

Appendix G

Bayview Pipeline Shut Down Data

Pipeline Rupture and Fire
Bellingham, Washington
June 10, 1999
DCA-99-MP-008



U.S. DEPARTMENT OF TRANSPORTATION
RESEARCH AND SPECIAL PROGRAMS
ADMINISTRATION
OFFICE OF PIPELINE SAFETY

Golden Hills Centre
Suite A-250
12600 West Colfax Avenue
Lakewood, Colorado 80215-3736

TELEX COVER SHEET

FAX NUMBER: 303-231-5711

TELEPHONE NUMBER: 303-231-5701

TO: Alan Beshore

SENT BY: PK DATE: 8-25-99

NUMBER OF PAGES INCLUDING COVER SHEET 10

If there is a problem with this FAX please contact the Western Regional
Office at the above number.

Past Bayview Receiver Inlet Valve Closures (Based on SCADA sort)

Date	Time Start Travel	Controller Action	Meter psi	Upstream psi
6/2/99	2:15:29	2:15:41 Transmit Ferndale #3 shutdown 2:15:44 Transmit Cherry P #1 shutdown	2:16:13 628	2:16:13 678
6/4/99	12:57:37	12:57:27 Transmit Bayview Sta sdown reset 12:57:33 Transmit Cherry P #1 shutdown 12:57:35 Transmit Ferndale #2 shutdown 12:57:43 Transmit Bayview SPT PSI 500	12:57:33 22	12:57:33 33
6/6/99	2:31:58	2:29:46 Transmit Bayview SPT PSI 70 2:31:45 Transmit Ferndale #3 shutdown 2:31:58 Transmit Ferndale #1 shutdown 2:32:09 Transmit Bayview SPT PSI 400 2:32:09 Transmit Cherry P #1 shutdown	2:31:55 44 2:32:37 636	2:31:55 51 2:32:37 635
5/12/99	2:24:23	2:23:56 Transmit Woodinville #2 shutdn 2:24:08 Transmit Allen 16" #3 shutdown 2:24:11 Transmit Ferndale #3 shutdown 2:24:13 Transmit Cherry P #1 shutdown 2:24:22 Transmit Seattle SP PSI 250 2:24:42 Transmit Seattle SP PSI 350 2:24:46 Transmit Seattle SP PSI 450 2:24:49 Transmit Seattle SP PSI 550 2:25:09 Transmit Seattle SP PSI 650 2:25:14 Transmit Seattle SP PSI 850 2:25:29 Transmit Seattle SP PSI 950 2:25:31 Transmit Seattle SP PSI 1050 2:25:33 Transmit Seattle Scraper in close	2:24:14 678 +ROC 39 2:25:09 713	2:24:14 676 +ROC 37
5/12/99	8:13:57 8:13:57 outlet also	8:12:54 uncmdchg Cherry P outlet close 8:13:48 Transmit Bayview Fer-Aln shutdown 8:13:51 Transmit Bayview Fer-Bpt shutdown		
5/22/99	7:37:56	7:36:20 Transmit Allen 16" #2 run 7:36:45 Transmit Allen SP PSI 1290 7:37:32 Transmit Allen SP PSI 1330 7:37:36 Uncmdchg Allen #1, #2, #3 shutdown 7:37:41 Uncmdchg Bayview P-201 shutdown 7:37:49 Uncmdchg Bayview Fer-Bpt shutdown 7:37:50 Transmit Ferndale #1 shutdown 7:37:55 Transmit Woodinville #1 shutdown 7:38:17 Transmit Ferndale #2 shutdown	7:37:36 742	7:37:43 694
5/24/99	13:57:26	13:56:53 Execute Bayview P-201 shutdown 13:56:53 Execute Allen 16" #1 shutdown	13:57:01 627	13:57:01 626

