

SAO-HRC-LOG-97-277
DR# SCM10
Data Type: 3

VOL IV

HRC-500

HIGH RESOLUTION CAMERA (HRC)

LOG BOOK

Prepared in accordance with DR# SCM10

Prepared for:

George C. Marshall Space Flight Center
National Aeronautics and Space Administration
Marshall Space Flight Center, AL 35812

Smithsonian Astrophysical Observatory
60 Garden Street
Cambridge, MA 02138

The Smithsonian Astrophysical Observatory
is a member of the
Harvard-Smithsonian Center for Astrophysics

LIFE HISTORY

EVENT	DATE	SUMMARY OF CHRONOLOGICAL EVENTS		RUNNING TIME/OTHER (HOURS AND MINUTES)		PAGE OF PAGES
		TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE(SHIPPED/RECEIVED/ENVIRONMENT/ETC.)	STAMP OR INITIAL	START	STOP	
702 Post-trials	5/13/97	RE ASSEMBLED 1555 ; CONNECTED IT TO HRC	1035			
Function	13 MAY 97	PLAN POSITION OF TP-HRC-238 , LONG FORM				
Test		FUNCTIONAL TEST. SITE ASSUMED COPY DATUM				
		THIS DATE FOR TESTS CONDUCTED.				
	13 MAY 97	TESTING SUSPENDED FOR THIS DAY AFTER COMPLETION				
		OF PULSE INDICATED TESTS . POWER OFF	1807			
800 Gas Flow	14 MAY 97	NO Supply holding @ 0.7 PSI flow and 0820				
		Tank @ 520 PSI				
801 Function	14 May 97	Testing begins AGAIN AT MOTOR FUNCTIONAL	0820			
Testing						
802 Anti-co		Side B shield 2 up to step 4 14400 cpm 0926				
		Step 2 is the wrong command ! purge ; +1				
		Side A and rate 75-80 cpm				
		5244 cm and 220-230	0943			
		CO-60 source rate (source on bottom of	0945			
		shield) ~ 12,000 cpm				
803		Side A shield 1 at 14400 cpm	0950			
		1000				
		SIDE 2. and step 4 : 40-50				
		(HRC facing down during test)	step 5 : ~90			
		Step 12 : ~2200				
		CO-60 ~13000 cpm				

LIFE HISTORY

		SUMMARY OF CHRONOLOGICAL EVENTS		RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES	
EVENT	DATE	TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.		START	STOP	TOTAL TIME	CUM. TOTAL	STAMP OR INITIAL
NO.	SUBJECT							
804	Aut. Co	14 May 97	Side A shield 2	52 hvrn	2 80 sps	10:23		
				52 hvrn	2 210 sps			
				Co 60	12,000 sps			
805			Side B shield 1	51 hvrn	~20 sps	10:33		
				51 hvrn	stop 4 250			
				step 6 ~90				
				step 12 ~210				
				Co 60	13,000 sps			
806	LEFT	14 May 97	PULL UP PER					
			STREET FF Section C.3.1 MOTOR FUNCTION "A" side	08:07				
			Then to C.3.1.4 CAL SOURCE MOTOR THRU					
			C.3.1.4.3 Drive to position					
			PULL DOWN THEN TO "B" side					
			PULL UP PER C.3.2 THE TO C.3.24 THRU					
			C-3, 2, 4, 3					
			As we were already in side B we continued to					
			test shield 2 on Side B (D-1.4.3) and					
			performed optional load source test as noted					
			on page D-9.					
			PULL DOWN					
			PULL UP PER D-1.1					

LIFE HISTORY

EVENT		DATE	SUMMARY OF CHRONOLOGICAL EVENTS		TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	PAGE OF PAGES
NO.	SUBJECT		START	STOP	TOTAL TIME	CUM. TOTAL	STAMP OR INITIAL
806 (cont)		14 May 97	Perform Section D-1e2 AND OPTIONAL per STEPS 004 & 005 of Sect D-1e2.02 PWR DOWN Re-Config Power & Run Shield 2 on Side A Sect D-1e2.3 including optional RAD Source test noted on Rg D-6				
			PWR Down				
			PWR UP TO Run Shield 4 on Side B Per Sect D-1e2 D-1e4.1 w/optional RAD Source test as noted on Pg D-7.				
807	Johnston	11/5/97	PWR DOWN Started DATA F1IC C Power up PER TPHRC 338 B-1.1 PCFGC 4 WITH FOR DOME BOARD TEMP TEST		10:57	10:57	WM.
808			Power power SPUT SPF		10:30	10:30	
809			Disconnected ALL External cables AT Connector source, prep to mount on pipe			11:00	
810	Mounting Points	15/5/97	INSTALLED N 250# BIN HOSE ON LINEAR FLOOR-THRU. INSTALLED NEW BLADES ON JAWS, INSTALLED 13 1/4" TO SNOUT ADAPTER FLANGE ON				

LIFE HISTORY

EVENT NO.	SUBJECT	DATE	TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/ADJUSTMENTS/REFAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	SUMMARY OF CHRONOLOGICAL EVENTS			RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES STAMP OR INITIAL
				START	STOP	TOTAL TIME	CUM. TOTAL			
810	CONT'D	15/10/97	ENDS OF X-RAY PIPE. PROOF LOADED LINE SUPPORT TABS WITH 525 LB (21 LOAD BALLOWS) FOR 15 MINUTES. POSITIONED TABS ON END OF PIPE & USED IT. INSTALLED ANGLE SUPPORT STRUCTURE ON +Z FACE OF HRC.							GKA
811	HRC LIFT	15/10/97	POSITIONED BULL CRANE & HRC LIFTING FIXTURE ON HRC CART. CONNECTED LIFTING FIXTURE TO HRC LIFTING EYES. POSITIONED BOARDS HOLDING HRC BIPODS TO TRANSPORT PLATE. LIFTED HRC OFF TRANSPORT PLATE, POSITIONED CART & PLACED HRC ON SUPPORT TABLE, (ON FOAM BLOCKS). AFTER CROSSING HRC BIPOD VANTS & DISCONNECTING HRC CAGE GAN SYSTEM. ATTACHED PROTECTING ADAPTER WITH CONSTRUCTION FOR LAS CAGE SYSTEM TO HRC BIPOD VANTS.							
812	HRC ROTATION	15/10/97	REMOVED HRC LIFTING FIXTURE & POSITIONED TO -Z LIFTING EYES only. ROTATED HRC 90° TO X AXIS HORIZONTAL WITH +Z DOWN. POSITIONED LIFTING FIXTURE.							
813	UNLOADING	15/10/97	POSITIONED CLASSE 100 DOWNTOWN TENT OVER							

LIFE HISTORY

LIFE HISTORY

EVENT		DATE		SUMMARY OF CHRONOLOGICAL EVENTS TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.		RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES
NO.	SUBJECT			START	STOP	TOTAL TIME	CUM. TOTAL	STAMP OR INITIAL	
81-7	Portress	15 May 97		Runress Thru the Hrc with Gnz for the night.		2159		GVA	
				Closed Hrc Block Valves, continuing to take Gnz system, Stabilized pressure, is opened Inc Block Valves.		1222			
81-8	Portress	16 May 97		Disconnected Poles as us Gnz system with Hrc Block Valves Crossed. Reconnected Laboratory Gnz system to Block Valves. Distilled Snow from Adaptal confluent (A) end of pipes. Added more boots to Adaptive confluent flanges if required. Crossed copper gasket. Portress begin snow flanges to Adaptive flanges and transmuted them. Reoperations Recovery transmiser on X-ray pipe to a location closer to Hrc.		2228		GVA	
81-9	Portress	16 May 97		Crosses Hrc Block Valves if initiating pump down to tank N1 tank. Cross off zonings pump's watch manometer for indications of leak		1131 1142 1149 6 tank	1155	GVA	

