ecrb.xls

Nye County Nuclear Waste Repository Project Office

Water Usage History in the ECRB

DATE	BEGIN STATION	END STATION (METERS)	END STATION (FEET)	STRATIGRAPHY	ADVANCE (METERS)	ADVANCE (FEET)	DAILY WATER USAGE (GALLONS)	CUMULATIVE WATER USAGE TO DATE	COMMENTS
19-Nov-97									Setup drill to core 7 test holes
20-Nov-97									
21-Nov-97									
22-Nov-97									
23-Nov-97									
24-Nov-97									
25-Nov-97									Continued welding & lagging ECRB bulkhead, hung doors, laid out holes for first shot
26-Nov-97									
27-Nov-97									
28-Nov-97									
29-Nov-97									
30-Nov-97									
01-Dec-97									Continued to weld on ECRB bulkhead, installed 2 sections of fan line (10 sections now in place)
02-Dec-97									Putting down fill between rails at ECRB, work on ECRB Bulkhead lagging.
03-Dec-97									
04-Dec-97									Surveyors layout holes for first shot. Removing rolled channels in way of ECRB. Started tunnel. Brounght in Tamrock Drill Jumbo & commenced drilling holes for first round.
05-Dec-97									Repaired Tamrock Drill Jumbo & resumed drilling round #1 for ECRB. Cut/removed channels in the way of ECRB cutout.
06-Dec-97									
07-Dec-97									
08-Dec-97									Installing hangers for blasting mats @ the ECRB, Started hanging blasting mats, welding on #4 muck hopper @ ECRB.
09-Dec-97									SHOT RNDS 1 & 2 @ 1015 & 1600 HRS FOR ECRB CUTOUT. SHOT RNDS 3 & 4 @ 1935 & 2214 HRS. WORKED ON ECRB MUCK HOPPER.
10-Dec-97									
11-Dec-97									Loaded and shotcreted round #6 @ 11:11 a.m. Swing drilled rockbolt boles for ground support.
12-Dec-97									Re-routed air & water lines past ECRB. Installed ground support in starter tunnel. Drill & shot round #7 to square up face.
13-Dec-97									
14-Dec-97									
15-Dec-97		0 + 9.65							
16-Dec-97		0 + 11.5							Trimmed tights & installed ground support, painted round #9, test run the conveyor. Swing drilled, loaded & shot round 39.
17-Dec-97		0 + 14.3							Mucked matl., drilled, loaded & shot round #10 to take care of perimeter bootleg to square up heading. Swing installed grnd support rockbolts & WWF.

Water Usage History in the ECRB

18-Dec-97									Installed rockbolts for ground support, surveyors painted out Round #11. C/O of conveyor level muck pile & started mucking out. Trimmed rolled channels in tunnel crown & started drilling holes for round #11.
19-Dec-97									
20-Dec-97									
21-Dec-97									
22-Dec-97									Drilling out Rnd #12 & starteed loading Rnd. Finsihged loading & shot round #12, muched out,installed grnd support & started drilling round #13.
23-Dec-97		0 + 14.3						0	Finished drilling, loaded & shot round #13. Shot to widen turnout of starter tunnel. Mucked out Rnd #14, scaled & stared installing ground support.
24-Dec-97	0 + 14.3	0 + 14.3						0	Installed ground support rockbolts, painted out round #14.
25-Dec-97	0 + 14.3	0 + 14.3						0	
26-Dec-97	0 + 14.3	0 + 14.3						0	
27-Dec-97	0 + 14.3	0 + 14.3						0	
28-Dec-97	0 + 14.3	0 + 14.3						0	
29-Dec-97	0 + 14.3	0 + 14.3						0	Completed drilling blast holes, loaded & shot round #14 at 11:30 am. No advancement, round continued widening out starter tunnel to make turn from main tunnel into E/W tunnel. Install rockbolts for ground support. Mucked out round, finished ground support & started drilling for round #15.
30-Dec-97	0 + 14.3	0 + 14.3						0	
31-Dec-97	0 + 14.3	0 + 14.3						0	
01-Jan-98	0 + 14.3	0 + 14.3						0	
02-Jan-98	0 + 14.3	0 + 14.3						0	Painted face, drilled, load & shot round #16. Rnd #16 was to widen turnout into the E/W tunnel.
03-Jan-98	0 + 14.3	0 + 14.3						0	
04-Jan-98	0 + 14.3	0 + 14.3						0	
05-Jan-98	0 + 14.3	0 + 14.3						0	Mucked & installed ground support & performed maintenance on #4 conveyor. Swing finished installing ground support, drilling on round #18.
06-Jan-98	0 + 14.3	0 + 14.3						0	Installed additional ground support & resumed drilling on Round #18. (Bench & slab round), mucked out, setup to install ground support.
07-Jan-98	0 + 14.3	0 + 14.3						0	Installed additional ground support , drilled, lad & shot Round #19 (Bench Rnd). Swing mucked, drill, load & shot round #20.
08-Jan-98	0 + 14.3	0 + 14.3						0	Installed ground suppoort, drilled, load & shot round #21. Mucked out #21, mucked out invert of tunnel.
09-Jan-98	0 + 14.3	0 + 14.3			0			0	Painted face, drilled round #22. Swing load & shot Rnd #22, mucked out. Installed ventline.
10-Jan-98	0 + 14.3	0 + 14.3			0			0	Drilled, load, & shot round #23, mucked out. Bench round.
11-Jan-98								0	
12-Jan-98	00 + 14.3	00 + 14.3			0			0	Drillied out round #24(bench along turnout of starter tunnel). Installed ground suppport. Swing load & shot round #24, mucked out started dirtling Rnd. #25. GY completed drilling load & shot round #25. Installed ground support.

Water Usage History in the ECRB

13-Jan-98	00 + 14.3	00 + 14.3			0			0	Drilled bench tights along the left rib turnout, pull test rockbotls, USGS mapping starter tunnel. Swing load & shot round #26. GY installed ground support, general cleanup & started setting up for shotcreting turnout.
14-Jan-98	00 + 14.3	00 + 14.3			0			0	Started shotcreting starter tunnel turnout. GY shift installed 40 1m split sets to pin & secure WWF for shotcreting. Completed mapping entrance to ECRB.
15-Jan-98	00 + 14.3	00 + 14.3			0			0	Placing shotcrete on starter tunnel turnout ribs & arch.
16-Jan-98	00 + 14.3	00 + 14.3	46.9		0			0	Curing shotcrete
17-Jan-98	00 + 14.3	00 + 16.7	54.8		2.4	7.9		0	Grave loaded, blasted Rnd #30.
18-Jan-98								0	
19-Jan-98								0	
20-Jan-98	00 + 16.7	00 + 19.7	64.6		3	64.6		0	Drilled, loaded, & shot Rnd #30 & mucked matl. Shot ECRB #31 (rib tights, installed spt. Drilled, loaded & shot Rnd ECRB #32.
21-Jan-98	00 + 19.7	00 + 23.5	77.1		3.8	12.5		0	Mucked Rnd ECRB #32 . Drilled, loaded & shot Rnd ECRB #33. Drilled 44 additional holes and began loading to quare up heading.
22-Jan-98	00 + 23.5	00 + 23.5	77.1		0	0		0	Completed loading & shot Rnd ECRB #34. Mucked, drilled left side trim holes, loaded & shot round ECRB #35. Mucked, drilled for gmd supt. Installed gmd support, drilled, loaded rond ECRB #36.
23-Jan-98	00 + 23.5	00 + 26.5	86.9		3	9.8		0	shot rounds #36 and #37, mucked out material, installed ground support and started removing blast curtains
24-Jan-98	00 + 23.5	00 + 26.5	86.9		3	9.8		0	shot rounds #36 and #37, mucked out material, installed ground support and started removing blast curtains
25-Jan-98	00 + 23.5	00 + 26.5	86.9		3	9.8		0	shot rounds #36 and #37, mucked out material, installed ground support and started removing blast curtains
26-Jan-98	00 + 26.5	00 + 26.5	86.9		0	0		0	Removed blast curtains, mucked out, cleaned up & laid out 3 exploratory drill holes & prepared for shot creting. Moving drill rig & equipment into starter tunnel.
27-Jan-98	00 + 26.5	00 + 26.5	86.9		0	0		0	setup to drill test holes and to shotcrete, placed 20 cubic yards of shotcrete and began drilling test hole ESF-ECRB slant #3, installed lights at entrance on left rib
28-Jan-98	00 + 26.7	00 + 26.7	87.6		0	0		0	continued curing shotcrete and drilling test hole slant #3, removed 66" diameter vent line section, prepared to realign conveyer belt #4 and vent line into ECRB
29-Jan-98	00 + 26.7	00 + 26.7	87.6		0	0		0	continued curing shotcrete and completed drilling test hole slant #3, conveyer tail pulley at ECRB moved to sta. 49+60, set-up to drill test hole slant #2
30-Jan-98	00 + 26.7	00 + 26.7	87.6		0	0		0	continued curing shotcrete and drilling test hole slant #2 (current depth is 13 meters, planned depth is 30 meters)
31-Jan-98								0	
01-Feb-98								0	
02-Feb-98								0	