		13:56:58 Change Cherry P #1 suction travel 13:57:17 Transmit Seatac V-1101 close	13:57:08 675	13:57:08 674
9	5/26/99	15:44:49 15:44:30 Change Cherry P #1 travel 15:44:47 Transmit Bayv Fer-Bpt sta shutdown		
207 removed from bank	10	22:40:56 22:40:05 Transmit Bayv Fer-Bpt SPT PSI 20 22:40:18 Alarm Bayv Fer-Aln disc 29 22:40:19 uncmdchg Allen 20" #2 shutdown 22:40:25 uncmdchg Allen 20" #1 shutdown 22:40:52 Transmit Ferndale #1 shutdown 22:40:56 Transmit Ferndale #3 shutdown 22:41:15 Transmit Ferndale #2 shutdown 22:41:26 Transmit Cherry P #1 shutdown	22:40:44 691	22:40:44 691
11	5/29/99	10:00:26 10:00:19 Transmit Bayv Fer-Bpt sta shutdown 10:00:55 Change Cherry P #1 discharge close		
8 (1-2) 15 (2-3)	12	5/31/99 1:44:10 1:40:48 Transmit Allen 16" #2 shutdown 1:41:24 Change Bayview P-201 S&D close 1:42:04 Transmit Woodinville #1 shutdown 1:43:16 Transmit Cherry P #1 shutdown 1:43:22 Transmit Ferndale #3 shutdown 1:43:38 Transmit Seatac incoming PSI SP 450 1:43:57 Transmit Seatac incoming PSI SP 650	1:43:59 702	1:43:59 700
13		2:8:26 2:8:20 Transmit Bayview Fer-Bpt Sta shutdown		
14	4/9/99	8:3:57 7:53:12 Transmit Bayv Fer-Bpt SPT PSI 250 8:2:12 Transmit Bayview tank TK-206 inlet 8:2:48 Transmit Allen 16" #1 shutdown 8:2:55 Transmit Woodinville #2 shutdown 8:3:57 uncmdchg bayv Fer-bpt & Fer-Aln shutdown (from field)		
15		8:25:29 8:25:09 Transmit Bayv Fer-Bpt recv vlv open 8:28:59 Transmit Bayv Fer-Bpt recv vlv open		
16		8:29:28 8:29:15 uncmdchg Bayv Fer-Bpt shutdown		
Farb	17	4/10/99 15:54:30 15:53:46 Transmit Cherry P #1 shutdown 15:53:49 Transmit Ferndale #3 shutdown 15:53:53 Transmit Allen 16" #3 shutdown 15:53:55 Transmit Woodinville #2 shutdown 15:54:00 Transmit Seattle inc PSI SP 350 15:54:3 Transmit Seattle inc PSI SP 450 15:54:14 Transmit Seattle inc PSI SP 550 15:55:43 Transmit Seattle scraper in close	15:54:09 645 15:54:19 689	15:54:09 644 15:54:19 690
18	4/12/99	6:57:30 6:57:28 Transmit Bayv Fer-Bpt sta shutdown		
9	19	4/15/99 15:14:10 (outlet) 15:15:04 15:14:7 Transmit Bayv Fer-Aln shutdown 15:14:18 Transmit Bayv Fer-Aln reset 15:14:34 Transmit Bayv Launcher outlet open	15:15:02 664	15:15:02 661