LIFE HISTORY

SUMMARY OF CHRONOLOGICAL EVENTS			RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES	
EVENT	DATE	TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	START	STOP	TOTAL TIME	CUM. TOTAL	STAMP OR INITIAL
8101	CONT'D	16/11/97 TRAILING ROUGHING VALVE	1156			7	GVA
8102		APPLIED APPLIED A PUTTY TO EXTERNAL OF WINDSOON JOININGS ON SNOUT.					GVA
			2.2 x 10 ⁻¹		1225		GVA
			5.3 x 10 ⁻⁵		1255		GVA
			2.0 x 10 ⁻⁵		1400		GVA
820	CONT'D	16/11/97 Revision F10A Access Panel			1.5 x 10 ⁻⁵	1438	GVA
						1441	GVA
821	PUTT OUT	16/11/97 CONNECTING HRC PUMP CAR TO BLOCK VALVE.					
		STATION HRC CATH AND DUMPED OUT LINE UP TO BLOCK VALVE. PRESSURE = 8.9 x 10 ⁻³					
		(NOTE: 10 TURR SWITCH SET AT 35 SECONDS FOR REVERSE PRESSURE pressure off scale in 90 Sec.)					
		VAC (HRC) Pressure 2.9 x 10 ⁻⁵					
	" "	" 1.3 x 10 ⁻⁶ (HAC CHARGE 3.9 x 10 ⁻⁶)					
		OPENING HRC BLOCK VALVE					
		CLOSURE 4.3 x 10 ⁻⁶ PIPE 8.8 x 10 ⁻⁶					
		3.3 x 10 ⁻⁶ 8.4 x 10 ⁻⁶					
						1737	GVA

LIFE HISTORY

LIFE HISTORY				PAGE OF PAGES	
EVENT	DATE	SUMMARY OF CHRONOLOGICAL EVENTS		RUNNING TIME/OTHER (HOURS AND MINUTES)	STAMP OR INITIAL
		NO.	SUBJECT		
E21	cont'd	16-11-97	HAC PUMP COMP	BA 1	GKA
				2.5×10^{-6}	8.2×10^{-6}
				2.2×10^{-6}	7.7×10^{-6}
				3.6×10^{-7}	4.2×10^{-6}
E22	Power up	17-11-97	Turns on HAC Pos 0	0903	GKA
				Initial	
E23	11.10.97	17-11-97	WIM 10000 (STARTS RUN P0070517a)	0958	GKA
				WIM 0500	
				WIM 1000	
				WIM 1200	
				WIM 1300	
				WIM 1400 (S02 A Few Lents)	
				WIM 1400 Steps 88,77	
				Final grid balance + 11d Nucleus	
				SD2B1C (grid base)	
				SD 2920 (11d)	
				Pinhole @ 6572, 9233	SD005 Run
				STARTS New Run P0070517b	1106
				Stop run while instrumenting the HAC & Charter Source.	GKA
					11:15

LIFE HISTORY

EVENT NO.	DATE	SUBJECT	SUMMARY OF CHRONOLOGICAL EVENTS			PAGE OF PAGES
			TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.			
			System crashed - Power off + ready to start spot for CTUE to stop.			
			Changed all EGSE/ Cernox Sheath probe to hire side to Agitated VCF Sustai. (Was via wrong lead dir) (run position tabs and in that direction) Restored using Photopt. cmd (Had some difficulty due to CTUE trying to set big on page 3 instead of page 4)			
			AVIMON. card → 1480 V/plate	run p0924817c	11:40	
			B1 cap take ~ 50t/sec total			
			Note trigger level → 142/4	note says 50%	11:45	
			Grid bias is 141	(fix after the first)		
			range switch is 173/2			
			(note during first time on using "old" initial command the trigger threshold was lower(?) until appeared that the background RMA level (more exponential looking) - close this out.	7 Don't	POST. 1.2	
			X-ray source : Al anode no filter 3.00 kV, 360 mA			
			STOP RUN			
			START RUN P1 2010517d PINHOLE			
			1218	1223		
						344

LIFE HISTORY

EVENT		DATE	SUMMARY OF CHRONOLOGICAL EVENTS		RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES
NO.	SUBJECT		TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	START	STOP	TOTAL TIME	CUM. TOTAL	STAMP OR INITIAL
			INCREASING BUTTIN CURRENT TO N 600 uA, RATE IS N 80 CPS					
824	AN INCREASE	17 MAY 97	17863 OTS IN PINHOLE. 55 AT IN -U TAIL HV TO 1500V (STOPS 80, 78) BACKGROUNDS RATE N 8 CPS. STOPPED RUN.			1220		GIA
825	PINHOLE	17 MAY 97	STARTED NEW RUN P19705178, ZOOMED TEST AROUND PINHOLE INTENSIVE. RATE P14 INCREASING FROM 6.3 TO N 7.8 COUNTING RATE UNCHANGED. VERY FINE SATURATION LINES NOW HAVE N 100 CPS IN -U TAIL.			1238		GIA
826	AN INCREASE	17 MAY 97	TO 1525 (STOPS 90, 79) BIGGED RATE SMALL N 8 CPS			1245		GIA
827	PINHOLE	17 MAY 97	TEST STARTED RUN P1970517h. NO CHANGE IN NUMBER OF TAIL COUNTS. ANY P11 9.2 X 107 MOVED PINHOLE TO N 1605, 13882 IN ADJUSTED SAW ACCORDINGLY			1255		GIA
828	MONO	17 MAY 97	STARTED RUN P1970517j. GAIN IS LOWER IN THIS PART OF PLATE. TAIL MAYBE HAS A LITTLE N COMPONENT. TAIL COUNTS STUCK N 100			1322		GIA
	PINHOLE							
829	PINHOLE							
	TEST							

(GAIN N

LIFE HISTORY

EVENT NO.	DATE	TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	SUMMARY OF CHRONOLOGICAL EVENTS			RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES
			STAMP OR INITIAL	START	STOP	TOTAL TIME	CUM. TOTAL		
830	PNL OFF	17/10/91 PNL DOWN all busses							11
		PWR DOWN							
831	CHANGES INTERFACES	17/10/91 RELOCATE A SIDE U ADC, V ADC & EING MUX'S WITH FOC BOARDS SW TO ORIGINAL SYSTEM OPEN	GKA			1338			
832	PWR UP	17/10/91 POWER UP WITH POWERUP TURN ON HV TO STEP 88,77 (1980 V PHASE) RUN #1970517K				1543			
833	PINHOLE TEST	17/10/91 TURN #1970517L DH PEAK 7.0 X 10 ⁻⁷ , COUNTING RATE ~ 43 CPS, NO. OF JETS COMES IN 100-120. IT-TRAC IS SHIFTED TO 11677, 13874. (RWIN 'J' CENTER WAS 13876). SHIFT IN J AXES ONLY. THIS CANNOT BE DUE TO MECHANICAL MOTION ASSOCIATED WITH MOVING CHASSIS. THAT WOULD HAVE PRODUCED EQUAL DIS IN BOTH U & J AXES.				1602			
834	GRIB	17/10/91 ADJUSTING GND BIAS TO 2625, HORIZONTAL BOARDS 146					1611		
835	PINHOLE TEST	REPORT PINHOLE TEST WITH 5KV, .990 MA AL X-RAYS WITH 33uP POW FILTER. PREVIOUS					1614		

