				
UN362_3989	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 39	2	22OCT08	23OCT08			Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 39				
UN362_4088	Assemble Cradle/Quad Supt/Movers - 40	1	23OCT08	23OCT08			Assemble Cradle/Quad Supt/Movers - 40				
UN362_4089	Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 40	2	24OCT08	27OCT08			Assemble Cradle/Vac Chmbr/BPM/Quad/Cher Det - 40				
UN362_3410	REQD: Undulator Mag Assy - 34	0		05NOV08			REQD: Undulator Mag Assy - 34				

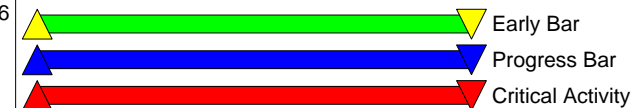


**LCLS
INTEGRATED SCHEDULE**

Undulator

Start Date 01JUN01
 Finish Date 31MAR09
 Data Date 01OCT04
 Run Date 29APR05 13:44

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN362_3420	Adjust to Temperature - 34	10	06NOV08	19NOV08				Adjust to Temperature - 34		
UN362_3510	REQD: Undulator Mag Assy - 35	0		19NOV08				REQD: Undulator Mag Assy - 35		
UN362_3430	Undulator Setup and Alignment @ Test Bench - 34	1	20NOV08	20NOV08				Undulator Setup and Alignment @ Test Bench - 34		
UN362_3520	Adjust to Temperature - 35	10	20NOV08	05DEC08				Adjust to Temperature - 35		
UN362_3440	Undulator Measurement and Set Gap - 34	2	21NOV08	24NOV08				Undulator Measurement and Set Gap - 34		
UN362_3460	Undulator Measurement/Pre-fiducialization - 34	4	25NOV08	02DEC08				Undulator Measurement/Pre-fiducialization - 34		
UN362_3470	Undulator Setup and Alignment @ CMM - 34	1	03DEC08	03DEC08				Undulator Setup and Alignment @ CMM - 34		
UN362_3480	Undulator Fiducialization - 34	2	04DEC08	05DEC08				Undulator Fiducialization - 34		
UN362_3610	REQD: Undulator Mag Assy - 36	0		05DEC08				REQD: Undulator Mag Assy - 36		
UN362_3530	Undulator Setup and Alignment @ Test Bench - 35	1	08DEC08	08DEC08				Undulator Setup and Alignment @ Test Bench - 35		
UN362_3485	Undulator Ready for Assembly - 34	5	08DEC08	12DEC08				Undulator Ready for Assembly - 34		
UN362_3620	Adjust to Temperature - 36	10	08DEC08	19DEC08				Adjust to Temperature - 36		
UN362_3540	Undulator Measurement and Set Gap - 35	2	09DEC08	10DEC08				Undulator Measurement and Set Gap - 35		
UN362_3560	Undulator Measurement/Pre-fiducialization - 35	4	11DEC08	16DEC08				Undulator Measurement/Pre-fiducialization - 35		
UN362_3490	Install Undulators on Cradle- 34	1	15DEC08	15DEC08				Install Undulators on Cradle- 34		
UN362_3491	Prealign Vacuum Chamber - 34	1	16DEC08	16DEC08				Prealign Vacuum Chamber - 34		
UN362_3500	Undulator Cradle RFI - 34	0		16DEC08				Undulator Cradle RFI - 34		
UN362_3570	Undulator Setup and Alignment @ CMM - 35	1	17DEC08	17DEC08				Undulator Setup and Alignment @ CMM - 35		
UN362_3580	Undulator Fiducialization - 35	2	18DEC08	19DEC08				Undulator Fiducialization - 35		
UN362_3710	REQD: Undulator Mag Assy - 37	0		19DEC08				REQD: Undulator Mag Assy - 37		
UN362_3630	Undulator Setup and Alignment @ Test Bench - 36	1	02JAN09	02JAN09				Undulator Setup and Alignment @ Test Bench - 36		
UN362_3585	Undulator Ready for Assembly - 35	5	02JAN09	08JAN09				Undulator Ready for Assembly - 35		
UN362_3720	Adjust to Temperature - 37	10	02JAN09	15JAN09				Adjust to Temperature - 37		
UN362_3640	Undulator Measurement and Set Gap - 36	2	05JAN09	06JAN09				Undulator Measurement and Set Gap - 36		
UN362_3660	Undulator Measurement/Pre-fiducialization - 36	4	07JAN09	12JAN09				Undulator Measurement/Pre-fiducialization - 36		
UN362_3590	Install Undulators on Cradle- 35	1	09JAN09	09JAN09				Install Undulators on Cradle- 35		
UN362_3591	Prealign Vacuum Chamber - 35	1	12JAN09	12JAN09				Prealign Vacuum Chamber - 35		
UN362_3600	Undulator Cradle RFI - 35	0		12JAN09				Undulator Cradle RFI - 35		
UN362_3670	Undulator Setup and Alignment @ CMM - 36	1	13JAN09	13JAN09				Undulator Setup and Alignment @ CMM - 36		
UN362_3680	Undulator Fiducialization - 36	2	14JAN09	15JAN09				Undulator Fiducialization - 36		
UN362_3810	REQD: Undulator Mag Assy - 38	0		15JAN09				REQD: Undulator Mag Assy - 38		
UN362_3730	Undulator Setup and Alignment @ Test Bench - 37	1	16JAN09	16JAN09				Undulator Setup and Alignment @ Test Bench - 37		
UN362_3685	Undulator Ready for Assembly - 36	5	16JAN09	22JAN09				Undulator Ready for Assembly - 36		
UN362_3820	Adjust to Temperature - 38	10	16JAN09	29JAN09				Adjust to Temperature - 38		
UN362_3740	Undulator Measurement and Set Gap - 37	2	19JAN09	20JAN09				Undulator Measurement and Set Gap - 37		
UN362_3760	Undulator Measurement/Pre-fiducialization - 37	4	21JAN09	26JAN09				Undulator Measurement/Pre-fiducialization - 37		
UN362_3690	Install Undulators on Cradle- 36	1	23JAN09	23JAN09				Install Undulators on Cradle- 36		