	unmdchg (inlet) 15:15:16 (outlet)	15:15:18 Transmit Allen 16 #3 shutdown 15:15:20 Transmit Allen 16 #1 shutdown 15:15:21 Transmit Woodinville #2 shutdown 15:15:26 Transmit Ferndale #3 shutdown 15:15:29 Transmit Ferndale #2 shutdown 15:15:29 Transmit Cherry P #1 shutdown	15:15:04 756	15:15:04 756		
20	4/16/99	7:25:12	7:24:53 Transmit Ferndale #3 shutdown 7:24:54 Transmit Ferndale #2 shutdown 7:24:55 Execute Allen 16" #1 shutdown 7:24:55 Execute Allen 16" #3 shutdown 7:24:58 Cherry P #1 shutdown 7:24:58 uncmdchg seatac v-1110 manifold close	7:24:57 669 7:25:07 751 7:25:40 658	7:24:57 668 7:25:07 750 7:25:40 658	10
21		7:59:20	7:58:46 uncmdchg seatac v-1111 mfl travel 7:58:54 Transmit Woodinville #1 shutdown 7:59:02 Transmit Woodinville #2 shutdown 7:59:08 Transmit Allen 16" #3 shutdown 7:59:09 Transmit Allen 16" #1 shutdown 7:59:10 Transmit Ferndale #2 shutdown 7:59:21 Transmit Ferndale #3 shutdown 7:59:24 Transmit Cherry Point #1 shutdown	7:59:14 660 7:59:22 746	7:59:14 655 7:59:22 745	11
22		8:12:30	8:11:46 Transmit Bayview Fer-Bpt rec open 8:12:39 Transmit Bayview Sta Sdown reset 8:13:12 Transmit Bayview Sta Sdown reset	8:12:02 638 8:12:09 717	8:12:02 637 8:12:09 718	12
23	4/21/99	14:37:01	14:29:43 Alarm Allen Control High 1502 14:30:00 Transmit Ferndale PSI SP 1070 14:30:04 Transmit Ferndale PSI SP 1060 14:30:10 Transmit Allen Disch PSI SP 1457 14:30:49 Transmit Ferndale PSI SP 1050 14:32:59 Transmit Ferndale #1 shutdown 14:36:36 Allen #1, #2, #3 uncmdchg shutdown 14:36:56 Transmit Ferndale #2 shutdown 14:37:03 Alarm Bayview Fer-Aln pmp case 736 14:37:14 Transmit Woodinville #2 shutdown 14:37:16 Transmit Woodinville #1 shutdown 14:37:27 Transmit Cherry P #1 shutdown 14:37:33 Transmit BayvFer Bpt sta Sdown reset	14:36:50 650 14:36:57 698	14:36:50 649 14:36:57 697	13
24	4/23/99	21:03:43	21:03:27 Transmit Allen 20" #2 shutdown 21:03:31 uncmdchg Allen V-576 20" scraperout 21:03:31 uncmdchg Ferndale V-358 Dish close	21:03:37 739	21:03:37 739	14
25	4/29/99	3:22:01	3:20:40 Transmit Woodinville #1 shutdown 3:20:52 Transmit Allen 16" #2 shutdown 3:21:00 Transmit Woodinville #2 shutdown 3:21:06 Transmit Ferndale #2 shutdown 3:21:44 Transmit Allen 16" #3 shutdown 3:21:53 Transmit Ferndale #3 shutdown	3:21:55 777	3:21:55 777	15

		3:22:02 Transmit Cherry P #1 shutdown 3:22:11 Transmit Bayview Fer/Bpt sdown reset			
cro 26	10:57:46	10:57:28 Transmit Woodinville #1 shutdown 10:57:34 Transmit Allen 16" #1 shutdown	10:58:03 746		16
27	3/2/99	6:03:08 All 4 Bayv isolation valves uncmdchg			
cro 28	3/10/99	3:47:50 3:46:49 Transmit Ferndale #3 shutdown 3:46:50 Transmit Cherry P #1 shutdown 3:47:30 Transmit Allen 16" #3 shutdown 3:47:32 Transmit Woodinville #2 shutdown 3:47:37 Transmit Seattle PSI SP 100 3:47:39 Transmit Seattle PSI SP 150 3:47:41 Transmit Seattle PSI SP 200 3:47:49 Transmit Seattle PSI SP 250	3:47:41 706	3:47:41 705	17
cro 29	3/14/99	23:42:51 23:41:19 Transmit seatac PSI SP 300 23:41:20 Transmit seatac PSI SP 200 23:41:40 Transmit seatac PSI SP 100 23:42:19 Transmit seatac PSI SP 50 * 23:42:37 Transmit Allen 16" #3 shutdown 23:42:40 Transmit Woodinville #2 shutdown 23:42:43 Transmit Ferndale #3 shutdown 23:42:44 Transmit Ferndale #2 shutdown 23:42:47 Transmit Ferndale #1 shutdown 23:42:53 Transmit Cherry Point #1 shutdown 23:43:23 Alarm Renton 1112 psi 23:43:28 Transmit seatac PSI SP 1500	23:42:46 730	23:42:46 724	18
30 23	3/15/99	00:06:39 00:01:55 Transmit Bayv Fer-Bpt Sdown reset 00:03:35 Transmit Ferndale V-359 close 00:04:04 Transmit Ferndale V-359 open 00:05:29 Transmit Ferndale V-359 close 00:06:01 Transmit Bayv Fer-Bpt recv inlet open 00:06:55 Transmit Byv Fer-Bpt sdown reset 00:07:21 Transmit Byv Fer receiver inlet open	00:06:21 752 00:07:39 729	00:06:21 751 00:07:39 729	19
cro 31	3/16/99	17:34:57 17:34:16 Alarm Allen 20" discharge 938 17:34:26 Transmit Ferndale #2 shutdown 17:34:44 Transmit Ferndale #3 shutdown 17:34:48 Transmit Allen 20" #2 shutdown	17:34:53 621 17:35:00 744	17:35:00 744	20
cro 32	3/26/99	10:45:12 10:44:58 Transmit Ferndale disch PSI SP 825 10:45:16 uncmdchg Allen 20" #2 shutdown 10:45:25 Transmit Bayv Fer-Bpt sdown reset 10:45:27 Transmit Ferndale #2 shutdown	10:44:54 650	10:44:54 650	21
33	2/7/99	9:53:03 9:50:56 Transmit Bayv P-201 run 9:51:38 Transmit Bayv Fer-Aln SPT PSI 60 9:52:32 Alarm Allen 16" suction low 12	9:52:55 678	9:52:55 678	22