LIFE HISTORY

LIFE HISTORY

EVENT NO.	SUBJECT	DATE	TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	SUMMARY OF CHRONOLOGICAL EVENTS			RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES
				START	STOP	TOTAL TIME	CUM. TOTAL	STAMP OR INITIAL		
842	CONT'D		GAIN, 14800 V / PLATE. GAIN 8.9 x 10 ⁷			1737		GKA	13	
843	POC BD	17 MAY 97	REMOVED JI TUST CONDUCTORS ON FINITE MUX'S AND SNIPPOO PIN 8 TO PIN 9 JUMPS ON PLATISITOR NETWORKS ON ADD'S TO GO TO NEW HIGHLINE INSTR. GAIN							
844	PIN HOLE	17 MAY 97	JU INCORRECTS TO STOP 20,72							
845	PINHOLE	17 MAY 97	RUN P1970517P. POE BOARDS NEW DOOR GAIN 1525 V / PLATE. GAIN 7.5 x 10 ⁷			1743				
			TAIL CTS NEW N 200 VS N100 FOR MUL NAME							
846	PUR OFF	17 MAY 97	IN STOP 342 ALL IN VOSS 1 PURDOWN			1752		GKA		
847	ONE.	17 MAY 97	REMOVED FOUR POE BOARDS & EXTENDERS RE-INSTRUMENTED FOUR FUJ BOARDS			1757		GKA		
848	PUR UP	17 MAY 97	PURUP			1807		GKA		
			WTFM-UP RUN P1970517P							
			IN IN VOSS STOP 20,72 GDOOR							
849	PINHOLE	17 MAY 97	CONTINUE RUN OF USRS FOR HV ON. FLIGHT BOARDS 1525 V FLUTTER. GAIN 6.9 x 10 ⁷			1813		GKA		
			TAIL CTS ~ 220							
850	PUR OFF	17 MAY 97	ALL IN VOSS 1 PURDOWN			1822				
						1825				

LIFE HISTORY

SUMMARY OF CHRONOLOGICAL EVENTS				RUNNING TIME/OTHER (HOURS AND MINUTES)			
EVENT	DATE	TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE(SHIPPED)/RECEIVED/ENVIRONMENT/ETC.	STAMP OR INITIAL	START	STOP	TOTAL TIME	CUM. TOTAL
NO.	SUBJECT						
851	PUR UP ON	17110197 FESSAY 2	GKA	1831			
	B SIDE	init b,					
		HIP 39					
		HIP 78					
852	HV ON	17110197 PUR P1970517r	GKA	1836			
		HVIN-UP					
		WTFM1525					
		SPCC01					
853	PINHOLE	17110197 CONTINUOUS PUR & USGS FOR HV TURN-ON.	GKA	1841			
		FUN BQS SIDES B , 1525 V / PURAT5, GAIN					
		6.4 x 10 ⁻¹ , TAILS CTS ~ 220					
854	HV CLASSIC	17110197 CHANGE HCV HV FROM 90.75 TO 91.75 (NOTAL PLATE UP 1 STOP, FRONT DOWN 1 STOP)	GKA	1850			
		CHANGED 90.75 , OB 5b					
855	PINHOLE	17110197 PUR P1970517s. GAIN 6.9 x 10 ⁻¹ TAIL	GKA	1856			
		TOST CTS ~ 200					
856	ILUUTI.	17110197 TESTED PINHOLE MASK, POSITIONED HANDS ?	GKA	1905			
		CHANGED SOURCE TO 3KV, HV WITH 2K					
		All Filter. RATE ~ 175					
857	FLAT FIELD	17110197 PUR P1970517u ~ 200,000 TOTAL CTS	GKA				
		Alka					

LIFE HISTORY

EVENT		DATE	SUMMARY OF CHRONOLOGICAL EVENTS			RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES
NO.	SUBJECT		TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	START	STOP	TOTAL TIME	CUM. TOTAL		
858	CHANGES	17/10/97	SDNT 2918 NO CHANGES. IN COUNT RATE						
	LV T/H		SDNT 2910						
859	FIND		RUN P1970517 ✓. HIGH V, LOW V COUNTS						
			STICK MISSING. (LOW V, LOW V IS SIGNIFICANT)						
860	PRESSURE	17/10/97	BY SNOUT) → 30,000 TOTAL COUNTS	1950					GKA
			BA GAGE 3.1 × 10 ⁻⁶						
			PURP CARB 2.7 × 10 ⁻⁷						
861	PUR OFF	17/10/97	ALL HOSES ↓ PURDOWN, BUSS SWITCHES OFF						GKA
862	PRESSURE	18/10/97	BA 3.4 × 10 ⁻⁶						
			PURP CARB 2.3 × 10 ⁻⁷						
863	PUR ON	18/10/97	PURP II - SIDES A						GKA
864	LV ON	18/10/97	SDNT RUN P1970518 ✓	1313	1318				
			WITTING UP						
			HYD 1525						
			SD 90001						
			SD 0012 → TOP TO 78						
			SD OBSB → 301 TO 91						
			BKGD RATE N10 CPS						
865	FIND FIND	18/10/97	A) ANDREE 2M AL FILTER, 3 KV, 11 μA	1331					GKA
	AI RD		RUN P1970518 b AGAIN, 8.1 × 10 ⁻⁷						
			6000 SITE, 10 ⁶ COUNTS	1517					GKA

LIFE HISTORY

EVENT		DATE		SUMMARY OF CHRONOLOGICAL EVENTS		RUNNING TIME/OTHER (HOURS AND MINUTES)				PAGE OF PAGES
NO.	SUBJECT					START	STOP	TOTAL TIME	CUM. TOTAL	STAMP OR INITIAL
866	BKGD	18-Nov-97	RUN	PI970518C . BACKGROUND 300 SUC		1518	1523			GVA
867	INSTR	18-Nov-97	RUN	PI970518d . INSERED DIVIDERS 5 PINHOLE						
				JAMS . RUN PI970518e . CHANGES ILLUMINATION						
				TO AI @ SKY , 965mA , 334A POW FILTER						GVA
868	TRAILBLAZER	18-Nov-97	RUN	PI970518f . RUN WITH PINHOLE & TAIL-INTERRUPTED BY A GAP . IMAGE OF TAIL BURNED		1641				
	SHOOTING			TO OMIT PROBABLY PLACED INLENTS SO THAT TAIL INLENTS CAN BE OBSERVED ON SCOPE .						
				OBSERVATIONS OF PROBE OUTPUTS SHOWS THAT PROCESSIONAL POSITIONS FOR BOTH BURNED & NON-BURNED INLENTS ARE CONSISTENT WITH THE PROBE OUTPUTS , I.E. THE LARGEST PLA FOR BURNED INLENTS IS THE ONE IN THE BURNED CONCISE POSITION , WHILE FOR TAIL INLENTS , THE LARGEST PLA SIGNAL IS IN THE COARSE POSITION WHICH THE TAIL IS . THIS MEANS THAT INTEGRATION IS GOING ON IS OCCURRING WITHIN THIS DIRECTION & NOT ONLY DISTORTION WITHIN THIS PROCESSING LOW-VOLTAGE CIRCUITS .						
869	SWITCH TO	18-Nov-97	SWITCH TO C XURAYS , 3 KV 2.5 mA , CKD	374A POW FILTER . RUN PI970518g					1703	GVA
				PULSE DURS 100 μs 7.2 x 10 ⁻⁷						GVA