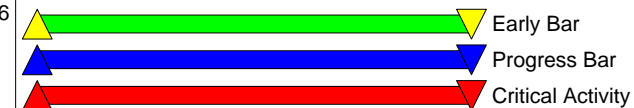


**LCLS
INTEGRATED SCHEDULE**

Undulator

Start Date 01JUN01
 Finish Date 31MAR09
 Data Date 01OCT04
 Run Date 29APR05 13:44

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN362_3691	Prealign Vacuum Chamber - 36	1	26JAN09	26JAN09					Prealign Vacuum Chamber - 36	
UN362_3700	Undulator Cradle RFI - 36	0		26JAN09					Undulator Cradle RFI - 36	
UN362_3770	Undulator Setup and Alignment @ CMM - 37	1	27JAN09	27JAN09					Undulator Setup and Alignment @ CMM - 37	
UN362_3780	Undulator Fiducialization - 37	2	28JAN09	29JAN09					Undulator Fiducialization - 37	
UN362_3910	REQD: Undulator Mag Assy - 39	0		29JAN09					REQD: Undulator Mag Assy - 39	
UN362_3830	Undulator Setup and Alignment @ Test Bench - 38	1	30JAN09	30JAN09					Undulator Setup and Alignment @ Test Bench - 38	
UN362_3785	Undulator Ready for Assembly - 37	5	30JAN09	05FEB09					Undulator Ready for Assembly - 37	
UN362_3920	Adjust to Temperature - 39	10	30JAN09	12FEB09					Adjust to Temperature - 39	
UN362_3840	Undulator Measurement and Set Gap - 38	2	02FEB09	03FEB09					Undulator Measurement and Set Gap - 38	
UN362_3860	Undulator Measurement/Pre-fiducialization - 38	4	04FEB09	09FEB09					Undulator Measurement/Pre-fiducialization - 38	
UN362_3790	Install Undulators on Cradle- 37	1	06FEB09	06FEB09					Install Undulators on Cradle- 37	
UN362_3791	Prealign Vacuum Chamber - 37	1	09FEB09	09FEB09					Prealign Vacuum Chamber - 37	
UN362_3800	Undulator Cradle RFI - 37	0		09FEB09					Undulator Cradle RFI - 37	
UN362_3870	Undulator Setup and Alignment @ CMM - 38	1	10FEB09	10FEB09					Undulator Setup and Alignment @ CMM - 38	
UN362_3880	Undulator Fiducialization - 38	2	11FEB09	12FEB09					Undulator Fiducialization - 38	
UN362_4010	REQD: Undulator Mag Assy - 40	0		12FEB09					REQD: Undulator Mag Assy - 40	
UN362_3930	Undulator Setup and Alignment @ Test Bench - 39	1	13FEB09	13FEB09					Undulator Setup and Alignment @ Test Bench - 39	
UN362_3885	Undulator Ready for Assembly - 38	5	13FEB09	19FEB09					Undulator Ready for Assembly - 38	
UN362_4020	Adjust to Temperature - 40	10	13FEB09	26FEB09					Adjust to Temperature - 40	
UN362_3940	Undulator Measurement and Set Gap - 39	2	16FEB09	17FEB09					Undulator Measurement and Set Gap - 39	
UN362_3960	Undulator Measurement/Pre-fiducialization - 39	4	18FEB09	23FEB09					Undulator Measurement/Pre-fiducialization - 39	
UN362_3890	Install Undulators on Cradle- 38	1	20FEB09	20FEB09					Install Undulators on Cradle- 38	
UN362_3891	Prealign Vacuum Chamber - 38	1	23FEB09	23FEB09					Prealign Vacuum Chamber - 38	
UN362_3900	Undulator Cradle RFI - 38	0		23FEB09					Undulator Cradle RFI - 38	
UN362_3970	Undulator Setup and Alignment @ CMM - 39	1	24FEB09	24FEB09					Undulator Setup and Alignment @ CMM - 39	
UN362_3980	Undulator Fiducialization - 39	2	25FEB09	26FEB09					Undulator Fiducialization - 39	
UN362_4030	Undulator Setup and Alignment @ Test Bench - 40	1	27FEB09	27FEB09					Undulator Setup and Alignment @ Test Bench - 40	
UN362_3985	Undulator Ready for Assembly - 39	5	27FEB09	05MAR09					Undulator Ready for Assembly - 39	
UN362_4040	Undulator Measurement and Set Gap - 40	2	02MAR09	03MAR09					Undulator Measurement and Set Gap - 40	
UN362_4060	Undulator Measurement/Pre-fiducialization - 40	4	04MAR09	09MAR09					Undulator Measurement/Pre-fiducialization - 40	
UN362_3990	Install Undulators on Cradle- 39	1	06MAR09	06MAR09					Install Undulators on Cradle- 39	
UN362_3991	Prealign Vacuum Chamber - 39	1	09MAR09	09MAR09					Prealign Vacuum Chamber - 39	
UN362_4000	Undulator Cradle RFI - 39	0		09MAR09					Undulator Cradle RFI - 39	
UN362_4070	Undulator Setup and Alignment @ CMM - 40	1	10MAR09	10MAR09					Undulator Setup and Alignment @ CMM - 40	
UN362_4080	Undulator Fiducialization - 40	2	11MAR09	12MAR09					Undulator Fiducialization - 40	
UN362_4085	Undulator Ready for Assembly - 40	5	13MAR09	19MAR09					Undulator Ready for Assembly - 40	
UN362_4090	Install Undulators on Cradle- 40	1	20MAR09	20MAR09					Install Undulators on Cradle- 40	