		9:52:40 uncmdchg Allen 16" #1, #2, #3 shutdown 9:52:40 Transmit Bayv Fer-Aln SP PSI 70 9:52:41 Transmit Bayv Fer-Aln SP PSI 80 9:52:47 Transmit Bayv Fer-Aln SP PSI 90 9:53:07 Transmit Bayv Fer-Aln SP PSI 700 9:53:20 Transmit Woodinville #2 shutdown 9:53:32 Transmit Ferndale #3 shutdown 9:53:32 Transmit Ferndale #2 shutdown 9:53:43 Transmit Ferndale #1 shutdown				
3Y	2/11/99	20:50:21	20:49:38 uncmdchg Allen 16" V-510 close 20:49:43 Allen 16" station status reset 20:49:52 Transmit Allen 16" #1 run 20:50:33 Transmit Ferndale #3 shutdown 20:50:36 Transmit Ferndale #2 shutdown 20:50:38 Transmit Ferndale gas booster sdown	20:50:07 680	20:50:02 670	23
35	2/14/99	14:39:39	14:38:22 Transmit Seatac PSI SP 350 14:38:28 Transmit Seatac PSI SP 450 14:39:05 Cherry P #1 shutdown 14:39:08 Transmit Ferndale #3 shutdown 14:39:37 Transmit Allen 16" #3 shutdown 14:40:16 Transmit Seatac PSI SP 550 14:40:21 Transmit Seatac PSI SP 650 14:40:53 Transmit Bayv Fer-Bpt sdown reset 14:41:07 Transmit Bayv Fer-Bpt Inlet Vlv open	14:38:07 594 14:39:37 727	14:38:07 601 14:39:37 726	24
36	2/17/99	6:38:55	6:38:55 Alarm Fire sta general alarm (Bayview isolated, all valves closed)			
37		2:29:24	2:29:18 Alarm Bayview BPT station lockout (Bayview isolated, all valves closed)			
38		2:32:02	(unable to tell which system operated for sure)	2:31:52 689	2:31:52 686	25
39	1/3/99	1:51:29	1:50:42 Transmit Allen 16" #1 shutdown 1:50:43 Transmit Allen 16" #3 shutdown 1:50:45 Transmit Allen 16" #2 shutdown 1:50:48 Transmit Woodinville #1 shutdown 1:50:52 Transmit Woodinville #2 shutdown 1:50:54 Transmit Ferndale #3 shutdown 1:51:00 Transmit Ferndale #1 shutdown 1:51:13 Transmit Ferndale #3 shutdown 1:51:17 change Bayv P-201 vlv close 1:51:43 Transmit Ferndale #2 shutdown 1:51:44 Transmit Chery P #1 shutdown 1:52:34 Transmit Byv Fer-Bpt statdown reset 1:52:58 Transmit Byv Fer-Bpt inlet valve open	1:51:17 646 1:51:23 684	1:51:17 645 1:51:23 683	26
40	1/5/99	21:58:52	21:44:04 Alarm Allen control 16" high 1500 21:44:14 Transmit Ferndale PSI SP 1110 21:55:45 Transmit Ferndale #2 shutdown	21:58:46 670 21:58:52	21:58:46 667 21:58:52	27