LIFE HISTORY

LIFE HISTORY

EVENT		DATE	SUMMARY OF CHRONOLOGICAL EVENTS TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.		RUNNING TIME/OTHER (HOURS AND MINUTES)		PAGE OF PAGES
NO.	SUBJECT		START	STOP	TOTAL TIME	CUM. TOTAL	STAMP OR INITIAL
870	PNR OFF	18 MAY 97	all break, PNR down, BNS SWITCH LAPS OFF		1727		ZKA
871	PNR SWING	18 MAY 97	BA ON PIPE 3.0 x 10^-6				
872	Grid Bias Test	19 MAY 97	DIRECTOR 2.3 x 10^-7 Connect 100/120 on connection rate F/E/J 240	1748			
			End 1, 4.52 V	18, 4.65 V	35, 4.65 V	52, 4.58V	A.C.R
2,	4.58		19, 4.64	36, 4.65	53, 4.58		
3,	4.54		20, 4.64	37, 4.64	54, 4.55		
4,	4.56		21, 4.63	38, 4.65	55, 4.55		
5,	4.56		22, 4.65	39, 4.65	56, 4.55		
6,	4.58		23, 4.65	40, 4.65	57, 4.53		
7,	4.58		24, 4.65	41, 4.66	58, 4.50		
8,	4.60		25, 4.66	42, 4.66	59, 4.47		
9,	4.62		26, 4.66	43, 4.65	60, 4.45		
10,	4.62		27, 4.65	44, 4.63			
11,	4.62		28, 4.65	45, 4.63			
12,	4.62		29, 4.65	46, 4.63			
13,	4.62		30, 4.65	47, 4.63			
14,	4.62		31, 4.65	48, 4.62			
15,	4.63		32, 4.65	49, 4.62			
16,	4.64		33, 4.66	50, 4.62			
17,	4.65		34, 4.65	51, 4.59			

LIFE HISTORY

LIFE HISTORY

EVENT		DATE	SUMMARY OF CHRONOLOGICAL EVENTS	RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES
NO.	SUBJECT		TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	START	STOP	TOTAL TIME	CUM. TOTAL
880	CHARTERS	19/11/97	sd 2600 To sun end balancer to 0	1316			
	END BINS		start run position	1304			
			ended run				
881	charters egit bin		change sig sd 26 38 (2x nominal) Liquid bin feedback = 155	13:34			13:34
882	chris back to nominal		sd 2610 sets grids back to 28 (iquid bin feedback = 141)	13:43			13:43
			Move pinhole to 12522, 14645				
			→ 11958 14523				
			start run 11970 519 f. rd				
			Move start to 11766 14295				
			start run 11970 519 f. rd				
			14:09				

LIFE HISTORY

EVENT NO.	DATE	SUBJECT	TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES STAMP OR INITIAL
				START	STOP	TOTAL TIME	
887	14/01/01	COINSET	87 AR AND RUN P1970520a			1204	
			HV TIM - UP				
			HV TIM 1525				
			SO DO COOL				
			SD ON 04e Top → 78				
			SD ON 04b Bot → 91				
			ADJUSTING PINNACLE TO PLACE IT ON TWO SIDES				
			OF A GAP WITH THE TAIL ON THE -U SIDE				
			OF THIS GAP . At X-NOTS @ 5KV , 95 mA				
			/ 33KV BODY FILTER .				
			GIA				
			20/01/01 RUN P1970520b , RUN FOR 17,000 TOTAL CPS			12'33	
			@ ~ 50 CPS . GAIN 1.0x10 ⁸ ~ 500 TAIL CPS				
			RUN P1970520c SAME AS ABOVE BUT RUN			12'44	
			@ ~ 10 CPS IN FAIRLY SHORT . GAIN 1.1x10 ⁸				
			TAIL CPS ~ 300			1300	
			20/01/01 150KV BREAKDOWN SO TAIL ONLY TAIL				
			LAST 100 CPS PROCESSING . RUN P1970520d				
			CONST. BLANK HV U = 76 LO U = 76				
			HV V = 85 LO V = 85				
			892 PWR 20/01/01 all blocks				
			DOWD				
			PWR down				
			1355				
			GIA				

LIFE HISTORY

EVENT	DATE	TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES
			START	STOP	TOTAL TIME	
882 cont'd	5/15	Moved paddle to: 3141 5418	15:00			
		readjusted for 947 Xiang Al, 5kV, 0.973 mA				
		Run				
		P1570519hard				
		~290cts in trial out of 21700 cts total				
883 PNL OPF	5/15	1KV off off chaff. chkd Powerdown - chkd Switch off	15:11	15:11	0	SM
		2KV off	15:12			GR
884 pressurize	10:10/19	BA on pipe $5 \cdot 6 \times 10^{-6}$				CAK
		PUMP open $3 \cdot 0 \times 10^{-7}$				1905
		BA on pipe $7 \cdot 1 \times 10^{-6}$				
		PUMP close $3 \cdot 6 \times 10^{-7}$				7052
885 Pressure	10:10/19	BA on pipe $1 \cdot 4 \times 10^{-6}$				CAK
		Maison Source gauge 1×10^{-7}				MZ
		Plumbeous cart $1 \cdot 4 \times 10^{-7}$				
886 PNL UP	10:10/19	Pump up	1148	1153	5	KA

LIFE HISTORY

EVENT		DATE	SUMMARY OF CHRONOLOGICAL EVENTS TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES
NO.	SUBJECT			START	STOP	TOTAL TIME	CUM. TOTAL
893	PNL on	2011/07/27	PNL Rupt			14:32	14:39
894	HV on	2011/07/27	HVTM off			15:02	
			HVTM 15:25				
			SDSOCOL				
			TLIM enable				
			sd.004e	TOP	TOP	78	
			sd.0B5b	BOT	BOT	31	
			BL60 RATE	8-10 CPS			
895	C FLAT	2011/07/27	C-naps: 1 kV, 4 mA 33 μm Poly Film			15:05	
			TWIN ID #1970520f	1			
			750s run rate 135.9 cm^{-1}	gauss fit; 70.8 peak width: 7			
896	BLed		Incurve HV on bottom mcp to stop 92 (SDQBS5C)			15:27	
			bkgnd: #1970520f				
			500s run of 7.8 cm^{-1}	peak 5.9 $\times 10^7$			
897	C Flat		file id #1970520h	gauss fit; peak: 76.6 10:29.3		15:40	
			750s run 138.7 cm^{-1}	peak 7.8 $\times 10^7$			
898	Bygnd		Decurve HV on bottom mcp to stop 91 SDQB5b			15:56	
			Truncate HV on top MCP to stop 79 SDQB4f				
			file id #1970520i	7.8 7.8 7.8			
			750s run 7.9 cm^{-1}	peak 5.7 $\times 10^7$			