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Activity ID	Activity Description	Orig Dur	Early Start	Early Finish							
					2004	2005	2006	2007	2008	2009	
UN362_4091	Prealign Vacuum Chamber - 40	1	23MAR09	23MAR09							Prealign Vacuum Chamber - 40
UN362_4100	Undulator Cradle RFI - 40	0		23MAR09							Undulator Cradle RFI - 40
2.04.03.08 Fixed Supports											
UN43_RD000	Fixed Support R&D	50	01APR05*	10JUN05							Fixed Support R&D
UN43_SPR00	RCV: Fixed Support Spares	50	03OCT06	13DEC06							RCV: Fixed Support Spares
2.04.04 Vacuum System											
2.04.04.02 Undulator Vacuum Chamber Assembly											
UN42_D226	Investigate aluminum extrusion	3	01OCT04	05OCT04							Investigate aluminum extrusion
UN42_D229	Physics study AC Conductivity	3	01OCT04	05OCT04							Physics study AC Conductivity
UN42_D230	Test definition AC conductivity	3	01OCT04	05OCT04							Test definition AC conductivity
UN42_D231	Investigate AC con test equipment/technique	3	01OCT04	05OCT04							Investigate AC con test equipment/technique
UN42_D232	Design test samples AC conductivity	3	01OCT04	05OCT04							Design test samples AC conductivity
UN42_D233	Fabricate AC conductivity samples	3	01OCT04	05OCT04							Fabricate AC conductivity samples
UN42_D240	Create extrusion conceptual design	15	01OCT04	21OCT04							Create extrusion conceptual design
UN42_D211	Design surface measurement equipment	20	01OCT04	28OCT04							Design surface measurement equipment
UN42_D217	Design welding test samples	20	01OCT04	28OCT04							Design welding test samples
UN42_D218	Design weld tooling	30	01OCT04	11NOV04							Design weld tooling
UN42_D213	Fabricate surface measuring equipment	30	13OCT04	23NOV04							Fabricate surface measuring equipment
UN42_D212	Procure surface measurement equipment	30	29OCT04	13DEC04							Procure surface measurement equipment
UN42_D214	Assemble surface measuring equipment	10	14DEC04	29DEC04							Assemble surface measuring equipment
UN42_D215	Initial surface test	10	30DEC04	13JAN05							Initial surface test
UN42_D235	Test samples for AC conductivity	39	03JAN05*	28FEB05							Test samples for AC conductivity
UN42_D234	Travel to BNL AC conductivity	2	14FEB05*	15FEB05							Travel to BNL AC conductivity
UN42_D236	Collect results AC conductivity	20	01MAR05	28MAR05							Collect results AC conductivity
UN42_DP219	Fabricate welding sampels and tooling	23	01MAR05*	31MAR05							Fabricate welding sampels and tooling
UN42_DP227	Mechanical analysis of chamber	23	01MAR05*	31MAR05							Mechanical analysis of chamber
UN42_D237	Write study reprot AC conductivity	15	29MAR05	18APR05							Write study reprot AC conductivity
UN42_D220	Perform welding tests	15	01APR05	21APR05							Perform welding tests
UN42_D238	Submit study report AC conductivity	0		18APR05							Submit study report AC conductivity
UN42_D241	Create box conceptual design	15	19APR05	09MAY05							Create box conceptual design
UN42_D222	Final determination of metal surface finish meas	100	22APR05	13SEP05							Final determination of metal surface finish meas
UN42_D223	Final determination of welding process	100	22APR05	13SEP05							Final determination of welding process
UN42_00601	RCV: Chamber Supports	40	05OCT06	01DEC06							RCV: Chamber Supports
UN42_00441	Rec: Production Undulator Chamb (7)	50	05OCT06	15DEC06							Rec: Production Undulator Chamb (7)