Water Usage History in the ECRB

03-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	continued curing shotcrete, finished drilling on test hole slant #2, setup and started drilling on test hole slant #1, prepare area to pour slab at ECRB junction in main tunnel
04-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	continued drilling slant #1 test hole, tried to pour slab in turnout niche, problems w/ concrete mix, placed fill in tunnel invert at ECRB intersection
05-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	completed drilling on ESF-ECRB slant #1, poured slab in turnout niche, prepared foundation for pouring slab in at ECRB junction in main tunnel
06-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	poured concrete slab in main tunnel, installed conduit in invert at sta. 0+15 from left to right rib, finished removing ECRB vent bulkhead frame
07-Feb-98								0	
08-Feb-98								0	
09-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	moved drill from launch chamber to Alcove #4, reinstalled tunnel track onto tunnel, built ramp with select material coming off of main tunnel, invert slab
10-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	setup and poured invert slab in launch chamber, finished working on ramp coming off slab in main tunnel, began staging rail to tie-in main tunnel rail beyond ECRB junction
11-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	finished connecting up track in main tunnel through ECRB section, drill holes to install rebar in launch chamber ribs for added support for gripper walls,
12-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	received first load of TBM components, installed dowels for shotcreting gripper pads, installed five rock bolts to support transformer
13-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	installed 14 rock bolts for electrical power cable supports, installed dowels to define perimeter for shotcreting gripper pads, setup for shotcrete pads in launch chamber
14-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	
15-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	
16-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	
17-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	shotcreted in launch chamber for gripper pads, setup to apply additional shotcrete in launch chamber, put additional backfill on ramp at ECRB
18-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	continued shotcreting gripper pads in launch chamber and right rib of main tunnel where power lines were hanging at ECRB intersection, curing shotcrete in ECRB launch chamber
19-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	curing shotcrete placed on Feb. 18 and 19, 1998
20-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	started trimming tights on gripper pads and curing shotcrete, received two loads of TBM components
21-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	
22-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	
23-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	continued chipping tights on gripper pads in launch chamber, received 5 truck loads of TBM components
24-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	continued trimmer tights on gripper pads in launch chamber, started assembling TBM

Water Usage History in the ECRB

25-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	finished trimming tights on gripper pads, received one truck load of TBM components, installed conveyor supports thru ECRB junction with main tunnel
26-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	worked on lighting, installed hangers for supporting #4 conveyor across ECRB intersection, TBM assembly continued, received 3 loads of TBM components, installed moisture experiment in Slant #3 borehole
27-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	worked on lighting at ECRB, continued assembly of TBM (approx. 15% complete),
28-Feb-98	00 + 26.7	00 + 26.7	87.6		0	0		0	worked on lighting at ECRB, continued assembly of TBM (approx. 15% complete),
01-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	worked on lighting at ECRB, continued assembly of TBM (approx. 15% complete),
02-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	worked on electrical, continued assembly of TBM, received five loads of TBM components which finished up TBM shipments
03-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	continued assembly of TBM, mounted cutterhead support, installed TBM drive motors, worked on bridge conveyor and hooking up hydraulic lines
04-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	surveyors installed control inlaunch chamber, continued assembly of TBM
05-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	continued assembly of TBM, continued installing fire suppression system on hydraulic tanks, electricians weld down transformers on trailing floor cars 2 thru 4
06-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	continued TBM assembly, raised vent line in ECRB area, worked on Conveyor #4 hangers in ECRB area, moving in equipment to install Seamist system in the third ECRB borehole, LBNL continues moisture testing
07-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	continued TBM assembly, raised vent line in ECRB area, worked on Conveyor #4 hangers in ECRB area, moving in equipment to install Seamist system in the third ECRB borehole, LBNL continues moisture testing
08-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	continued TBM assembly, raised vent line in ECRB area, worked on Conveyor #4 hangers in ECRB area, moving in equipment to install Seamist system in the third ECRB borehole, LBNL continues moisture testing
09-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	installed dollies under TBM for moving down to ECRB, started staging TBM components to be installed after it is pulled to ECRB, LBNL continues moisture testing
10-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	worked on Propel Cylinder and electrical, took TBM components to ECRB, started laying track into launch chamber
11-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	moved TBM down to ECRB, LBNL/USGS continues moisture testing
12-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	removed back dollies, brought in bridge conveyor, installed two of the four cutterhead segments, brought in Trailing floor car #1 and started attaching bridge conveyor to TBM
13-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	moved second trailing floor car down to ECRB, continued to install cutterhead segments, installed hangers for power supply at starter tunnel

Water Usage History in the ECRB

14-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	moved second trailing floor car down to ECRB, continued to install cutterhead segments, installed hangers for power supply at starter tunnel
15-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	moved second trailing floor car down to ECRB, continued to install cutterhead segments, installed hangers for power supply at starter tunnel
16-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	installed side and quarter supports, extended rail toward launch chamber, started installing roof support
17-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	installed roof support and worked on electrical on Trailing Floor cars #1 and #2, prepared to move TBM into launch chamber
18-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	continued moving TBM towards launch chamber, worked on TBM electrical
19-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	continued advancing TBM towards launch chamber, electricians worked on power to TBM motors
20-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	installed cutters, worked on electrical and #4 conveyer tail pulley, installed conveyer belt on #1 and #2 conveyers, LBNL and USGS continue moisture testing
21-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	installed cutters, worked on electrical and #4 conveyer tail pulley, installed conveyer belt on #1 and #2 conveyers, LBNL and USGS continue moisture testing
22-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	installed cutters, worked on electrical and #4 conveyer tail pulley, installed conveyer belt on #1 and #2 conveyers, LBNL and USGS continue moisture testing
23-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	finished installing cutters onto cutterhead, contuned work on main tunnel conveyer tail pulley, installed fanline in ECRB, worked on #3 conveyer and electrical, installed vent fan "Y" section for ECRB ventilation
24-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	installed belt on #3 conveyer, worked on electrical, worked on misc. TBM and Trailing Floor items, installed 24" fan on TBM
25-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	continued TBM assembly, worked on hydraulics and wiring, installed dust collector hood and TBM conveyer belt #1, continued clearing ECRB muck storage area
26-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	electricians worked on electrical on Trailing Floor cars, installed roof support extensions, installed bag line between 66" tunnel vent line and TBM fan
27-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	made final adjustments on conveyor system, worked on dust control spray system, worked on installing catwalks, replumbing hydraulic drills
28-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	made final adjustments on conveyor system, worked on dust control spray system, worked on installing catwalks, replumbing hydraulic drills
29-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0		0	made final adjustments on conveyor system, worked on dust control spray system, worked on installing catwalks, replumbing hydraulic drills
30-Mar-98	00 + 26.7	00 + 26.7	87.6		0	0	124	124	worked on conveyor controls, moved TBM up to face, installed diverter hopper onto end of Conveyor #3, worked on elctrical