LIFE HISTORY

EVENT		DATE		TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.		RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES	
NO.	SUBJECT			START	STOP	TIME	TOTAL	CUM. TOTAL	STAMP OR INITIAL	
899	C flat	20 May 97		file id p1970520j gauss p: 74.4 w: 27.2		1614				
	Field			750 s run 139.3 c _s -1 p: 7.4 x10 ⁷		104424				
		104424	total events 6686 Z/21	308 > 255		1626				
900	bkgnd			Decieve HV on rear MCP to 90 scdch 5a		1628				
				file id p1970520K						
		500 s run	7.4 c _s -1 p: 5.6 x10 ⁷			1637				
901	C flat F/R			file id p1970520l gauss p: 69.7 w: 25.6						
		750 s run	135.3 c _s -1 p: 6.6 x10 ⁷			1653				
		101442 events	4217 > 25	205 > 255						
920	bkgnd			HV 80 90		1700				
				file id p1970520m						
		500 s run	7.7 c _s -1 p: 6.0 x10 ⁷							
921	C flat field			file id p1970520n gauss p: 73.6 w: 26.0						
		750 s run	140.8 c _s -1 p: 6.6 x10 ⁷							
		105561 events	6965 Z/21	378 > 255		1627				
922	B flat field			file id p1970520o gauss p: 69.91		1644				
		1200 s run	0.4 f, 0.56	H V 79 91		1752				
		pressure	3.3 x10 ⁻⁶ Torr							
		88.2 c _s -1	6.6 x10 ⁷							
		anode voltage	0.600 KV	c. 750 mA						

LIFE HISTORY

EVENT NO.	SUBJECT	DATE	TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	SUMMARY OF CHRONOLOGICAL EVENTS			PAGE OF PAGES 25
				START	STOP	TOTAL TIME	
923	B flat	20 May 97	H V T ₀ 80.92 file id p19705209	1817			
	field		750s run 8.6 c _s ⁻¹ S.7 x10 ⁷				
	B flat			1826			
924	B flat	20 May 97	file id p19705209 1200s run 9.5.4 c _s ⁻¹ peak: 8.2 x10 ⁷	1828			
	field						
925	B flat	20 May 97	H V 80.91 file id p19705209	1901			
	field		500s run 8.2 c _s ⁻¹ S.9 x10 ⁷				
	B flat						
	C flat						
927	C flat		file id p19705209 750s run 150.4 c _s ⁻¹ p = 7.8 x10 ⁷				
	field						
928	A flat		file id p19705209 anode V = 3.00 kV i = 0.012 mA 2005 750s run 140.8 c _s ⁻¹ 9.6 x10 ⁷				
	field						

LIFE HISTORY

EVENT		DATE	TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.		RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES
NO.	SUBJECT		START	STOP	TOTAL TIME	CUM. TOTAL	STAMP OR INITIAL	
929	Te flat field	20 May 91	Fe anode file id p1970520v	1.5KV 3.3mm poly 174.0 C s ⁻¹ peak 7.7 x 10 ⁷	2030			
930	Te flat field	20 May 91	HY 79, 91 file id p1970520w	1105.7 peak: 8.2 x 10 ⁷	2046			
931	power down		all breakers down sent		2112			
			4.1.9 x 10 ⁻⁶ Torr in pipe					
			2.3 x 10 ⁻⁷ Torr					
			bus switch in neutral					
			L VPS turned off					
			79, 91 is selected operating point.					
932	pressure	21 May 91	4.4 x 10 ⁻⁶ Torr in pipe		0955			
933	base changes	21 May 91	DISCONNECTION FLIGHT BASE FROM FLIGHT HPC For use in transverse shooting A Non - FL					
			Detector will take for electronics					

LIFE HISTORY

EVENT NO.	SUBJECT	DATE	TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	SUMMARY OF CHRONOLOGICAL EVENTS			PAGE OF PAGES
				START	STOP	TOTAL TIME	
933 CAND	21MAY97	CONNECTED THE FLIGHT HMC TO THE ENGINERUNING TESTS WHICH HAS BEEN ALIGNED TO BUS ABOVE TO AND @ 10X THE T/M RATES. FLIGHT SIDE A FIFO PCB ASSY POSITIONED IN INSTANCES IN POE SYSTEM. POE FIFO INSTANCED IN FLT MPC ON AND EXTENDED BOARDS & INSTANCES A SPECIAL BOARD ON AND EXTENDED IN CE113 FOR 10X OPERATION IN CONSTRUCTION UNIT A THIS MODIFYING POE FIFO. CONNECTED A BNC CABIN WITH A SMALL POST ISOLATOR TO THE FRONT HAIR OF THE FLT SIDE A SIGNALS TO BE ABOVE TO LOOK AT THE RATE WHILS OPERATING IN THIS 10X MODE (SIC. SCI NOT AVAILABLE IN 10X MODE)					STAMP OR INITIAL
934 PNT UP	21MAY97	SIMPLY S, P, N					1204
935 HW on	21MAY97	CHANGED CARD 12 = 1 SONG CARD 12 CHANGE CARD 2 = 1 SONG CHO 9 SONG HW TO TOP 79, BOTTOM 31					GA
936 CHTS OUT	41	= 32, SONG CHTS 41					

LIFE HISTORY

EVENT		DATE		TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.		RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES	
NO.	SUBJECT			START	STOP	TOTAL TIME	CUM. TOTAL	STAMP OR INITIAL		
235	CONT'D	21-11-97		BKGD RATE N 7-8		1315		GKA		
236	TEST RUNS	21-11-97		MADE 10 SEC BKGD RUN 8 sec. rd.						
		"		" 100 SEC X-RAY RUN P197052109.rd.						
				(CARBON) X-RAYS, 1KV, 3mA, 33m POLY FILTR						
				ADJUST RATE TO 1500 IMMERSION CURR 55mA						
237	PARTS CHANGED	21-11-97		CHANGES 62-1 (10X) 1 SUND CND 62		13.98		GKA		
238	BKGD	21-11-97		1000 SEC BKGD ; RUN P197052109.rd		14.03		GKA		
239	FILT FILLED	21-11-97		7000 SEC FLAT FILDS, RUN P197052109.r.d		14.26		DA		
				CKD		14.30				
				SHD SWITCH		16.28		GKA		
				SWITCH TO ① X-RAYS 1 KV, 2mA FILTR						
				SWITCH						
241	BKGD	21-11-97		1000 SEC BKGD RUN P197052109.r.d		17.13	17.31	GKA		
242	① FILT FIL	21-11-97		7200 SEC ① FLAT FILDS P197052109.r.d		17.29		GKA		
243	pressure			pump cart 2.2×10^{-7} /in gauge pump 9.9×10^{-6} 1810				WT		
244	Bknd			1000 sec Blended run p197052109.r.d				WT		
245	B flat filk			Band 0.800KV 0.513mA Film per-C filter		20.15		WT		
				10,000 second flat field p197052109.r.d				WT		
				pump cart 2.1×10^{-7} BAI 4.5×10^{-6}				WT		
246	power off			Power off		20.48				
						23.24				

LIFE HISTORY

EVENT	DATE	TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES	STAMP OR INITIAL
			START	STOP	TOTAL TIME		
947 Pass up	5.22	set up PWS CS Manua (14, 5 T S6 → 10 INIT all looks normal)					
			12 → 0		(current limites off)		
			9 → 1		(I HV)		
948 HV on		Bot #77					
		TOP 78	??	didn't work			
949 HV on		HV on manually				(EJ)	
		S 12 → 0				send 12	
		S 9 → 1				send 9	
		Bottom → 500V 10 → 39				send 10	
		Top → 500V 10 → 28				send 11	
		Bottom → 1000V 11 → 64				send 10	
		Top → 100V 10 → 53				send 11	
		11 → 91				send 11	
		10 → 79				Send 10	
		Through 41 → 37				Send 41	