2.04.04.03 Beam-line Bellows Module Assembly											
UN43_00451	Receive Standard Bellows Module (4)	40	05OCT06	01DEC06							Receive Standard Bellows Module (4)

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▶ Early Bar
▶ Progress Bar
▶ Critical Activity

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
2.04.04.05 Short Diagnostic Break (SDB) Assembly										
UN45_00321	Rec: SDB Chamber Weldment Assembly	30	23OCT06	05DEC06					Rec: SDB Chamber Weldment Assembly	
UN45_00323	Rec: SDB Pump Manifold	30	23OCT06	05DEC06					Rec: SDB Pump Manifold	
UN45_00325	Rec: SDB Ion Pump	30	23OCT06	05DEC06					Rec: SDB Ion Pump	
UN45_00327	Rec: SDB Ion Pump Power Supply	30	23OCT06	05DEC06					Rec: SDB Ion Pump Power Supply	
UN45_00329	Rec: SDB Ion Pump Cable	30	23OCT06	05DEC06					Rec: SDB Ion Pump Cable	
UN45_00331	Rec: SDB Chamber Supports	30	23OCT06	05DEC06					Rec: SDB Chamber Supports	
UN45_00333	Rec: SDB Pump Supports	30	23OCT06	05DEC06					Rec: SDB Pump Supports	
2.04.04.06 Long Diagnostic Break (LDB) Assembly										
UN46_00351	Rec: LDB Valve (2)	40	20OCT06	02JAN07					Rec: LDB Valve (2)	
UN46_00401	Rec: LDB Chamber Weldment Assembly (1)	40	20OCT06	02JAN07					Rec: LDB Chamber Weldment Assembly (1)	
UN46_00403	Rec: LDB Pump Manifold (1)	40	20OCT06	02JAN07					Rec: LDB Pump Manifold (1)	
UN46_00405	Rec: LDB Ion Pump (1)	40	20OCT06	02JAN07					Rec: LDB Ion Pump (1)	
UN46_00409	Rec: LDB Ion Pump Support (1)	40	20OCT06	02JAN07					Rec: LDB Ion Pump Support (1)	
UN46_00407	Rec: LDB Chamber Support (1)	40	24OCT06	04JAN07					Rec: LDB Chamber Support (1)	
2.04.04.07 Entrance Section Assembly										
UN47_00349	AWRD: Pneumatic Gate Valve	1	24OCT06	24OCT06					AWRD: Pneumatic Gate Valve	
UN47_00461	Rec: Standard Entrance Chamber	40	24OCT06	04JAN07					Rec: Standard Entrance Chamber	
UN47_00463	Rec: Entrance Bellows	40	24OCT06	04JAN07					Rec: Entrance Bellows	
UN47_00465	Rec: Entrance Upstream Chamber	40	24OCT06	04JAN07					Rec: Entrance Upstream Chamber	
UN47_00467	Rec: Pump Manifold	40	24OCT06	04JAN07					Rec: Pump Manifold	
UN47_00469	Rec: Ion Pump	40	24OCT06	04JAN07					Rec: Ion Pump	
UN47_00471	Rec: Ion Pump Controller	40	24OCT06	04JAN07					Rec: Ion Pump Controller	
UN47_00473	Rec: Ion Pump Cable	40	24OCT06	04JAN07					Rec: Ion Pump Cable	
UN47_00475	Rec: Gate Valve	40	24OCT06	04JAN07					Rec: Gate Valve	
UN47_00477	Rec: Valve	40	24OCT06	04JAN07					Rec: Valve	
UN47_00481	Rec: RGA	40	24OCT06	04JAN07					Rec: RGA	
UN47_00483	Rec: Entrance Chamber Support	40	24OCT06	04JAN07					Rec: Entrance Chamber Support	
UN47_00485	Rec: Chamber Mount	40	24OCT06	04JAN07					Rec: Chamber Mount	
UN47_00487	Rec: Ion Pump Support	40	24OCT06	04JAN07					Rec: Ion Pump Support	
UN47_00489	Rec: Gate Valve Support	40	24OCT06	04JAN07					Rec: Gate Valve Support	
UN47_00495	Rec: Pneumatic Gate Valve	1	25OCT06	25OCT06					Rec: Pneumatic Gate Valve	
UN47_00479	Rec: Vacuum Gauge	40	05JAN07	05MAR07					Rec: Vacuum Gauge	
UN47_00491	Rec: RGA Support	40	05JAN07	05MAR07					Rec: RGA Support	
2.04.04.08 Exit Section Assembly										
UN48_00461	Rec.: Standard Exit Chamber	40	19OCT06	15DEC06					Rec.: Standard Exit Chamber	
UN48_00464	Rec: Exit Downstream Chamber	40	19OCT06	15DEC06					Rec: Exit Downstream Chamber	