Water Usage History in the ECRB

31-Mar-98	00 + 26.7	00 + 27.4	89.9		0.7	2.3	3013	3137	commenced boring with TBM to bury the head, began TBM excavation of ECRB Cross Drift, hooked up methane gas detection system and worked on hydraulics, added flashing to TBM Conveyers and worked on rockbolt drills
01-Apr-98	00 + 27.4	00 + 30.7	100.7		3.3	10.8	4512	7649	began excavation after being down for 4 hours for tours and routine maintenance, worked on electrical and hydraulics, installed a section of vent line, LBNL and USGS continue moisture testing
02-Apr-98	00 + 30.7	00 + 32.36	106.1		1.66	5.4	4913	12562	started excavating around 1300 after being down for tours and scheduled maintenance, worked on rock bolt drills, changed out right drill
03-Apr-98	00 + 32.36	00 + 36.08	118.3		3.72	12.2	12606	25168	started installing muck conveyor on main conveyor belt, worked on flex vent line
04-Apr-98	00 + 32.36	00 + 36.08	118.3		3.72	12.2	0	25168	started installing muck conveyor on main conveyor belt, worked on flex vent line
05-Apr-98	00 + 32.36	00 + 36.08	118.3		3.72	12.2	0	25168	started installing muck conveyor on main conveyor belt, worked on flex vent line
06-Apr-98	00 + 36.08	00 + 38.30	125.6		2.22	7.3	6278	31446	continued excavation, down to repair hydraulic cylinder on rock bolt drill, swing shift down most of shift raising flex vent line, continued clearing storage area for ECRB muck
07-Apr-98	0 + 38.30	0 + 40.3	132.2		2	6.6	8343	39789	down most of day working on electrical and mechanical problems, changed out vent line coming off TBM fan from 48" to 24", mucked out from excavation
08-Apr-98	0 + 40.3	0 + 56.1	184		15.8	51.8	29651	69440	worked on lube and electrical systems, installed covers over #3 conveyor belt, installed concrete barriers around transformer in ECRB, advanced the fan line and mucked out from excavation
09-Apr-98	0 + 56.1	0 + 63.3	207.6		7.2	23.6	16980	86420	worked on TBM electrical, hydraulics and rockbolt drills, finished mucking out from excavation, installed fan line, rail and advanced utilities, LBNL and USGS continued moisture testing
10-Apr-98	0 + 63.3	0 + 72.0	236.2		8.7	28.6	30000	116420	down two hours for routine maintenance prior to excavating, shutdown to replace spray nozzles on cutterhead, mucked out and advanced utilities
11-Apr-98	0 + 63.3	0 + 72.0	236.2		8.7	28.6	0	116420	down two hours for routine maintenance prior to excavating, shutdown to replace spray nozzles on cutterhead, mucked out and advanced utilities
12-Apr-98	0 + 63.3	0 + 72.0	236.2		8.7	28.6	0	116420	down two hours for routine maintenance prior to excavating, shutdown to replace spray nozzles on cutterhead, mucked out and advanced utilities
13-Apr-98	0 + 72.0	0 + 80.6	264.4		8.6	28.2	19333	135753	down 6.5 hours for scheduled maintenance, mucked out and advanced utilities, LBNL and USGS continued moisture testing
14-Apr-98	0 + 80.6	0 + 83.8	273.3		2.7	8.9	5463	141216	worked on hydraulics, down 6 hours for plugged up head, LBNL and USGS continued moisture testing
15-Apr-98	0 + 83.8	0 + 83.9	275.3		0.6	2	5625	146841	replaced #3 clutch on TBM, replaced 24" vent line with 48" vent line, worked on TBM mechanical and electrical, surveyors moved laser, made 0.6 m correction

Water Usage History in the ECRB

16-Apr-98	0 + 83.9	0 + 83.9	275.3		0	0	492	147333	performed general maintenance and work on ventilation system, worked on TBM drive motor clutches, LBNL and USGS continue moisture testing
17-Apr-98	0 + 83.9	0 + 83.9	275.3		0	0	2320	149653	no TBM advancement, worked on TBM clutches, put in switch to ECRB and worked on ventilation system, LBNL and USGS continue moisture monitoring, all TCO and scientific personnel attended the safety stand down at the change house
18-Apr-98	0 + 83.9	0 + 83.9	275.3		0	0	1050	150703	no TBM advancement, worked on TBM clutches, put in switch to ECRB and worked on ventilation system, LBNL and USGS continue moisture monitoring, all TCO and scientific personnel attended the safety stand down at the change house
19-Apr-98	0 + 83.9	0 + 83.9	275.3		0	0	0	150703	no TBM advancement, worked on TBM clutches, put in switch to ECRB and worked on ventilation system, LBNL and USGS continue moisture monitoring, all TCO and scientific personnel attended the safety stand down at the change house
20-Apr-98	0 + 83.9	0 + 91.5	300.2		7.6	24.9		150703	routine maintenance and worked on switch at ECRB, down 6 hours due to TBM electrical problems and mucker repairs, LBNL and USGS continue moisture monitoring
21-Apr-98	0 + 91.5	1 + 04.2	341.9		12.7	41.7		150703	down 3 and half hours for routine maintenance, down 2 hours due to plugged cutterhead, down 2 hours for repairs to the #4 Conveyor, (on April 16 and 17th a Safety Stand Down was conducted by the CMO and K/PB to cover recent safety problems for the three shifts working at the ESF pad
22-Apr-98	1 + 04.2	1 + 11.2	364.8		7	23.9		150703	drilled and cored test holes for scientists, worked on TBM maintenance and advanced utilities, down 7 hours due to problems with rockbolt drills
23-Apr-98	1 + 11.2	1 + 25.5	411.7		14.3	46.9		150703	replaced Right rockbolt drill slide and advanced utilities, down 1.5 hours to muck out tail pulley, USGS installed moisture probe at sta. 0+50 and installed a temp./humidity probe at the entrance to the ECRB
24-Apr-98	1 + 25.5	1 + 41.8	465.2		16.3	53.5		150703	down 4.5 hours for routine maintenance on the TBM, advanced utilities, USGS installed an air velocity probe at the entrance to the ECRB
25-Apr-98	1 + 25.5	1 + 41.8	465.2		16.3	53.5		150703	down 4.5 hours for routine maintenance on the TBM, advanced utilities, USGS installed an air velocity probe at the entrance to the ECRB
26-Apr-98	1 + 25.5	1 + 41.8	465.2		16.3	53.5		150703	down 4.5 hours for routine maintenance on the TBM, advanced utilities, USGS installed an air velocity probe at the entrance to the ECRB
27-Apr-98	1 + 41.8	1 + 52.6	500.6		10.8	35.4		150703	down 4.66 hours for routine maintenance, advanced utilities and fan line, installed rail, USGS installed a moisture probe at sta. 0+75, Kiewit dug out 30 meter borehole at entrance to ECRB in preparation for neutron logging
28-Apr-98	1 + 52.6	1 + 60.0	524.9		7.4	24.3		150703	day shift down all day due to EMS exercise, swing shift down most of the day due to power being off because of breakers tripping at the substation, advanced utilities

Water Usage History in the ECRB

29-Apr-98	1 + 60.0	1 + 79.4	588.6		19.4	64.7		150703	USBR checking out equipment for planned mapping, Kiewit drilled a 2 meter rockbolt hole at sta. CS 1+00 and cored a 2 meter (ECRB-SYS-CS100) at the same station
30-Apr-98	1 + 79.4	1 + 79.4	588.6		0	0		150703	stopped excavation to excavate niche for a ventilation spot scrubber, excavated 9 meters of niche from sta. 1+08 to 1+17 using Alpine Miner, USGS neutron logged the 2 meter borehole at CS 1+00 and the 30-m borehole at the entrance to the ECRB
01-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	finished excavation of spot scrubber niche, sheared bolts to swivel rams down 7 hours, brought in trailing floor cars #3,4,5 and 6
02-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	finished excavation of spot scrubber niche, sheared bolts to swivel rams down 7 hours, brought in trailing floor cars #3,4,5 and 6
03-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	finished excavation of spot scrubber niche, sheared bolts to swivel rams down 7 hours, brought in trailing floor cars #3,4,5 and 6
04-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	continued assembling Trailing Floor, reinstalled 200 feet of air, waste water and water lines, reinstalled 288 feet of fan lines, worked on conveyor drive support frame
05-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	continued assembling Trailing Floor, installed ECRB tunnel conveyor, USGS installed base station for data collection,
06-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	continued assembling Trailing Floor, installed ECRB tunnel conveyor, assembled vent line between Trailing cars #4 and #5, LBNL and USGS continue moisture monitoring
07-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	continued assembling Trailing Floor, installed ECRB tunnel conveyor, rockbolt hole drilled at sta. 1+28 collapsed, another hole will be drilled when the TBM has moved, LBNL downloaded data
08-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	continued assembling trailing floor, continued installing ECRB conveyor and setting up transfer unit at ECRB portal entrance, LBNL and LANL on-site to identify locations for data collection systems on the TBM
09-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	continued assembling trailing floor, continued installing ECRB conveyor and setting up transfer unit at ECRB portal entrance, LBNL and LANL on-site to identify locations for data collection systems on the TBM
10-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	continued assembling trailing floor, continued installing ECRB conveyor and setting up transfer unit at ECRB portal entrance, LBNL and LANL on-site to identify locations for data collection systems on the TBM
11-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	continued assembling trailing floor, continued installing ECRB conveyor and setting up transfer unit, worked on installing fanline and installing chain for monorail, LBNL and USGS continue moisture monitoring
12-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	continued work on trailing floor assembly, and ECRB Conveyor and transfer unit, worked on utilities, no drilling activity