		21:56:43 Transmit Allen 16" #1 shutdown 21:57:10 Transmit Woodinville #1 shutdown 21:58:08 Transmit Ferndale #3 shutdown 21:58:16 Transmit Cherry P #1 shutdown 21:58:40 Transmit Allen 16" #3 shutdown 21:59:14 Transmit Byv Fer-Bpt sdown reset 21:59:40 Transmit Woodinville #2 shutdown 22:00:22 Transmit Byv Fer-Bpt inlet vlv open	722	721		
41	1/7/99	11:46:10	11:45:46 Transmit Olympia #1 shutdown 11:45:48 Transmit Tacoma #2 shutdown 11:45:53 Transmit Renton #3 shutdown 11:45:55 Transmit Renton #1 shutdown 11:46:01 Transmit Allen 20" #2 shutdown 11:46:06 Transmit Ferndale #1 shutdown 11:46:14 Alarm Portland surge relief close 11:46:25 Transmit Ferndale #2 shutdown 11:46:37 Transmit Ferndale #3 shutdown	11:46:10 720	11:46:10 716	28
42		12:33:04	12:33:04 Alarm Byv BPT station lockout (Bayview isolated all valves closed)			
43		13:03:58	13:03:32 Transmit Allen 20" #2 shutdown 13:03:37 Transmit Olympia #2 shutdown 13:03:50 Transmit Portland PSI SP 1000 13:04:03 Transmit Tacoma Jct PSI SP 5 13:04:31 Transmit Portland scraper in vlv close 13:04:58 uncmdchg Byv Fer-Bpt inlet close 13:05:22 Transmit Byv Fer-Bpt rec bypass open 13:05:40 Transmit Byv Fer-Bpt sdown reset	13:03:40 665 13:03:49 689	13:03:40 664 13:03:49 688	29
44		13:14:04	13:14:04 Alarm Byv BPT station lockout (Bayview isolated all valves closed)			
45	1/14/99	8:13:29	7:43:57 Alarm Bayview communication failure 8:13:29 Alarm Bayview Fire general alarm			
46	1/20/99	9:31:48	9:31:23 Transmit Tacoma #2 shutdown 9:31:28 Transmit Renton #3 shutdown 9:31:28 Transmit Allen 20" #2 shutdown 9:31:35 Transmit Ferndale #3 shutdown 9:31:37 Transmit Ferndale #2 shutdown 9:31:43 Failure Cherry P #1 shutdown 9:32:05 Alarm Cherry P disch press high 572	9:31:35 654 9:31:44 715	9:31:35 664 9:31:44 721	30
47	12/16/98	12:10:47 Byv Fer- Allen Vlv travel	12:09:59 uncmdchg Byv TK-203 valve close 12:10:41 uncmdchg Byv Fer-Bpt shutdown 12:10:41 uncmdchg Byv Fer-Aln shutdown			
48	12/18/98	8:42:44	8:41:40 Transmit Tacoma #2 shutdown 8:41:44 Execute Renton #3 shutdown 8:41:44 Execute Ferndale #3 shutdown	8:42:36 655 8:42:44		31