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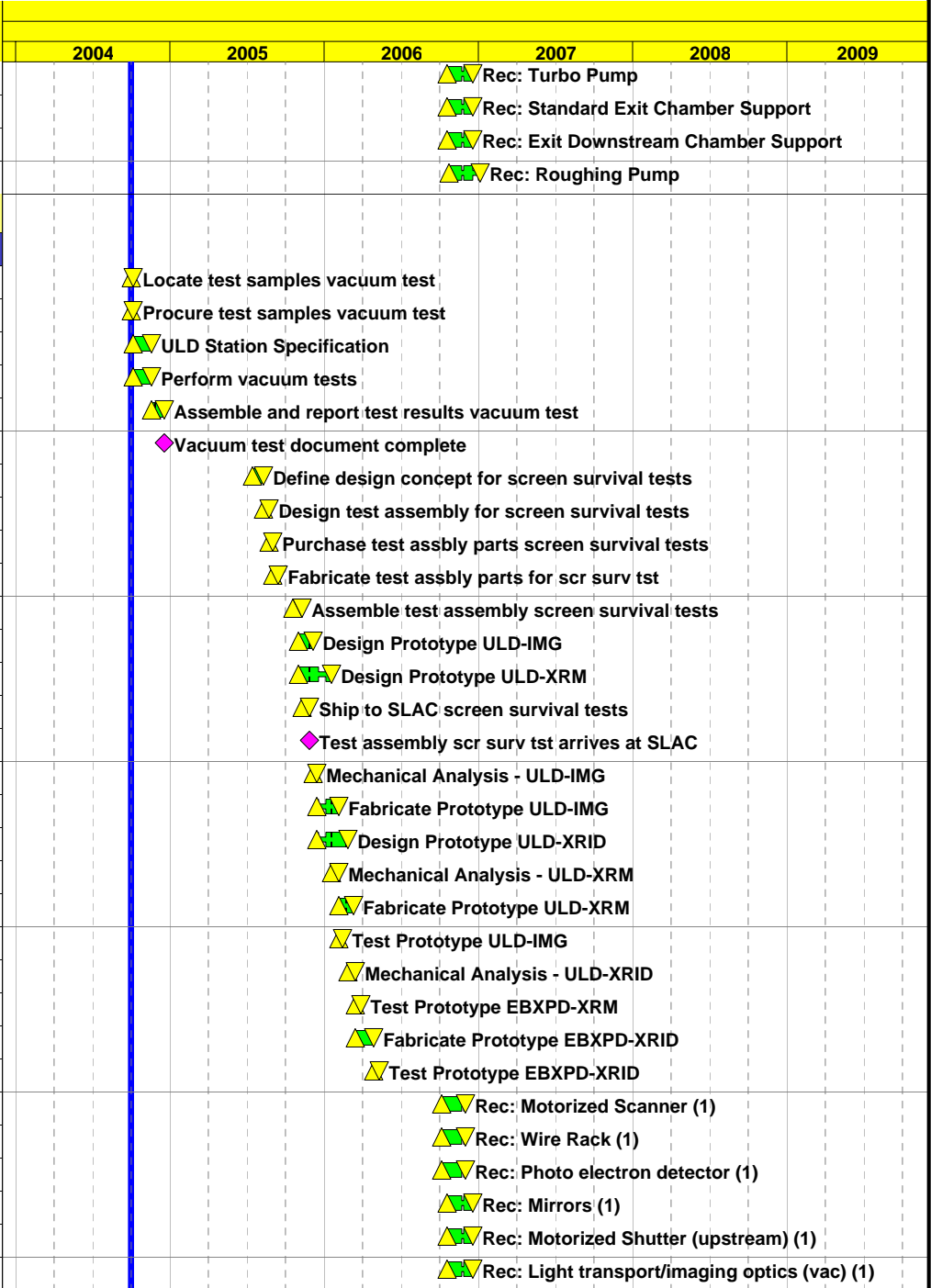
Early Bar
 Progress Bar
 Critical Activity