Water Usage History in the ECRB

13-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	continued work on trailing floor assembly, and ECRB Conveyor and transfer unit, installed rollers and belt on Conveyor, worked on utilities, no drilling activity
14-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	continued work on trailing floor assembly, and ECRB Conveyor and transfer unit, worked on utilities, no drilling activity, LANL located and installed hangers for dust sampling gauges that will be instaleed next week
15-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	continued work on trailing floor, conveyor and transfer unit scrubber, worked on cleaning TBM cutter head and installing spraybars on ECRB conveyor, USGS set up temp. and humidity probes on the TBM
16-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	continued work on trailing floor, conveyor and transfer unit scrubber, worked on cleaning TBM cutter head and installing spraybars on ECRB conveyor, USGS set up temp. and humidity probes on the TBM
17-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	continued work on trailing floor, conveyor and transfer unit scrubber, worked on cleaning TBM cutter head and installing spraybars on ECRB conveyor, USGS set up temp. and humidity probes on the TBM
18-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	continued work on trailing floor and conveyor, worked on TBM feeder cable and TBM, LANL located and installed hangers for dust sampling gauges
19-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	continued work on trailing floor and conveyor, installed differential pressure gauges on trailing floor scrubbers, LBNL installed infrared camera on deck 6 of the TBM
20-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	continued work on trailing floor and conveyor, installed fire supression system on conveyor drive pulley, Nye County installed instrumentation to measure temp./humidity/wind speed, and water sensors in the rock along the wall of the tunnel at sta. 1+00
21-May-98	1 +79.4	1 + 79.4	588.6		0	0		150703	continued working on Trailing Floor, USGS neutron logged boreholes in the ECRB
22-May-98	1 +79.4	1 + 80.4	591.9		1	3.3		150703	continued working on trailing floor, worked on electrical and mechanical items on TBM, stop work order was lifted and resumed mining, then down 7 hours due to problems with ECRB conveyor drive, NOTE: an all hands QC stand down meeting was held on each shift to discuss control procedures for water usage underground
23-May-98	1 +79.4	1 + 80.4	591.9		1	3.3		150703	continued working on trailing floor, worked on electrical and mechanical items on TBM, stop work order was lifted and resumed mining, then down 7 hours due to problems with ECRB conveyor drive, NOTE: an all hands QC stand down meeting was held on each shift to discuss control procedures for water usage underground

Water Usage History in the ECRB

24-May-98	1 +79.4	1 + 80.4	591.9		1	3.3		150703	continued working on trailing floor, worked on electrical and mechanical items on TBM, stop work order was lifted and resumed mining, then down 7 hours due to problems with ECRB conveyor drive, NOTE: an all hands QC stand down meeting was held on each shift to discuss control procedures for water usage underground
25-May-98	1 +79.4	1 + 80.4	591.9		1	3.3		150703	continued working on trailing floor, worked on electrical and mechanical items on TBM, stop work order was lifted and resumed mining, then down 7 hours due to problems with ECRB conveyor drive, NOTE: an all hands QC stand down meeting was held on each shift to discuss control procedures for water usage underground
26-May-98	1 + 80.4	1 + 94.6	638.5		14.2	46.6		150703	worked on conveyor electrical and mechanical problems, down four hours due to plugged conveyor
27-May-98	1 + 94.6	2 + 16.3	709.7		21.7	71.2		150703	routine maintenance on ECRB conveyor and TBM, Nye County downloaded data
28-May-98	2 + 16.3	2 + 37.9	780.5		21.6	70.8		150703	worked on TBM and drill hydraulics, lost 2 hours due to Conveyor #4 electrical problems, down 3 hours for survey control in first curve, Nye County downloaded data and replaced battery on the data logger

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Water Usage History in the ESF Tunnel

DATE	BEGIN STATION	END STATION	END STATION	STRATIGRAPHY	ADVANCE	ADVANCE	Cumulative ESF Advancement	DAILY WATER	CUMULATIVE WATER USAGE TO DATE	COMMENTS
		(METERS)	(FEET)		(METERS)	(FEET)		USAGE (GALLONS)	(GALLONS)	
01-Jan-95	1 + 01.4	1 + 01.4		Tiva Canyon crystal poor middle nonlithophysal zone	0	0			0	
02-Jan-95	1 + 01.4	1 + 01.4		Tiva Canyon crystal poor middle nonlithophysal zone	0	0		4,800	4,800	
03-Jan-95	1 + 01.4	1 + 06.9		Tiva Canyon crystal poor middle nonlithophysal zone					4,800	
04-Jan-95	1 + 06.9	1 +08.2		Tiva Canyon crystal poor middle nonlithophysal zone	1.3	4.3	4.3		4,800	
05-Jan-95	1 + 08.2	1 +16.9		Tiva Canyon crystal poor middle nonlithophysal zone	8.7	28.5	32.8		4,800	
06-Jan-95	1 + 16.9	1+ 23.9	406.5	Tiva Canyon crystal poor middle nonlithophysal zone	2.3	7.7	40.5		4,800	
07-Jan-95	1+ 23.9	1+ 23.9	406.5	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	40.5		4,800	
08-Jan-95	1+ 23.9	1+ 23.9	406.5	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	40.5		4,800	
09-Jan-95	1 + 23.9	1 + 31.7	432.1	Tiva Canyon crystal poor middle nonlithophysal zone	2.6	8.5	49	9,800	14,600	
10-Jan-95	1 + 31.7	1 + 35.2	443.6	Tiva Canyon crystal poor middle nonlithophysal zone	3.4	11.2	60.2		14,600	
11-Jan-95	1 + 35.2	1 + 36.5	447.8	Tiva Canyon crystal poor middle nonlithophysal zone	1.3	4.3	64.5		14,600	
12-Jan-95	1 + 36.5	1 + 36.5	447.8	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	64.5		14,600	
13-Jan-95	1 + 36.5	1 + 36.5	447.8	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	64.5		14,600	
14-Jan-95	1 + 36.5	1 + 36.5	447.8	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	64.5		14,600	
15-Jan-95	1 + 36.5	1 + 36.5	447.8	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	64.5		14,600	
16-Jan-95	1 + 36.5	1 + 36.5	447.8	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	64.5	6,860	21,460	
17-Jan-95	1 + 36.5	1 + 44.8	475.1	Tiva Canyon crystal poor middle nonlithophysal zone	8.3	27.2	91.7		21,460	
18-Jan-95	1 + 44.8	1 + 51.3	496.4	Tiva Canyon crystal poor middle nonlithophysal zone	6.5	21.3	113		21,460	
19-Jan-95	1 + 51.3	1 + 55.3	509.5	Tiva Canyon crystal poor middle nonlithophysal zone	2	6.6	119.6		21,460	
20-Jan-95	1 + 55.3	1 + 66.2	545.3	Tiva Canyon crystal poor middle nonlithophysal zone	3.6	11.9	131.5		21,460	
21-Jan-95	1 + 66.2	1 + 66.2	545.3	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	131.5		21,460	
22-Jan-95	1 + 66.2	1 + 66.2	545.3	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	131.5		21,460	
23-Jan-95	1 + 66.2	1 + 74.9	573.8	Tiva Canyon crystal poor middle nonlithophysal zone	8.7	28.5	160	20,340	41,800	Alcove #2 (BRFA) @ Sta 1 + 68.2
24-Jan-95	1 + 74.9	1 + 82.5	598.8	Tiva Canyon crystal poor middle nonlithophysal zone	7.6	24.9	184.9		41,800	
25-Jan-95	1 + 82.5	1 + 87.1	613.8	Tiva Canyon crystal poor middle nonlithophysal zone	4.6	15.1	200		41,800	
26-Jan-95	1 + 87.1	1 + 88.9	619.8	Tiva Canyon crystal poor middle nonlithophysal zone	1.8	5.9	205.9		41,800	
27-Jan-95	1 + 88.9	1 + 88.9	619.8	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	205.9		41,800	
28-Jan-95	1 + 88.9	1 + 88.9	619.8	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	205.9		41,800	
29-Jan-95	1 + 88.9	1 + 88.9	619.8	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	205.9		41,800	
30-Jan-95	1 + 88.9	1 + 98.0	649.6	Tiva Canyon crystal poor lower lithophysal zone	9.1	29.8	235.7	10,260	52,060	
31-Jan-95	1 + 98.0	1 + 98.0	649.6	Tiva Canyon crystal poor lower lithophysal zone	0	0	235.7		52,060	BOW RIDGE FAULT
01-Feb-95	1 + 98.0	1 + 98.0	649.6	Tiva Canyon crystal poor lower lithophysal zone	0	0	235.7		52,060	CONCRETE BOW RIDGE FAULT VOID
02-Feb-95	1 + 98.0	1 + 98.0	649.6	Tiva Canyon crystal poor lower lithophysal zone	0	0	235.7		52,060	CONCRETE BOW RIDGE FAULT VOID
03-Feb-95	1 + 98.0	1 + 98.0	649.6	Tiva Canyon crystal poor lower lithophysal zone	0	0	235.7		52,060	CONCRETE BOW RIDGE FAULT VOID
04-Feb-95	1 + 98.0	1 + 98.0	649.6	Tiva Canyon crystal poor lower lithophysal zone	0	0	235.7		52,060	
05-Feb-95	1 + 98.0	1 + 98.0	649.6	Tiva Canyon crystal poor lower lithophysal zone	0	0	235.7		52,060	
06-Feb-95	1 + 98.0	2 + 01.9	662.4	Bow Ridge fault zone	3.9	12.8	248.5	7,665	59,725	
07-Feb-95	2 + 01.9	2 + 01.9	662.4	Bow Ridge fault zone	0	0	248.5		59,725	SHOTCRETE VOIDS/BEARING SURFACE
08-Feb-95	2 + 01.9	2 + 04.9	672.2	pre-Ranier Mesa Tuff	3	9.8	258.3		59,725	
09-Feb-95	2 + 04.9	2 + 06.0	675.8	pre-Ranier Mesa Tuff	1.1	3.6	261.9		59,725	
10-Feb-95	2 + 06.0	**	**	pre-Ranier Mesa Tuff	**	**			59,725	WEEKEND REPORT
11-Feb-95	**	2 + 11.6	694.2	pre-Ranier Mesa Tuff	5.6	18.4	280.3		59,725	WEEKEND REPORT
12-Feb-95	2 + 11.6	2 + 11.6	694.2	pre-Ranier Mesa Tuff					59,725	
13-Feb-95	2 + 11.6	2 + 15.9	708.3	pre-Ranier Mesa Tuff	4.3	14.1	294.4	19,045	78,770	THRU BOW RIDGE FAULT
14-Feb-95	2 +15.9	2 + 26.8	744.1	pre-Ranier Mesa Tuff	10.9	35.8	330.2		78,770	
15-Feb-95	2 + 26.8	2 + 38.8		pre-Ranier Mesa Tuff	12	39.4	369.6		78,770	
16-Feb-95	2 + 38.8	2 + 50.0		pre-Ranier Mesa Tuff	11.2	36.7	406.3		78,770	Clean & Repair TBM, wash down TBM
17-Feb-95	2 + 50.9	**		pre-Ranier Mesa Tuff	N/REPORT				78,770	
18-Feb-95	**	2 + 70.9	826	Tuff "X"	20	???			78,770	
19-Feb-95	2 + 70.9	2 + 70.9	826	Tuff "X"	0	0	406.3		78,770	
20-Feb-95	2 + 70.9	2 + 73.0	895.7	Tuff "X"	2.1	6.9	413.2	21,880	100,650	
21-Feb-95	2 + 73.0	2 + 82.8	927.8	Tuff "X"	9.8	32.1	445.3		100,650	
22-Feb-95	2 + 82.8	2 + 93.5	962.9	Tuff "X"	10.7	35.1	480.4		100,650	