1339

		8:41:49 Execute Tacoma #2 shutdown 8:42:18 Transmit Portland PSI SP 300 8:42:24 Transmit DRA pump shutdown 8:42:26 Transmit Portland PSI SP 350 8:42:34 Transmit Portland PSI SP 400 8:42:37 Transmit Portland PSI SP 450	763		
49	9:23:41	9:23:41 unc mdchg Byv Fer-Bpt shutdown			
50 984	12/20/98 12:42:01	12:40:13 Transmit Seattle PSI SP 150 12:40:21 Transmit Seattle PSI SP 250 12:40:24 Transmit Seattle PSI SP 350 12:40:25 Transmit Seattle PSI SP 450 12:41:03 Transmit Seattle PSI SP 550 12:41:46 Transmit Woodinville #1 shutdown 12:41:47 Transmit Allen 16" #1 shutdown 12:41:50 Transmit Woodinville #2 shutdown 12:41:54 Transmit Allen 16" #3 shutdown 12:41:57 Transmit Ferndale #2 shutdown 12:42:13 Transmit Ferndale #3 shutdown 12:42:15 Transmit Cherry P #1 shutdown 12:48:40 Transmit Byv Fer-Bpt shutdown reset 12:49:01 Transmit Byv Fer-Bpt inlet vlv open	12:42:01 743	12:42:01 743	32
51	20:34:50	20:33:14 Execute Allen 16" #1 shutdown 20:33:37 Transmit Ferndale #2 shutdown 20:34:37 Transmit Woodinville #2 shutdown 20:34:41 Transmit Allen 16" #3 shutdown 20:34:44 Transmit Ferndale #3 shutdown 20:34:45 Alarm Seattle in psi high 858 20:34:45 Transmit Cherry P #1 shutdown 20:34:55 Failure Seattle scraper in close 20:35:15 Alarm Seattle in PSI HI HI 909 20:35:18 Transmit Seattle PSI SP 1000	20:34:50 752	20:33:35 622 20:34:26 717 20:34:50 787	33
52	12/22/98 00:50:40	00:43:46 Transmit Ferndale dish PSI SP 700 00:48:16 Transmit Ferndale dish PSI SP 680 00:49:35 Alarm Allen 16" suction low 35 00:49:46 uncmdchg Allen 16" #1 shutdown 00:49:55 Transmit Allen 16" station reset 00:50:09 Transmit Ferndale dish PSI SP 500 00:50:13 Transmit Allen 16" #3 run 00:50:49 Transmit Ferndale #1 shutdown 00:50:52 Transmit Ferndale #3 shutdown 00:50:55 Transmit Cherry P #1 shutdown 00:51:13 Transmit Woodinville #2 shutdown	00:50:22 642 00:50:34 692	00:50:22 641 00:50:34 692	34
53	6:15:10	6:11:01 Transmit Cherry P #1 run 6:12:55 Transmit Ferndale #3 run 6:14:31 Transmit Allen 16" #3 run 6:15:26 Transmit Allen 16" #3 shutdown	6:15:10 730	6:15:10 729 6:15:30 477	35

		6:15:28 Transmit Ferndale #3 shutdown 6:15:30 Transmit Cherry P #1 shutdown 6:15:34 Transmit Seattle V-702 vlv in close 6:15:43 Transmit Byv Fer-Bpt shutdown reset 6:16:29 Transmit Byv Fer-Aln SP PSI 700 6:16:50 Transmit Byv Fer-Bpt sdown reset 6:17:03 Transmit Byv Fer-Aln PSI SP 900 6:17:16 Transmit Byv Fer-Bpt inlet vlv open	6:15:46 635 6:15:52 769	6:15:46 644 6:15:52 769		
54	12/23/98	13:48:22	13:46:52 Normal Byv Fer-Bpt meter psi 612 13:46:53 uncmdchg Allen V-511 vlv close 13:47:16 Transmit Woodinville #1 run 13:48:22 Alarm Byv Fer-Aln pump case Hi 784 13:48:30 Transmit Ferndale #2 shutdown 13:48:33 Transmit Ferndale #1 shutdown 13:48:34 Transmit Cherry P #1 shutdown	13:48:16 671	13:48:16 671	36 ?
55		13:58:52	13:58:37 Transmit Byv Fer-Bpt vlv inlet open 13:58:52 Alarm Byv Fer-Aln Case Psi Hi 764 13:59:19 Transmit Byv Fer-Bpt sdown reset 14:03:46 Transmit Allen 16" #1 run	13:58:52 764		37
56	12/26/98	13:49:40	13:48:52 Alarm Byv Fer-Aln case Hi 700 13:48:55 uncmdchg Allen V-510 16" close 13:48:58 uncmdchg Byv P-201 shutdown 13:49:24 Execute Woodinville #2 run 13:49:26 Transmit Allen 16" #1 run 13:49:40 Transmit Woodinville #1 run 13:50:14 Transmit Ferndale Gas Booster sdown 13:50:15 Transmit Ferndale #3 shutdown 13:50:16 Transmit Woodinville #1 shutdown 13:50:19 Transmit Allen 16" #1 shutdown 13:50:22 Transmit Ferndale #1 shutdown 13:50:23 Transmit Woodinville #2 shutdown	13:48:58 688	13:49:19 645	38
57		13:58:28	13:57:45 Transmit Byv Fer-Bpt inlet vlv open 13:58:13 uncmdchg Byv Fer-Bpt shutdown 13:59:21 Transmit Byv Fer-Bpt Sdown reset	13:58:03 641 13:58:13 766	13:58:03 659	39
58	12/29/98	9:50:55	9:44:32 Transmit Seattle incoming PSI SP 150 9:45:12 Transmit Seattle incoming PSI SP 140 9:45:15 Transmit Seattle incoming PSI SP 130 9:45:16 Transmit Seattle incoming PSI SP 120 9:46:12 Transmit Seattle incoming PSI SP 115 9:46:28 Transmit Seattle incoming PSI SP 110 9:46:34 Transmit Seattle incoming PSI SP 125 9:47:07 Transmit Seattle incoming PSI SP 130 9:50:07 Transmit Seattle incoming PSI SP 1000 9:50:08 Transmit Ferndale #1 shutdown 9:50:21 Transmit Ferndale #3 shutdown	9:50:36 640 9:50:42 678	9:50:36 639 9:50:42 677	40 ?