LIFE HISTORY

EVENT		DATE		TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.		RUNNING TIME/OTHER (HOURS AND MINUTES)		PAGE OF PAGES	
NO.	SUBJECT			START	STOP	TOTAL TIME	CUM. TOTAL	STAMP OR INITIAL	
				8:500 sec run, p197052204.rd					
953	X-ray off	5/22		ended @ 11:08 am					
954	X-ray off								
955	ΔHV			changed HRC HV cmd # 11 → 88 (Bottom) cmd # 10 → 77 (Top) verified ✓	11:26				
956	X-ray			X-ray on (A1) ~1300 sec	11:28				
957	X-rays off			X-rays off	14:00				
958	B X-rays								
959	X-rays on for Boiling run			reduced MCP voltage p197052208.rd	16:02				
960									
961									
962									
963									
964	HRC error mash			Getting message "write failed, file system is full" "da: bad write"	18:20			MZ	
965	pressure			disk capacity ~ 150 mb left, end file					
966				p197052208.rd is still increasing, continue with new pressure 1.1x10 ⁻⁷ Torr	18:36			MZ	

LIFE HISTORY

EVENT		DATE	SUMMARY OF CHRONOLOGICAL EVENTS TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES
NO.	SUBJECT			START	STOP	TOTAL TIME	CUM. TOTAL
			Send HV to 91, 79				
			repeat				
			Set to turn current limit \rightarrow 0				
			S10 \rightarrow 00				
			S11 \rightarrow 00				
			S12 \rightarrow 00				
			S				
			SO9 \rightarrow 01				
			S HV 91, 79 (verified)				
			\checkmark HV went on in 1 step				
			Enabled current limit 10 \rightarrow 2				
			S command 41 \rightarrow 32				
			(verified)				
			SOURCE PROBLEMS TURN OFF HV				
			SEND CMD 9 \rightarrow 0 AND 10 \rightarrow 0 AND H \rightarrow 0				
			BRISE HV UP SEND AND H \rightarrow 0				
			\checkmark 15				
			1: CMD 9 = 1				
			11: 11 M = 39				
			12: n 10 = 28				

LIFE HISTORY

SUMMARY OF CHRONOLOGICAL EVENTS			TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.			PAGE OF PAGES
EVENT	DATE	NO. SUBJECT	START	STOP	TOTAL TIME	CUM. TOTAL
23 May 97	Send Cmd	11 = 64				
	" "	10 = 53				
	" "	11 = 91				
	10	= 79				
	VERIFIED	MONITORS Lower = 78				
		Upper = 86				
	TABLE FACE	I Lin Cmd 1/2 = 1				
Xray on	Xrays on	$\sim 1400 \text{ sec}^{-1}$	Ni L	9:24		
Xray off		$C_2KU = V_A$	$I_e = 0.027 \text{ mA}$			
		P197052304.cmd	7200 sec	11:24		
Xray on		$\sim 1350 \text{ sec}^{-1}$	Ag L, Ceu, CuA	13:25		
		P197052308.cmd				
Xray off		P197052308.cmd	8000	15:43 →		
Get Ti flat	Ti Anode	150 µm Ti filter	10.000 KV	0.125 mA	16:30	gm
	field	7200 second run file				llc

LIFE HISTORY

LIFE HISTORY

EVENT		DATE	SUMMARY OF CHRONOLOGICAL EVENTS TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.		RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES
NO.	SUBJECT		START	STOP	TOTAL TIME	CUM. TOTAL		
962	HV change	23 May 97	Changed HLC-T HV to 77 (top) 88 (bot)	1850			34	
963	Ti flat field		Anode HV 10,000 KV i = 0.128 mA file p1970523/3rd 7200 seconds	1900			M12	
964	Pressure		BAL 1.2 x 10^-6 Torr pump out 9.5 x 10^-8 Ti flat field done	1910	2054		M12	
965	HV change	23 May 97	Changed HLC-T HV to 79 (top) 91 (bot) filling counter to 60 Torr	2100			M12	
Globe	Fe flat field		Fe anode 10,000 KV i = 0.097 mA 105mA 2222 7200 seconds file p1970523/3rd				M12	
967	Pressure	24 May 97	Run over gate valve (Manually) closed BAL 9.7 x 10^-7	0025				
968	Power off		HLC-T powered off	0026				
969	Power up		Turned on HBC, HV started	11:00				
			Tested Beam run @ Trig level = 12 HV was raised "manually" as per sweat # 949, his level (#41) = 12					

Boron runs PI97052401 T/H 12 D
2 22 D
0 3 32 D (20 H)

LIFE HISTORY

EVENT		DATE		SUMMARY OF CHRONOLOGICAL EVENTS		RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES	
NO.	SUBJECT					START	STOP	TOTAL TIME	CUM. TOTAL	STAMP OR INITIAL
970	Delta threshold	5/24		trigged alarm Δ 12 → 22 end	TER = VER					A/E
971	HV OFF	24 May 97		start 800 sec run	PI97052401.rd					
972	HV ON	24 May 97		HV off & Valves SW to O						SKA
973	ADJ. ioniser			ADJUST IONISER THOLD TO 12 D						13:47
974	FUAR fixed	24 May 97		T/H 12. PAIR N 40, V.E.R N 8 200 SEC FLAT E1600 @ OXYGEN						13:49
	CO			T/H = 12 DIGITAL PI97052404.rd						
975	HV off			Δ T/H 12 → 22						
976	HV off			200 sec PI97052406.rd						14:15
977	PROGRESS	24 May 97		Detects turned off Instrument off PUSHED THESE CABLES & GND STAMP FROM H/C, CROSSING H/C BLACK VALVE & REPOSITION PUSH SPKA LINES. POSITIONED LINES FROM BLACK VALVE & ANALOG FACULTY CAN LINE TO BLACK						14:10

LIFE HISTORY

EVENT		TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.		SUMMARY OF CHRONOLOGICAL EVENTS		RUNNING TIME/OTHER (HOURS AND MINUTES)		PAGE OF PAGES	
NO.	SUBJECT			START	STOP	TOTAL TIME	CUM. TOTAL	STAMP OR INITIAL	
977 cont'd	24-11-97	VALVE. CRACKED HRC BLOCK VALVE TO RESPONSE HRC IN PIPE							
		REPHRASED COMPLIENCIES		1432.					
978 SNOUT	24-11-97	DISCONINUING HRC IN ROUND TUBE SNOUT FROM PIPE. RAISES HRC IN SUPPORT TABS USING ELECTRICAL HOIST. REMOVES LONGER PORTION OF SUPPORT TABS IN TOP IS CUT 5" OFF VERTICAL LEGS WITH CORRESPONDING SHORTENING OF DIAGONAL BLOCKS. REASSORTED TABS IS LOWER IN WITH HRC ONTO THE FLOOR - REMOVED ROUND TUBE SNOUT IN PLACES IT WITH ROTATING TURNAROUND SNOUT CONTROLS ON HRC-S SEGMENT O. ROTATE LOWER HRC WITH NEW SNOUT TO END OF XRAY PIPE MATED THE FLANGES. HRC WAS PURGED DURING THIS STOP BY GN-2 FLOWING IN THRU THE HRC BLOCK SNOUT		1442					
979 PUMP DOWN	24-11-97	STARTED PUMP DOWN		1556					
				1558					
				50 mm					
				23 mm					
				4.1x10^-2					
				1729					