Water Usage History in the ESF Tunnel

23-Feb-95	2 + 93.5	3 + 12.2	1024.3	Tuff "X"	18.7	61.4	541.8		100,650	
24-Feb-95	3 + 12.2	3 + 20.2	1050.5	Tuff "X"	8	26.2	568		100,650	
25-Feb-95	3 + 20.2	3 + 20.2	1050.5	Tuff "X"	0	0	568		100,650	
26-Feb-95	3 + 20.2	3 + 20.2	1050.5	Tuff "X"	0	0	568		100,650	
27-Feb-95	3 + 20.2	3 + 38.1	1109.3	pre-Tuff "X"	17.9	58.7	626.7	23,575	124,225	
28-Feb-95	3 + 38.1	3 + 49.1	1148.4	pre-Tuff "X"	11	36.1	662.8		124,225	
01-Mar-95	3 + 49.1	3 + 56.4	1169.3	Tiva Canyon vitric zone	7.3	23.9	686.7		124,225	
02-Mar-95	3 + 56.4	3 + 67.8	1206.7	Tiva Canyon crystal rich nonlithophysal zone	11.4	37.4	724.1		124,225	
03-Mar-95	3 + 67.8	3 + 67.8	1206.7	Tiva Canyon crystal rich nonlithophysal zone	0	0	724.1		124,225	NO TBM OPERATION - MECH. FAIL
04-Mar-95	3 + 67.8	3 + 67.8	1206.7	Tiva Canyon crystal rich nonlithophysal zone	0	0	724.1		124,225	NO TBM OPERATION - MECH. FAIL
05-Mar-95	3 + 67.8	3 + 67.8	1206.7	Tiva Canyon crystal rich nonlithophysal zone	0	0	724.1		124,225	NO TBM OPERATION - MECH. FAIL
06-Mar-95	3 + 67.8	3 + 67.8	1206.7	Tiva Canyon crystal rich nonlithophysal zone	0	0	724.1	22,125	146,350	NO TBM OPERATION - MECH. FAIL
07-Mar-95	3 + 67.8	3 + 71.6	1219.2	Tiva Canyon crystal rich nonlithophysal zone	3.8	12.6	736.7		146,350	
08-Mar-95	3 + 71.6	3 + 77.1	1237.2	Tiva Canyon crystal rich nonlithophysal zone	5.5	18	754.7		146,350	
09-Mar-95	3 + 77.1	3 + 94.6	1294.6	Tiva Canyon crystal rich nonlithophysal zone	17.5	57.4	812.1		146,350	
10-Mar-95	3 + 94.6	4 + 10.8	1347.8	Tiva Canyon crystal rich nonlithophysal zone	16.2	53.1	865.2		146,350	
11-Mar-95	4 + 10.8	4 + 10.8	1347.8	Tiva Canyon crystal rich nonlithophysal zone	0	0	865.2		146,350	
12-Mar-95	4 + 10.8	4 + 10.8	1347.8	Tiva Canyon crystal rich nonlithophysal zone	0	0	865.2		146,350	HIGH WATER AT FORTY MILE WASH
13-Mar-95	4 + 10.8	4 + 26.8	1400.3	Tiva Canyon crystal rich nonlithophysal zone	16	52.5	917.7	37,910	184,260	
14-Mar-95	4 + 26.8	4 + 37.6	1435.7	Tiva Canyon crystal rich lithophysal zone	10.8	35.4	953.1		184,260	Fault (~10m offset) @ 4 +30m
15-Mar-95	4 + 37.6	4 + 44.6	1458.7	Tiva Canyon crystal poor upper lithophysal zone	7	23	976.1		184,260	
16-Mar-95	4 + 44.6	4 + 51.9	1482.6	Tiva Canyon crystal poor upper lithophysal zone	7.3	24	1000.1		184,260	
17-Mar-95	4 + 51.9	4 + 63.8	1521.7	Tiva Canyon crystal poor upper lithophysal zone	11.9	39	1039.1		184,260	
18-Mar-95	4 + 63.8	4 + 63.8	1521.7	Tiva Canyon crystal poor upper lithophysal zone	0	0	1039.1		184,260	
19-Mar-95	4 + 63.8	4 + 63.8	1521.7	Tiva Canyon crystal poor upper lithophysal zone	0	0	1039.1		184,260	
20-Mar-95	4 + 63.8	4 + 77.4	1566.3	Tiva Canyon crystal poor upper lithophysal zone	13.6	44.6	1083.7	30,210	214,470	
21-Mar-95	4 + 77.4	4 + 91.4	1612.2	Tiva Canyon crystal poor upper lithophysal zone	4.7	15.3	1099		214,470	
22-Mar-95	4 + 91.4	4 + 93.7	1619.8	Tiva Canyon crystal poor upper lithophysal zone	2.3	7.5	1106.5		214,470	
23-Mar-95	4 + 93.7	5 + 06.4	1661.4	Tiva Canyon crystal poor upper lithophysal zone	12.7	41.7	1148.2		214,470	
24-Mar-95	5 + 06.4	5 + 15.7	1691.9	Tiva Canyon crystal poor upper lithophysal zone	9.3	30.5	1178.7		214,470	
25-Mar-95	5 + 15.7	5 + 15.7	1691.9	Tiva Canyon crystal poor upper lithophysal zone	0	0	1178.7		214,470	
26-Mar-95	5 + 15.7	5 + 15.7	1691.9	Tiva Canyon crystal poor upper lithophysal zone	0	0	1178.7		214,470	
27-Mar-95	5 + 15.7	5 + 30.4	1740.2	Tiva Canyon crystal poor upper lithophysal zone	14.7	48.2	1226.9	23,010	237,480	
28-Mar-95	5 + 30.4	5 + 38.9	1768	Tiva Canyon crystal poor upper lithophysal zone	8.5	27.9	1254.8		237,480	
29-Mar-95	5 + 38.9	5 + 46.0	1791.3	Tiva Canyon crystal poor upper lithophysal zone	3.6	11.6	1266.4		237,480	
30-Mar-95	5 + 46.0	5 + 48.6	1799.9	Tiva Canyon crystal poor upper lithophysal zone	2.6	8.5	1274.9		237,480	
31-Mar-95	5 + 48.6	5 + 49.4	1802	Tiva Canyon crystal poor upper lithophysal zone	0.8	2.6	1277.5		237,480	
01-Apr-95	5 + 49.4	5 + 49.4	1802	Tiva Canyon crystal poor upper lithophysal zone	0	0	1277.5		237,480	
02-Apr-95	5 + 49.4	5 + 49.4	1802	Tiva Canyon crystal poor upper lithophysal zone	0	0	1277.5		237,480	
03-Apr-95	5 + 49.4	5 + 51.7	1810	Tiva Canyon crystal poor upper lithophysal zone	2.3	7.5	1285	9,210	246,690	Fault (~5m offset) @ Sta 5 + 50
04-Apr-95	5 + 51.7	5 + 52.2	1811.7	Tiva Canyon crystal poor upper lithophysal zone	0.5	1.6	1286.6		246,690	
05-Apr-95	5 + 52.2	5 + 52.2	1811.7	Tiva Canyon crystal poor upper lithophysal zone	0	0	1286.6		246,690	
06-Apr-95	5 + 52.2	5 + 53.5	1815.9	Tiva Canyon crystal poor middle nonlithophysal zone	1.3	4.3	1290.9		246,690	
07-Apr-95	5 + 53.5	5 + 53.5	1817.3	Tiva Canyon crystal poor middle nonlithophysal zone	0.4	1.3	1292.2		246,690	
08-Apr-95	5 + 53.5	5 + 53.5	1817.3	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	1292.2		246,690	
09-Apr-95	5 + 53.5	5 + 53.9	1817.3	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	1292.2		246,690	
10-Apr-95	5 + 53.9	5 + 54.2	1818.2	Tiva Canyon crystal poor middle nonlithophysal zone		1	1293.2	0	246,690	
11-Apr-95	5 + 54.2	5 + 54.2	1818.2	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	1293.2	2,750	249,440	
12-Apr-95	5 + 54.2	5 + 54.2	1818.2	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	1293.2	4,010	253,450	
13-Apr-95	5 + 54.2	5 + 54.2	1818.2	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	1293.2	1,040	254,490	
14-Apr-95	5 + 54.2	5 + 54.2	1818.2	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	1293.2	2,910	257,400	72 HR REPORT - WEEKEND
15-Apr-95	5 + 54.2	5 + 54.2	1818.2	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	1293.2	40	257,440	72 HR REPORT - WEEKEND
16-Apr-95	5 + 54.2	5 + 54.2	1818.2	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	1293.2	0	257,440	72 HR REPORT - WEEKEND
17-Apr-95	5 + 54.2	5 + 55.9	1823.8	Tiva Canyon crystal poor middle nonlithophysal zone	1.7	5.5	1298.7	1,700	259,140	
18-Apr-95	5 + 55.9	5 + 57.8	1830.1	Tiva Canyon crystal poor middle nonlithophysal zone	1.9	6.2	1304.9	1,410	260,550	
19-Apr-95	5 + 57.8	5 + 61.7	1842.8	Tiva Canyon crystal poor middle nonlithophysal zone	3.9	12.8	1317.7	3,220	263,770	
20-Apr-95	5 + 61.7	5 + 66.9	1859	Tiva Canyon crystal poor middle nonlithophysal zone	5.2	17.1	1334.8	3,630	267,400	