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish
UN48_00468	Rec: Turbo Pump	40	19OCT06	15DEC06
UN48_00477	Rec: Standard Exit Chamber Support	40	19OCT06	15DEC06
UN48_00479	Rec: Exit Downstream Chamber Support	40	19OCT06	15DEC06
UN48_00470	Rec: Roughing Pump	40	24OCT06	04JAN07

2.04.05 Undulator System Diagnostics [OPC]

2.04.05.02 Undulator Line Diagnostics

UN502_D174	Locate test samples vacuum test	3	01OCT04	05OCT04
UN502_D175	Procure test samples vacuum test	3	01OCT04	05OCT04
UN502_1393	ULD Station Specification	34	04OCT04	18NOV04
UN502_D176	Perform vacuum tests	30	06OCT04	16NOV04
UN502_D177	Assemble and report test results vacuum test	20	17NOV04	16DEC04
UN502_D178	Vacuum test document complete	0		16DEC04
UN502_D166	Define design concept for screen survival tests	20	13JUL05	09AUG05
UN502_D167	Design test assembly for screen survival tests	10	10AUG05	23AUG05
UN502_D168	Purchase test assbly parts screen survival tests	5	24AUG05	30AUG05
UN502_D169	Fabricate test assbly parts for scr surv tst	10	31AUG05	14SEP05
UN502_D170	Assemble test assembly screen survival tests	15	20OCT05	09NOV05
UN502_1160	Design Prototype ULD-IMG	21	02NOV05	02DEC05
UN502_0960	Design Prototype ULD-XRM	40	02NOV05	17JAN06
UN502_D171	Ship to SLAC screen survival tests	10	10NOV05	23NOV05
UN502_D172	Test assembly scr surv tst arrives at SLAC	0		23NOV05
UN502_1170	Mechanical Analysis - ULD-IMG	6	05DEC05	12DEC05
UN502_1180	Fabricate Prototype ULD-IMG	26	13DEC05	02FEB06
UN502_0840	Design Prototype ULD-XRID	40	13DEC05	23FEB06
UN502_0970	Mechanical Analysis - ULD-XRM	11	18JAN06	01FEB06
UN502_0980	Fabricate Prototype ULD-XRM	26	02FEB06	10MAR06
UN502_1190	Test Prototype ULD-IMG	6	03FEB06	10FEB06
UN502_0850	Mechanical Analysis - ULD-XRID	13	24FEB06	14MAR06
UN502_0990	Test Prototype EBXPD-XRM	11	13MAR06	27MAR06
UN502_0860	Fabricate Prototype EBXPD-XRID	31	15MAR06	26APR06
UN502_0870	Test Prototype EBXPD-XRID	9	27APR06	09MAY06
UN502_0612	Rec: Motorized Scanner (1)	40	05OCT06	01DEC06
UN502_0616	Rec: Wire Rack (1)	40	05OCT06	01DEC06
UN502_0619	Rec: Photo electron detector (1)	40	05OCT06	01DEC06
UN502_0811	Rec: Mirrors (1)	40	19OCT06	15DEC06
UN502_0813	Rec: Motorized Shutter (upstream) (1)	40	19OCT06	15DEC06
UN502_0815	Rec: Light transport/imaging optics (vac) (1)	40	19OCT06	15DEC06