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		9:50:23 Transmit Cherry P #1 shutdown 9:50:46 Transmit Allen V-508 16" vlv open 9:52:23 Transmit Byv Fer-Bpt sdown reset 9:52:24 Transmit Seattle DF status shutdown		
	23:27:30	23:25:27 Transmit Woodinville #1 shutdown 23:25:52 Transmit Ferndale #1 shutdown 23:26:20 Transmit Allen 16" #2 shutdown 23:27:22 Transmit Allen 16" #3 shutdown 23:27:22 Transmit Ferndale #3 shutdown 23:27:26 Transmit Cherry P #1 shutdown	23:27:30 710	23:27:30 709

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INDEX	DATE	TIME	A	B	Technician	
1	16-Dec-98	12:10:47	M.HAUSER	L.TIEKEN	No assistance required.	
2	18-Dec-98	08:43:46	R.BURT	L.SHELTON	No assistance required.	
3	18-Dec-98	09:27:41	R.BURT	L.SHELTON	No assistance required.	
4	20-Dec-98	12:43:02	R.BURT	L.SHELTON	No assistance required.	
5	20-Dec-98	20:35:53	M.RANSOM	J.SMITH	No assistance required.	
6	22-Dec-98	00:51:41	J.SMITH	L.TIEKEN	No assistance required.	
7	22-Dec-98	06:16:16	D.CLEMMENTS	M.HAUSER	No assistance required.	
8	23-Dec-98	13:49:22	D.CLEMMENTS	M.HAUSER	No assistance required.	
9	23-Dec-98	13:59:04	D.CLEMMENTS	M.HAUSER	No assistance required.	
10	26-Dec-98	13:50:46	L.TIEKEN	J.SMITH	No assistance required.	
11	26-Dec-98	13:58:28	L.TIEKEN	J.SMITH	No assistance required.	
12	29-Dec-98	09:51:53	R.BURT	D.SMITH	No assistance required.	
13	29-Dec-98	23:28:32	M.RANSOM	L.TIEKEN	No assistance required.	
14	03-Jan-99	01:52:30	K.DYVIG	C.HERRERA	No assistance required.	
15	05-Jan-99	21:59:52	M.HAUSER	L.SHELTON	No assistance required.	
16	07-Jan-99	11:27:34	L.TIEKEN	L.SHELTON	No assistance required.	
17	07-Jan-99	12:33:00	L.TIEKEN	L.SHELTON	NOT KNOWN	Lock out
18	07-Jan-99	13:04:58	L.TIEKEN	L.SHELTON	No assistance required.	
19	07-Jan-99	13:14:04	L.TIEKEN	L.SHELTON	NOT KNOWN	Lock out
20	14-Jan-99	08:13:29	M.HAUSER	L.SHELTON	No assistance required.	
21	20-Jan-99	09:33:00	D.CLEMMENTS	K.DYVIG	No assistance required.	
22	07-Feb-99	09:54:02	D.CLEMMENTS	K.DYVIG	No assistance required.	
23	11-Feb-99	20:51:25	D.CLEMMENTS	K.DYVIG	No assistance required.	
24	14-Feb-99	14:40:45	R.BURT	C.HERRERA	No assistance required.	
25	17-Feb-99	06:47:38	D.CLEMMENTS	K.DYVIG	No assistance required.	