Water Usage History in the ESF Tunnel

21-Apr-95	5 + 66.9	5 +76.6	1891.7	Tiva Canyon crystal poor middle nonlithophysal zone	9.7	31.8	1366.6	4,300	271,700	
22-Apr-95	5 + 76.6	5 + 76.6	1891.7	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	1366.6	0	271,700	
23-Apr-95	5 + 76.6	5 + 76.6	1891.5	Tiva Canyon crystal poor middle nonlithophysal zone	0	0	1366.6	0	271,700	
24-Apr-95	5 + 76.6	5 + 86.0	1922.6	Tiva Canyon crystal poor middle nonlithophysal zone	9.4	30.8	1397.4	6,420	278,120	
25-Apr-95	5 + 86.0	5 + 97.2	1959.3	Tiva Canyon crystal poor lower lithophysal zone	11.2	36.7	1434.1	6,400	284,520	
26-Apr-95	5 + 97.2	6 + 09.2	1998.7	Tiva Canyon crystal poor lower lithophysal zone	12	39.4	1473.5	6,080	290,600	
27-Apr-95	6 + 09.2	6 + 21.2	2038.1	Tiva Canyon crystal poor lower lithophysal zone	12	39.4	1512.9	3,920	294,520	
28-Apr-95	6 + 21.2	6 +33.9	2079.7	Tiva Canyon crystal poor lower lithophysal zone	12.7	41.7	1554.6	3,870	298,390	
29-Apr-95	6 + 33.9	6 + 33.9	2079.7	Tiva Canyon crystal poor lower lithophysal zone	0	0	1554.6	340	298,730	
30-Apr-95	6 + 33.9	6 + 33.9	2079.7	Tiva Canyon crystal poor lower lithophysal zone	0	0	1554.6	0	298,730	
01-May-95	6 + 33.9	6 + 48.1	2126.3	Tiva Canyon crystal poor lower lithophysal zone	14.2	46.6	1601.2	6,550	305,280	
02-May-95	6 + 48.1	6 + 55.2	2149.6	Tiva Canyon crystal poor lower lithophysal zone	7.1	23.3	1624.5	4,490	309,770	
03-May-95	6 + 55.2	6 + 64.6	2180.4	Tiva Canyon crystal poor lower lithophysal zone	9.4	30.8	1655.3	5,580	315,350	
04-May-95	6 + 64.6	6 + 73.9	2211	Tiva Canyon crystal poor lower lithophysal zone	9.3	30.5	1685.8	5,100	320,450	
05-May-95	6 + 73.9	6 + 80.6	2232.9	Tiva Canyon crystal poor lower lithophysal zone	6.7	22	1707.8	3,265	323,715	
06-May-95	6 + 80.6	6 + 80.6	2232.9	Tiva Canyon crystal poor lower lithophysal zone	0	0	1707.8	11,585	335,300	
07-May-95	6 + 80.6	6 + 80.6	2232.9	Tiva Canyon crystal poor lower lithophysal zone	0	0	1707.8	0	335,300	
08-May-95	6 + 80.6	6 + 87.3	2254.9	Tiva Canyon crystal poor lower lithophysal zone	6.7	22	1729.8	3,170	338,470	
09-May-95	6 + 87.3	6 + 97.1	2287.1	Tiva Canyon crystal poor lower lithophysal zone	9.9	32.5	1762.3	5,160	343,630	
10-May-95	6 + 97.1	7 + 09.4	2327.4	Tiva Canyon crystal poor lower nonlithophysal zone	12.3	40.4	1802.7	5,130	348,760	Fault (~20m offset) 7 + 00m
11-May-95	7 + 09.4	7 + 24.2	2376	Tiva Canyon crystal poor lower nonlithophysal zone	14.8	48.6	1851.3	5,730	354,490	
12-May-95	7 + 24.2	7 + 41.5	2432.7	Tiva Canyon crystal poor lower nonlithophysal zone	17.3	56.8	1908.1	5,730	360,220	
13-May-95	7 + 41.5	7 + 41.5	2432.7	Tiva Canyon crystal poor lower nonlithophysal zone	0	0	1908.1	14,410	374,630	
14-May-95	7 + 41.5	7 + 41.5	2432.7	Tiva Canyon crystal poor lower nonlithophysal zone	0	0	1908.1	0	374,630	
15-May-95	7 + 41.5	7 + 50.9	2463.6	Tiva Canyon crystal poor lower nonlithophysal zone	9.4	30.8	1938.9	3,810	378,440	
16-May-95	7 + 50.9	7 + 62.7	2502.3	Tiva Canyon crystal poor lower nonlithophysal zone	11.8	38.7	1977.6	4,310	382,750	ALCOVE #3 (UPCA) @ 7 +54
17-May-95	7 + 62.7	7 + 74.5	2541	Tiva Canyon crystal poor lower nonlithophysal zone	11.8	38.7	2016.3	3,400	386,150	
18-May-95	7 + 74.5	7 + 74.5	2541	Tiva Canyon crystal poor lower nonlithophysal zone	0	0	2016.3	5,600	391,750	
19-May-95	7 + 74.5	7 + 74.5	2541	Tiva Canyon crystal poor lower nonlithophysal zone	0	0	2016.3	9,300	401,050	
20-May-95	7 + 74.5	7 + 74.5	2541	Tiva Canyon crystal poor lower nonlithophysal zone	0	0	2016.3	0	401,050	
21-May-95	7 + 74.5	7 + 74.5	2541	Tiva Canyon crystal poor lower nonlithophysal zone	0	0	2016.3	0	401,050	
22-May-95	7 + 74.5	7 + 88.2	2586	Tiva Canyon crystal poor vitric zone	13		2016.3	5,550	406,600	
23-May-95	7 + 88.2	8 + 05.7	2643.4	Tiva Canyon crystal poor vitric zone	17.5	57.4	2073.7	5,710	412,310	
24-May-95	8 + 05.7	8 + 19.2	2687.7	Tiva Canyon crystal poor vitric zone	13.5	44.3	2118	5,056	417,366	
25-May-95	8 + 19.2	8 + 35.5	2741.1	Tiva Canyon crystal poor vitric zone	16.3	53.5	2171.5	6,520	423,886	
26-May-95	8 + 35.5	8 + 48.4	2783.5	Tiva Canyon crystal poor vitric zone	12.9	42.3	2213.8	3,520	427,406	
27-May-95	8 + 48.4	8 + 48.4	2783.5	Tiva Canyon crystal poor vitric zone	0	0	2213.8		427,406	
28-May-95	8 + 48.4	8 + 48.4	2783.5	Tiva Canyon crystal poor vitric zone	0	0	2213.8		427,406	
29-May-95	8 + 48.4	8 +48.4	2783.5	Tiva Canyon crystal poor vitric zone	0	0	2213.8		427,406	
30-May-95	8 + 48.4	8 + 64.0	2834.6	Tiva Canyon crystal poor vitric zone	15.6	51.2	2265	3,921	431,327	
31-May-95	8 + 64.0	8 + 79.6	2885.8	Bedded Tuffs (including thin Yucca Mnt member)	15.6	51.2	2316.2	7,161	438,488	
01-Jun-95	8 + 79.6	9 + 03.2	2963.3	Bedded Tuffs (including thin Yucca Mnt member)	23.6	77.4	2393.6	7,683	446,171	
02-Jun-95	9 + 03.2	9 + 14.6	3000.7	Pah Canyon Member	11. 4	37.4	2431	4,377	450,548	
03-Jun-95	9 + 14.6	9 + 14.6	3000.7	Pah Canyon Member	0	0	2431	566	451,114	
04-Jun-95	9 + 14.6	9 + 14.6	3000.7	Pah Canyon Member	0	0	2431	0	451,114	
05-Jun-95	9 + 14.6	9 + 25.7	3037.1	Pah Canyon Member	11.1	36.4	2467.4	4,494	455,608	
06-Jun-95	9 + 25.7	9 + 36.4	3072.2	Pah Canyon Member	10.7	35.1	2502.5	3,891	459,499	
07-Jun-95	9 + 36.4	9 + 58.6	3145	Pah Canyon Member	22.2	72.8	2575.3	10,158	469,657	
08-Jun-95	9 + 58.6	9 + 72.2	3189.6	Pah Canyon Member	13.6	44.6	2619.9	7,900	477,557	
09-Jun-95	9 + 72.2	9 + 72.2	3189.6	Pah Canyon Member	0	0	2619.9	2,849	480,406	
10-Jun-95	9 + 72.2	9 + 72.2	3189.6	Pah Canyon Member	0	0	2619.9	2,140	482,546	
11-Jun-95	9 + 72.2	9 + 72.2	3189.6	Pah Canyon Member	0	0	2619.9	0	482,546	
12-Jun-95	9 + 72.2	9 + 93.1	3258.2	Pah Canyon Member	20.9	68.6	2688.5	10,561	493,107	
13-Jun-95	9 + 93.1	10 + 14.4	3328.1	Pah Canyon Member	21.3	69.9	2758.4	11,266	504,373	
14-Jun-95	10 + 14.4	10 + 32.2	3386.5	Pre-Pah Canyon tuffs	17.8	58.4	2816.8	8,503	512,876	ALCOVE # 4 (LPCA) CL @ 10 + 27.8
15-Jun-95	10 + 32.2	10 + 50.6	3446.9	Pre-Pah Canyon tuffs	18.4	60.4	2877.2	13,009	525,885	
16-Jun-95	10 + 50.6	10 + 68.3	3504.9	Topopah Spring crystal rich vitric zone	17.7	58.1	2935.3	13,834	539,719	
17-Jun-95	10 + 68.3	10 + 68.3	3504.9	Topopah Spring crystal rich vitric zone	0	0	2935.3	1,677	541,396	
18-Jun-95	10 + 68.3	10 + 68.3	3504.9	Topopah Spring crystal rich vitric zone	0	0	2935.3	0	541,396	
19-Jun-95	10 + 68.3	10 + 85.1	3560	Topopah Spring crystal rich vitric zone	16.8	55.1	2990.4	10,000	551,396	
20-Jun-95	10 + 85.1	11 + 01.2	3612.9	Topopah Spring crystal rich vitric zone	16.1	52.8	3043.2	9,722	561,118	