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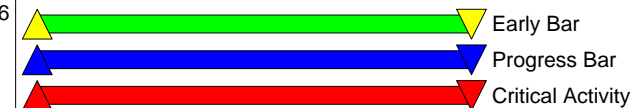
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 Early Bar
 Progress Bar
 Critical Activity

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish						
					2004	2005	2006	2007	2008	2009
UN502_0819	Rec: Camera assembly and shielding (1)	40	19OCT06	15DEC06				▲▼ Rec: Camera assembly and shielding (1)		
UN502_0826	Rec: Motorized filter/aperture changer (1)	40	19OCT06	15DEC06				▲▼ Rec: Motorized filter/aperture changer (1)		
UN502_0432	Rec: Beam Tube and Spring Contact (1)	30	26JAN07	09MAR07				▲▼ Rec: Beam Tube and Spring Contact (1)		
UN502_0444	Rec: Main translation stage (1)	30	26JAN07	09MAR07				▲▼ Rec: Main translation stage (1)		
UN502_0271	Rec: EBXPD Vacuum Chamber (1)	40	13MAR07	07MAY07				▲▼ Rec: EBXPD Vacuum Chamber (1)		
UN502_0275	Rec: EBXPD Support Stand (1)	40	13MAR07	07MAY07				▲▼ Rec: EBXPD Support Stand (1)		
2.04.05.03 High-Power X-Ray and Profile Diagnostics (HPD)										
UN503_0770	Specification of HPPD	8	30AUG05	12SEP05				▲▼ Specification of HPPD		
UN503_0780	Analysis and Simulations - HPPD	20	13SEP05	11OCT05				▲▼ Analysis and Simulations - HPPD		
UN503_0790	Literature Research - HPPD	20	12OCT05	08NOV05				▲▼ Literature Research - HPPD		
UN503_0800	Study Review and Recommendations - HPPD	10	09NOV05	23NOV05				▲▼ Study Review and Recommendations - HPPD		
UN503_0810	HPPD Study Period Complete	0		23NOV05				◆ HPPD Study Period Complete		
UN503_0040	Preliminary Design - PRPT HPPD	20	28NOV05	10JAN06				▲▼ Preliminary Design - PRPT HPPD		
UN503_0050	Design Analysis - PRPT HPPD	5	11JAN06	19JAN06				▲▼ Design Analysis - PRPT HPPD		
UN503_0060	Design Review - PRPT HPPD	7	20JAN06	31JAN06				▲▼ Design Review - PRPT HPPD		
UN503_0070	Final Design - PRPT HPPD	15	01FEB06	23FEB06				▲▼ Final Design - PRPT HPPD		
UN503_0142	Determine Suitable Test Facility - HPPD	2	22AUG06	23AUG06				▲▼ Determine Suitable Test Facility - HPPD		
UN503_0090	Prepare Bid Package - ODR Module	25	22AUG06	27SEP06				▲▼ Prepare Bid Package - ODR Module		
UN503_0100	Prepare Bid Package - Laser Wire Module	25	22AUG06	27SEP06				▲▼ Prepare Bid Package - Laser Wire Module		
UN503_0152	Assemble Test Station - HPPD	12	24AUG06	11SEP06				▲▼ Assemble Test Station - HPPD		
UN503_0110	Bid Process - PRPT HPPD	20	28SEP06	26OCT06				▲▼ Bid Process - PRPT HPPD		
UN503_0120	Evaluate Bids - PRPT HPPD	8	27OCT06	08NOV06				▲▼ Evaluate Bids - PRPT HPPD		
UN503_0141	RCV: PRPT HPPD Components	1	21NOV06	21NOV06				▲▼ RCV: PRPT HPPD Components		
UN503_0150	Integrate Controls - HPPD	15	22NOV06	15DEC06				▲▼ Integrate Controls - HPPD		
UN503_0160	Perform Module Testing - HPPD	20	02JAN07	31JAN07				▲▼ Perform Module Testing - HPPD		
UN503_0170	Test Measurements Review meeting - HPPD	5	01FEB07	08FEB07				▲▼ Test Measurements Review meeting - HPPD		
UN503_0180	HPPD Testing Complete	0		08FEB07				◆ HPPD Testing Complete		
2.04.05.04 End-of-Undulator(EOU) X-ray and Profile diagnost										
UN504_1225	Specification of EOU	122	04OCT04	11APR05	▲▼			▲▼ Specification of EOU		
UN504_1235	Organize literature Materials	115	12APR05	22SEP05	▲▼			▲▼ Organize literature Materials		
UN504_1240	Conduct Principles of Design Workshop	7	23SEP05	04OCT05				▲▼ Conduct Principles of Design Workshop		
UN504_1250	Justification Complete	0		04OCT05				◆ Justification Complete		
2.04.05.05 RFBPM										
UN45_D180	Perform literature search Cavity BPM	80	19JAN05	11MAY05	▲▼			▲▼ Perform literature search Cavity BPM		
UN45_D181	Develop conceptual design of BPM	40	12MAY05	08JUL05	▲▼			▲▼ Develop conceptual design of BPM		
UN45_D182	BPM conceptual design complete	0		08JUL05				◆ BPM conceptual design complete		
UN505_0213	Rec: Support & Alignment Mechanism (4)	60	03OCT06	11JAN07				▲▼ Rec: Support & Alignment Mechanism (4)		