LIFE HISTORY

EVENT		DATE	SUMMARY OF CHRONOLOGICAL EVENTS TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES
NO.	SUBJECT			START	STOP	TOTAL TIME	CUM. TOTAL
280	Press	24/10/97	TRANSIT FOR LEAK REPAIR INSTANT FROM COUNTDOWN FOR BND USE STATION PUMP DOWN	1731	1743		GKA
281	Pump down	24/10/97	CONNECTIONS ARE PUTTING ON TO HRC BLOCK VALVE SPURGED OUT LINE	1921	1920		
			BA GAS ON PIPE	6.5 x 10^-5	1958		
			OPENING HRC BLOCK VALVE	2.0 x 10^-5	2041		
			PUTTING CARRY	1.3 x 10^-5	2044		
			OPENING HRC BLOCK VALVE	2.3 x 10^-5	2045		
				8.6 x 10^-6	2051		
				5.4 x 10^-4	2103		
				1.6 x 10^-4	1.8 x 10^-7		
				1.3 x 10^-6	1.6 x 10^-7		
282	CASTLE UP	25/10/97	CABIN FLIGHT TESTS TO HRC FOR INITIAL HRC-S TURN ON TO HADS ROUTINE IMAGE DISCERN CAPABILITY	1412			
283	PULL ON	25/10/97	SYSTEM CARTED UP WITH BOTH A & B SIDES CONNECTED TO THE S PROBES. "PUSHED ON" SUSPENDING OR HIP'S FAILED TO CONNECT THIS HRC'S PLATE TO SIDE B, DUE TO REMOVAL	1413			GKA
			POWER UPS	1416			

LIFE HISTORY

EVENT		DATE		TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.		RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES	
NO.	SUBJECT			START	STOP	TIME	CUM. TOTAL	STAMP OR INITIAL		
983	CONT'D	25-10-97		OF B SIDES PREPARERS FOR 25% IN FOC SYSTEM						
984	HV ON	25-10-97		STARTED RUN P1970575 & FOR TURN ON		1551				
	HVC-S			OFF HVC-S HV HVSUP-UP				GVA		
				UP TO STOPS 87/98						
				ONLY SIDE LEGS IN CENTER SEGMENT, SONT						
				S&1501 SPOT DAY IN NORMAL MODE AND						
				THEN GOT LEGS IN AVE 3 SEGMENTS.						
985	PWR OFF	25-10-97		HV OFF, LV OFF SWITCH TO SCI, DIRECTORY						
				ON BASE.				✓KA		
							1523			
986	PWR UPS	25-10-97					1524			
987	HVC-HV ON	25-10-97		HVSUP-UP. RUN P1970575b		1528				
				HV @ STOPS 87/98 HEIGHTS 82/75						
				LEGS IN AVE THREE SEGMENTS			1533			
				ADJUSTED PINHOLE'S JAMS TO HAVE				GVA		
				PINHOLE IMAGES ON CENTER SEGMENT						
				ADJUSTED JAMS FORWARD & PINHOLE						
				SUPPLY MUN P1970575c						
988	PINHOLE TJS	25-10-97		RUN P1970575d. INDENCE OF TAIL N +U			1701			
				DIMENSION, BUT NOT AS SMALL AS HVC-T.				1712		
989	MONITOR/A	25-10-97		MOVING PINHOLE TO LOWRE U VALUES.						

LIFE HISTORY

LIFE HISTORY				PAGE OF PAGES				
EVENT	DATE	SUMMARY OF CHRONOLOGICAL EVENTS		RUNNING TIME/OTHER (HOURS AND MINUTES)	STAMP OR INITIAL			
		NO.	SUBJECT	TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	START	STOP	TOTAL TIME	CUM. TOTAL
991	PI-1104-97	25/11/97	TRND	P1970525e				
			TURB					
992	BKGD	25/11/97	TRND	F1970525 S	1000	Suc BKGD.	1730	1730
				1 Hot spot in centre segment	0.6 caps			
				C 6091 577				
993	PULL OFF	25/11/97		1 WIRE NDA (33 CPS) @ 6091, 6893			1800	1800
994	PRESSURE	25/11/97		HV LN OFF			1801	1801
				BA GAGE ON PIPE	1.3×10^{-6}			
				PUMP C ACT	1.6×10^{-7}		1802	1802
				BA 1.7×10^{-6}	PUMP C ACT 1.4×10^{-7}		2000	2000
				BA 1.0×10^{-6}	PUMP C ACT 1.1×10^{-7}		0952	0952
995	PWR UP	26/11/97		PWR UPS			0953	0953
				HECS				
996	HECS	26/11/97		HV SP-UP PWN P1970526n				
				HV S-T @ 87/98 ($\sim 1680 V/P$)				
997	SP-UP	26/11/97		All X-RAYS 3 KV, 2 mils Al Filter. ADJUSTING FOR FLAT FWD				
				FWD TO CENTRE SEGMENT. ADD'L SET-UP				
				PWN P1970526b				
998	CLEAR BAL	26/11/97		CLEAR BALANCE ADJUSTING \Rightarrow 2628			1120	1120

LIFE HISTORY

EVENT NO.	SUBJECT	DATE	SUMMARY OF CHRONOLOGICAL EVENTS		RUNNING TIME/OTHER (HOURS AND MINUTES)		PAGE OF PAGES
			TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	START	STOP	TOTAL TIME	
9995	Al ADJ	26/11/97	MC HV FROM 87/28 To 88/100 (Front) +1, none +2)				
10000	FRT FLNG	26/11/97	300 SOT FLAT F1500, AL X-MMS 312V, 59 CPS, 2 mil Al Future PI 970526C			1143	GKA
10001	BKGD	26/11/97	RATES 131.7, PK 8.5x10 ⁷				
10002	HV ADJ	26/11/97	300 SOT BKGD PI 970526D 6.5 CPS			1157	GKA
10003	FRT FLNG	26/11/97	INITIAL CPS IN ONE HOT SPOT				
10004	BKGD	26/11/97	HV AND FROM 88/100 TO 89/101			1208	GKA
10005	SURCH	26/11/97	300 FLAT B1000 PI 970526E				
10006	FLNG	26/11/97	PIK 9.4x10 ⁷ RATE 138.5			1215	
			RATE = 8.0 CPS WITH 2V CPS IN HOT SPOT				
			BAUD X-101/S 808 V, 493 MA PACKARD Future				
			TO BURN				
			1000 SOT PI 970526F				
			B				
10007	4V ADJ	26/11/97	RAISNS HV FROM 89/101 TO 90/102			1306	
10008	FRT FLNG	26/11/97	PI 970526G BORON MN 200 SV			1317	GKA
10009	BKGD	26/11/97	PI 970526H 300 SV BKGD				
			RATE 9.0 CPS WITH N3 CPS IN HOT SPOT				