26	20-Feb-99	02:30:26	L.SHELTON	J.SMITH	NOT KNOWN	Lock out
27	20-Feb-99	02:32:15	L.SHELTON	J.SMITH	No assistance required.	
28	02-Mar-99	06:04:13	R.BURT	L.TIEKEN	No assistance required.	
29	10-Mar-99	03:48:49	D.CLEMMENTS	K.DYVIG	No assistance required.	
30	14-Mar-99	23:43:57	M.RANSOM	J.SMITH	No assistance required.	
31	15-Mar-99	00:06:39	M.RANSOM	J.SMITH	No assistance required.	
32	16-Mar-99	17:36:01	L.SHELTON	T.SMITH	No assistance required.	
33	26-Mar-99	10:46:08	M.HAUSER	L.SHELTON	No assistance required.	
34	09-Apr-99	08:04:58	R.BURT	D.SMITH	No assistance required.	
35	09-Apr-99	08:25:35	R.BURT	D.SMITH	No assistance required.	
36	09-Apr-99	08:29:28	R.BURT	D.SMITH	No assistance required.	
37	10-Apr-99	15:55:27	R.BURT	D.SMITH	No assistance required.	
38	12-Apr-99	06:56:26	D.CLEMMENTS	T.SMITH	No assistance required.	
39	15-Apr-99	15:16:07	D.CLEMMENTS	T.SMITH	No assistance required.	
40	16-Apr-99	07:26:06	M.RANSOM	K.DYVIG	No assistance required.	
41	16-Apr-99	08:00:23	M.RANSOM	K.DYVIG	No assistance required.	
42	16-Apr-99	08:12:30	M.RANSOM	K.DYVIG	No assistance required.	
43	21-Apr-99	14:38:04	R.BURT	D.SMITH	No assistance required.	
44	23-Apr-99	21:04:39	D.CLEMMENTS	K.DYVIG	No assistance required.	
45	29-Apr-99	03:22:53	M.HAUSER	L.SHELTON	No assistance required.	
46	29-Apr-99	11:01:47	M.RANSOM	J.SMITH	No assistance required.	
47	12-May-99	02:25:37	R.BURT	D.SMITH	No assistance required.	Duplicate
48	12-May-99	02:25:37	R.BURT	D.SMITH	No assistance required.	Duplicate
49	12-May-99	08:14:55	D.CLEMMENTS	K.DYVIG	No assistance required.	
50	22-May-99	07:38:53	D.CLEMMENTS	K.DYVIG	No assistance required.	
51	24-May-99	13:58:16	J.SMITH	M.RANSOM	No assistance required.	
52	26-May-99	15:45:52	J.SMITH	M.RANSOM	No assistance required.	
53	26-May-99	22:41:54	M.HAUSER	L.SHELTON	No assistance required.	
54	29-May-99	10:01:23	D.CLEMMENTS	K.DYVIG	No assistance required.	
55	31-May-99	01:45:07	R.BURT	L.TIEKEN	No assistance required.	
56	31-May-99	02:09:24	R.BURT	L.TIEKEN	No assistance required.	
57	02-Jun-99	02:16:25	D.CLEMMENTS	K.DYVIG	No assistance required.	
58	04-Jun-99	12:58:28	R.BURT	L.TIEKEN	No assistance required.	
59	06-Jun-99	02:32:56	J.SMITH	M.RANSOM	No assistance required.	