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					2004	2005	2006	2007	2008	2009		
UN505_0215	Rec: RF Cabling (4)	60	03OCT06	11JAN07				▲▲▲▲	Rec: RF Cabling (4)			
UN505_0211	Rec: Copper Body Brazement (4)	60	10NOV06	22FEB07				▲▲▲▲	Rec: Copper Body Brazement (4)			
2.04.05.07 Charge Monitor (CM)												
UN507_0125	Rec: Charge Monitor Package (1)	30	10OCT06	20NOV06				▲▲	Rec: Charge Monitor Package (1)			
2.04.05.08 Cherenkov Detector												
UN508_0105	Rec: Cherenkov Detector (4)	30	16NOV06	16JAN07				▲▲▲▲	Rec: Cherenkov Detector (4)			
2.04.05.09 Radiation Detection Monitor (RDM)												
UN509_0175	Rec: RDM (1)	30	16NOV06	16JAN07				▲▲	Rec: RDM (1)			
2.04.06 Undulator System Commissioning												
2.04.06.01 Undulator System Commissioning												
UN42_00810	Commission Un Cham	5	03OCT06	09OCT06				▲	Commission Un Cham			
UN44_00580	Commission Std Col	5	03OCT06	09OCT06				▲	Commission Std Col			
UN43_CM000	Commission Fixed Supports	80	03OCT06	09FEB07				▲▲▲▲	Commission Fixed Supports			
UNUN_00010	Support Commissioning - Controls	160	03OCT06*	05JUN07				▲▲▲▲	Support Commissioning - Controls			
UNUN_00020	Support Commissioning - Mechanical	160	03OCT06*	05JUN07				▲▲▲▲	Support Commissioning - Mechanical			
UNUN_00030	Support Commissioning - Physics	160	03OCT06*	05JUN07				▲▲▲▲	Support Commissioning - Physics			
UN601_1862	Commission Stretched Wire System Complete	20	21NOV06	04JAN07				▲▲	Commission Stretched Wire System Complete			
UN43_00620	Commission Std Bel Mod	5	04DEC06	08DEC06				▲	Commission Std Bel Mod			
UN509_0320	Commission RDM	7	17JAN07	25JAN07				▲	Commission RDM			
UN508_0250	Commission Cherenkov Detector	10	17JAN07	30JAN07				▲	Commission Cherenkov Detector			
UN505_0370	Commission RFBPM	10	08MAR07	21MAR07				▲	Commission RFBPM			
UNMS_00040	Undulator System Commissioning Complete	0		05JUN07				◆	Undulator System Commissioning Complete			
UN45_00530	Commission - Short Diag Break Assy	5	16AUG07	22AUG07				▲	Commission - Short Diag Break Assy			
UN48_00670	Commission - Exit Section Assy	5	16AUG07	23AUG07				▲	Commission - Exit Section Assy			
UN507_0260	Commission Charge Monitor	5	16AUG07	23AUG07				▲	Commission Charge Monitor			
UN47_00670	Commission - Entrance Section Assy	5	23AUG07	29AUG07				▲	Commission - Entrance Section Assy			
UN511_0250	Commission Supplemental Shielding	15	18SEP07	09OCT07				▲	Commission Supplemental Shielding			
UN601_1921	Commission Hydrostatic Level System	20	26OCT07	26NOV07				▲	Commission Hydrostatic Level System			
UN46_00610	Commission - Long Diag Break Assy	5	12DEC07	03JAN08				▲	Commission - Long Diag Break Assy			
UN502_1750	Commission EBXPD	10	12DEC07	10JAN08				▲	Commission EBXPD			
UN504_1620	Commission EOU	13	13MAR08	01APR08				▲	Commission EOU			

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