Water Usage History in the ESF Tunnel

21-Jun-95	11 + 01.2	11 + 11.2	3645.7	Topopah Spring crystal rich vitric zone	10	32.8	3076	7,146	568,264	
22-Jun-95	11 + 11.2	11 + 16.7	3663.7	Topopah Spring crystal rich vitric zone	5.5	18	3094	4,715	572,979	
23-Jun-95	11 + 16.7	**	**	Topopah Spring crystal rich vitric zone	N/REPORT	N/REPORT		9,378	582,357	72 HR REPORT - WEEKEND
24-Jun-95	**	**	**	Topopah Spring crystal rich vitric zone	N/REPORT	N/REPORT		12,574	594,931	72 HR REPORT - WEEKEND
25-Jun-95	**	11 + 25.9	3693.9	Topopah Spring crystal rich vitric zone	9.2	30.2	3124.2	0	594,931	72 HR REPORT - WEEKEND
26-Jun-95	11 + 25.9	11 + 30.2	3708	Topopah Spring crystal rich vitric zone	4.3	14.1	3138.3	12,278	607,209	
27-Jun-95	11 + 30.2	11 + 35.8	3726.4	Topopah Spring crystal rich vitric zone	5.6	18.4	3156.7	6,303	613,512	
28-Jun-95	11 + 35.8	11 + 37.9	3733.3	Topopah Spring crystal rich vitric zone	2.1	6.9	3163.6	3,288	616,800	
29-Jun-95	11 + 37.9	11 + 37.9	3733.3	Topopah Spring crystal rich vitric zone	0	0	3163.6	2,089	618,889	
30-Jun-95	11 + 37.9	11 + 37.9	3733.3	Topopah Spring crystal rich vitric zone	0	0	3163.6	8,026	626,915	CONVEYOR INSTALLATION
01-Jul-95	11 + 37.9	11 + 37.9	3733.3	Topopah Spring crystal rich vitric zone	0	0	3163.6	2,136	629,051	CONVEYOR INSTALLATION
02-Jul-95	11 + 37.9	11 + 37.9	3733.3	Topopah Spring crystal rich vitric zone	0	0	3163.6		629,051	
03-Jul-95	11 + 37.9	11 + 37.9	3733.3	Topopah Spring crystal rich vitric zone	0	0	3163.6		629,051	
04-Jul-95	11 + 37.9	11 + 37.9	3733.3	Topopah Spring crystal rich vitric zone	0	0	3163.6		629,051	
05-Jul-95	11 + 37.9	11 + 37.9	3733.3	Topopah Spring crystal rich vitric zone	0	0	3163.6	2,640	631,691	
06-Jul-95	11 + 37.9	11 + 37.9	3733.3	Topopah Spring crystal rich vitric zone	0	0	3163.6	1,995	633,686	
07-Jul-95	11 + 37.9	11 + 37.9	3733.3	Topopah Spring crystal rich vitric zone	0	0	3163.6	3,115	636,801	
08-Jul-95	11 + 37.9	11 + 37.9	3733.3	Topopah Spring crystal rich vitric zone	0	0	3163.6	2,695	639,496	
09-Jul-95	11 + 37.9	11 + 37.9	3733.3	Topopah Spring crystal rich vitric zone	0	0	3163.6	1,130	640,626	
10-Jul-95	11 + 37.9	11 + 37.9	3733.3	Topopah Spring crystal rich vitric zone	0	0	3163.6	3,275	643,901	
11-Jul-95	11 + 37.9	11 + 37.9	3733.3	Topopah Spring crystal rich vitric zone	0	0	3163.6	2,943	646,844	
12-Jul-95	11 + 37.9	11 + 37.9	3733.3	Topopah Spring crystal rich vitric zone	0	0	3163.6	1,920	648,764	
13-Jul-95	11 + 37.9	11 + 38.2	3734.3	Topopah Spring crystal rich vitric zone	0.3	1	3164.6	3,186	651,950	
14-Jul-95	11 + 38.2	11 + 38.2	3734.3	Topopah Spring crystal rich vitric zone	0	0	3164.6	3,579	655,529	
15-Jul-95	11 + 38.2	11 + 38.2	3734.3	Topopah Spring crystal rich vitric zone	0	0	3164.6	3,168	658,697	
16-Jul-95	11 + 38.2	11 + 38.2	3734.3	Topopah Spring crystal rich vitric zone	0	0	3164.6		658,697	
17-Jul-95	11 + 38.2	11 + 49.0	3769.5	Topopah Spring crystal rich vitric zone	10.8	35.4	3200	7,386	666,083	
18-Jul-95	11 + 49.0	11 + 54.9	3789	Topopah Spring crystal rich vitric zone	5.9	19.4	3219.4	6,005	672,088	
19-Jul-95	11 + 54.9	11 + 59.1	3802.3	Topopah Spring crystal rich vitric zone	4.2	13.8	3233.2	4,751	676,839	
20-Jul-95	11 + 59.1	11 + 62.8	3815	Topopah Spring crystal rich vitric zone	3.7	12.1	3245.3	6,643	683,482	
21-Jul-95	11 + 62.8	11 + 64.4	3820.2	Topopah Spring crystal rich vitric zone	1.6	5.2	3250.5	6,917	690,399	
22-Jul-95	11 + 64.4	11 + 64.4	3820.2	Topopah Spring crystal rich vitric zone	0	0	3250.5	2,210	692,609	
23-Jul-95	11 + 64.4	11 + 64.4	3820.2	Topopah Spring crystal rich vitric zone	0	0	3250.5		692,609	
24-Jul-95	11 + 64.4	11 + 68.2	3832.7	Topopah Spring crystal rich vitric zone	3.8	12.5	3263		692,609	
25-Jul-95	11 + 68.2	11 + 71.9	3844.8	Topopah Spring crystal rich vitric zone	3.7	12.1	3275.1		692,609	
26-Jul-95	11 + 71.9	11 + 74.0	3851.7	Topopah Spring crystal rich vitric zone	2.1	6.9	3282		692,609	
27-Jul-95	11 + 74.0	11 + 74.0	3851.7	Topopah Spring crystal rich vitric zone	0	0	3282		692,609	
28-Jul-95	11 + 74.0	11 + 74.0	3851.7	Topopah Spring crystal rich vitric zone	0	0	3282		692,609	
29-Jul-95	11 + 74.0	11 + 74.0	3851.7	Topopah Spring crystal rich vitric zone	0	0	3282		692,609	
30-Jul-95	11 + 74.0	11 + 74.0	3851.7	Topopah Spring crystal rich vitric zone	0	0	3282	13,925	706,534	
31-Jul-95	11 + 74.0	11 + 77.6	3863.5	Topopah Spring crystal rich vitric zone	3.6	11.8	3293.8	6,045	712,579	
01-Aug-95	11 + 77.6	11 + 80.6	3873.4	Topopah Spring crystal rich vitric zone	3	9.8	3303.6	6,460	719,039	