LIFE HISTORY

EVENT NO.	SUBJECT	DATE	TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	SUMMARY OF CHRONOLOGICAL EVENTS			RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES
				START	STOP	TOTAL TIME	CUM. TOTAL	STAMP OR INITIAL		
1010	Switch To	26/11/97	Switch To AL 200 SFC TO CHURK DURFURANCE							
	AL Karts		AT CURRENT VOLTAGE SIGHTINGS							
1011	F10 F10	26/11/97	PI970526g 300 SFC FLAT FIELD							
	AL		PULL 1.1 x10 ⁸ 145.1 CPS							
1012	L/H INC	26/11/97	TEASONS T/HOURS TO 40h (FOUNDED THAT							
			24h IS LOWEST POSSIBLE T/H OF PROBLEMS							
			RUNS WORK DONE @ 28h)							
1013	AL fm PRO	26/11/97	300 SFC AL FLAT FIELD @ HIGHER T/HOUR							
			PI970526k							
1014	L/H DCR	26/11/97	WORKERS T/HOURS TO 24h							
1015	AL/FLA fm	26/11/97	PI970526j							
1016	PULL OFF	26/11/97	ALL HIGHER DOWNS / DOWNS							
1017	EGS	26/11/97	UNCAUSING FLIGHT ISSUES & CANCELLED UP							
	CHANCES		LINE INDICATING ISSUES TO MAKE 10X MORE							
1018	PULL UP	26/11/97	AVAILABILITY FOR FLAT FLIGHTS.							
			S, P, N & INIT							
			SOT LONGER T/HOURS CHD41 = 40							
			AND TURN ON HERR'S HV, NOT IN PREPARE							
1019	PULL OFF	26/11/97	POWER CONFIGURATION							
			S, P, F							
			PI97							

LIFE HISTORY

LIFE HISTORY		PAGE OF PAGES			
EVENT	DATE	SUMMARY OF CHRONOLOGICAL EVENTS TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ ADJUSTMENTS/REPAIRS/MAINTENANCE/EQUIPMENT/ENVIRONMENT/ETC.	RUNNING TIME/OTHER (HOURS AND MINUTES)	STAMP OR INITIAL	
NO.	SUBJECT	START	STOP	TOTAL TIME	CUM. TOTAL
1020	PNL ON	26-11-97	S, P, N INIT		
1021	PNL OFF	26-11-97	S, P, F 3, D, N	1501	
1022	PNL ON	26-11-97	S6 → 3		
			56 → 6		
			INIT		
			27 → 1		
			41 → 40		
			4 → 0		
			1 → 1		
			CAN'T GET ACROSS HVPS onto BUS A.		
1023	PNL OFF	26-11-97	S, P, F POWER OFF, 28V LUPS OFF	1549	
1024	CHNGS	26-11-97	CHANGES BACK TO FLIGHT MODE		
	CHNGS			1557	
1025	PNL ON	26-11-97	POWER UPS	1601	
			28V LUPS		
1026	HV ON	26-11-97	FILE P1970526M HVSP-UP (87/98)	1606	
			SD 0366 BOTTOM 28 → 102		
			SD 025A TOP 87 → 90		
				1613	
					GVA

LIFE HISTORY

LIFE HISTORY		PAGE OF PAGES	
		44	
		RUNNING TIME/OTHER (HOURS AND MINUTES)	
NO.	SUBJECT	START	STOP
NO.	TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTION/SERIAL NUMBER OF REMOVED OR MAINTENANCE/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	TOTAL TIME	CUM. TOTAL
1027	Bklynd 26 May 97 run	1619	1636
1028	B flatfield	1643	1643
1029	pressure	2340	2346
1030	pump ON	7:03	AK
1031	HV up S	7:10	AL
1032	Bklynd Run	7:15	

LIFE HISTORY

EVENT NO.	DATE	TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	RUNNING TIME/OTHER (HOURS AND MINUTES)			STAMP OR INITIAL	PAGE OF PAGES
			START	STOP	TOTAL TIME		
1031	5/27	Start Run 25000 sec Beacon			7:35		AK
1032		Power went off via interlock, Persons un-named turned off (on George) switch (center position) recycled interlock.			11:02		
1033	Power Up	Send Purp S. card hSP=up=ard (87/98) ✓ note limit switch = 1	11:08	11:14	11:15		
1034	H/W Up	X-rays	Started next run B, 13000 sec		11:20		
			P197052703rd				
		X-rays off	Closed Mainstn X-ray source shutter		14:58		
			all bright		15:00		
			Purposes				
			Kill switch in neutral				

LIFE HISTORY		DATE	SUMMARY OF CHRONOLOGICAL EVENTS TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES
NO.	SUBJECT			START	STOP	TOTAL TIME	
1035	pwrt up	27 May 96	Engineering EBSIE installed C 156 to 10 (turns SV on) send Send I (init)	1623			MZ
1036	H V on		C 4 to 0 disable current limiter send C 1 to 1 spec HV on send				
			C 56 to 1 turns SV off send Plugged C EP168 into CEJ169	1634			MZ/EJ
			C 56 to 2 (turns SV on) send Plug CEP168 into CEJ168				
			Plug turned 28V on				
			C 56 to 10 send	1643			
			C 1 to 0 send				
			Send "init"				
			1. 3amps on supply				
			C 1 to 1 send	1646			
			bottom step 102 top step 90				
			H V off total rate w/ better k				
			threshold was @ 40				
			Set to 28H (40D)				
			C 4 to 0 send				
			C 1 to 1 send				

LIFE HISTORY

LIFE HISTORY

LIFE HISTORY

EVENT		DATE	SUMMARY OF CHRONOLOGICAL EVENTS	RUNNING TIME/OTHER (HOURS AND MINUTES)			PAGE OF PAGES	
NO.	SUBJECT		TEST DOCUMENT NUMBER/TEST DESCRIPTION/NATURE & DESCRIPTION OF MALFUNCTIONS/SERIAL NUMBER OF REMOVED OR REPLACED PARTS/MODIFICATIONS/ADJUSTMENTS/REPAIRS/MAINTENANCE/SHIPPED/RECEIVED/ENVIRONMENT/ETC.	START	STOP	TOTAL TIME	CUM. TOTAL	STAMP OR INITIAL
1050		5-28	Send SD1601 to reset S to normal config, total rate ~ 6 sec ⁻¹	9:22				
			end run @ 2240 sec					9:35
			Start 2nd run P1970528 herd to see if break goes away					9:35
			End Run P1970528 has ended Average background of 4.1cts/s					10:25
1051		5-28	Up HRS-S hv. one step @ a time					
			Start data run P1970528 cont					
			88 / 99					
			89 / 100					
			Pause, note blks ~ normal					
			Raised to 90 / 101, Pause					
			→ 90 / 102					10:47

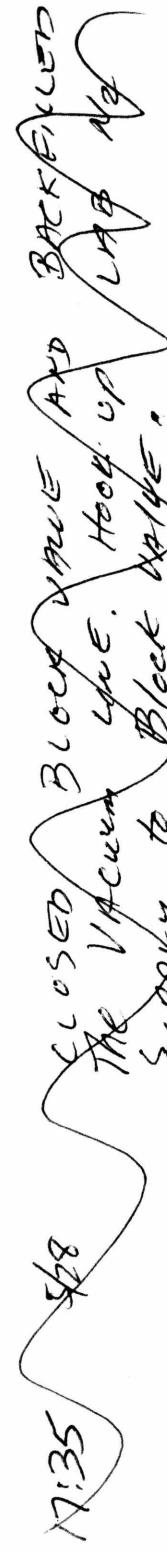
Start over for stops 1052 & 1053

10:52 5/28

Turned on Xrays (C & 1kV)
for ~ 500 seconds.
HRC's rate went to ~ 170 sec⁻¹
Turned off Xrays and
rate recovered to around 100s values

1053

all hv off
power down HRC

11:35 
closed Block valve and Backflow
The Vacuum syst. hook up into Net
Supply to Block valve.
Entered Haze in order

2001 520 2002 2003 2004 2005 2006 2007