02-Aug-95	11 + 80.6	11 + 83.2	3881.9	Topopah Spring crystal rich vitric zone	2.6	8.5	3312.1	15,020	734,059	
03-Aug-95	11 + 83.2	11 + 87.6	3896.3	Topopah Spring crystal rich vitric zone	4.4	14.4	3326.5	16,850	750,909	
04-Aug-95	11 + 87.6	11 + 91.2	3908.1	Topopah Spring crystal rich vitric zone	3.6	11.8	3338.3	6,680	757,589	72 HR REPORT - WEEKEND
05-Aug-95	11 + 91.2	11 + 91.2	3908.1	Topopah Spring crystal rich vitric zone	0	0	3338.3	460	758,049	
06-Aug-95	11 + 91.2	11 + 91.2	3908.1	Topopah Spring crystal rich vitric zone	0	0	3338.3		758,049	
07-Aug-95	11 + 91.2	12 + 15.1	3986.5	Topopah Spring crystal rich nonlithophysal zone	23.9	78.4	3416.7	22,990	781,039	Began using UG conveyor system
08-Aug-95	12 +15.1	12 + 34.6	4050.5	Topopah Spring crystal rich nonlithophysal zone	19.5	64	3480.7	25,325	806,364	
09-Aug-95	12 + 34.6	12 + 61.0	4137.1	Topopah Spring crystal rich nonlithophysal zone	26.1	85.6	3566.3	33,585	839,949	
10-Aug-95	12 + 60.7	12 + 61.7	4139.4	Topopah Spring crystal rich nonlithophysal zone	1	3.3	3569.6	4,677	844,626	TBM backed up for maintenance
11-Aug-95	12 + 61.7	12 + 61.7	4139.4	Topopah Spring crystal rich nonlithophysal zone	0	0	3569.6	1,328	845,954	
12-Aug-95	12 + 61.7	12 + 61.7	4139.4	Topopah Spring crystal rich nonlithophysal zone	0	0	3569.6	437	846,391	
13-Aug-95	12 + 61.7	12 + 61.7	4139.4	Topopah Spring crystal rich nonlithophysal zone	0	0	3569.6		846,391	
14-Aug-95	12 + 61.7	12 + 61.7	4139.4	Topopah Spring crystal rich nonlithophysal zone	0	0	3569.6	290	846,681	
15-Aug-95	12 + 61.7	12 + 61.7	4139.4	Topopah Spring crystal rich nonlithophysal zone	0	0	3569.6	3	846,684	
16-Aug-95	12 + 61.7	12 + 61.7	4139.4	Topopah Spring crystal rich nonlithophysal zone	0	0	3569.6	265	846,949	
17-Aug-95	12 + 61.7	12 + 61.7	4139.4	Topopah Spring crystal rich nonlithophysal zone	0	0	3569.6	1,215	848,164	
18-Aug-95	12 + 61.7	12 + 61.7	4139.4	Topopah Spring crystal rich nonlithophysal zone	0	0	3569.6	1,277	849,441	
19-Aug-95	12 + 61.7	12 + 61.7	4139.4	Topopah Spring crystal rich nonlithophysal zone	0	0	3569.6	2,014	851,455	
20-Aug-95	12 + 61.7	12 + 61.7	4139.4	Topopah Spring crystal rich nonlithophysal zone	0	0	3569.6	0	851,455	
21-Aug-95	12 + 61.7	12 + 80.3	4200.5	Topopah Spring crystal rich nonlithophysal zone	18.6	61	3630.6	26,105	877,560	

Water Usage History in the ESF Tunnel

22-Aug-95	12 + 80.3	12 + 90.9	4235.2	Topopah Spring crystal rich nonlithophysal zone	10.6	34.8	3665.4	23,035	900,595
23-Aug-95	12 + 90.9	13 + 02.0	4271.7	Topopah Spring crystal rich nonlithophysal zone	11.1	36.4	3701.8	21,480	922,075
24-Aug-95	13 + 02.0	13 + 07.2	4288.7	Topopah Spring crystal rich nonlithophysal zone	5.2	17.1	3718.9	20,830	942,905
25-Aug-95	13 + 07.2	13 + 18.6	4326.1	Topopah Spring crystal rich nonlithophysal zone	11.4	37.4	3756.3	28,390	971,295
26-Aug-95	13 + 18.6	13 + 18.6	4326.1	Topopah Spring crystal rich nonlithophysal zone	0	0	3756.3	0	971,295
27-Aug-95	13 + 18.6	13 + 18.6	4326.1	Topopah Spring crystal rich nonlithophysal zone	0	0	3756.3	0	971,295
28-Aug-95	13 + 18.6	13 + 30.9	4366.5	Topopah Spring crystal rich nonlithophysal zone	12.3	40.4	3796.7	19,950	991,245
29-Aug-95	13 + 30.9	13 + 48.3	4423.8	Topopah Spring crystal rich nonlithophysal zone			3796.7	25,191	1,016,436
30-Aug-95	13 + 48.3	13 + 69.0	4491.5	Topopah Spring crystal rich nonlithophysal zone	20.7	67.9	3864.6	26,939	1,043,375
31-Aug-95	13 + 69.0	14 + 14.8	4641.7	Topopah Spring crystal rich nonlithophysal zone	45.8	150.3	4014.9	48,100	1,091,475
01-Sep-95	14 + 14.8	14 + 51.6	4762.5	Topopah Spring crystal rich nonlithophysal zone	36.8	120.7	4135.6	48,117	1,139,592
02-Sep-95	14 + 51.6	14 + 51.6	4762.5	Topopah Spring crystal rich nonlithophysal zone	0	0	4135.6	0	1,139,592
03-Sep-95	14 + 51.6	14 + 51.6	4762.5	Topopah Spring crystal rich nonlithophysal zone	0	0	4135.6	0	1,139,592
04-Sep-95	14 + 51.6	14 + 51.6	4762.5	Topopah Spring crystal rich nonlithophysal zone	0	0	4135.6	0	1,139,592
05-Sep-95	14 + 51.6	14 + 95.8	4907.5	Topopah Spring crystal rich nonlithophysal zone	44.2	145	4280.6	49,323	1,188,915
06-Sep-95	14 + 95.8	15 + 26.1	5006.9	Topopah Spring crystal rich nonlithophysal zone	30.3	99.4	4380	48,690	1,237,605
07-Sep-95	14 + 26.1	15 + 60.5	5119.8	Topopah Spring crystal rich nonlithophysal zone	34.4	113	4493	43,190	1,280,795
08-Sep-95	15 + 60.5	15 + 60.5	5119.8	Topopah Spring crystal rich nonlithophysal zone	0	0	4493	1,322	1,282,117
09-Sep-95	15 + 60.5	15 + 60.5	5119.8	Topopah Spring crystal rich nonlithophysal zone	0	0	4493	198	1,282,315
10-Sep-95	15 + 60.5	15 + 60.5	5119.8	Topopah Spring crystal rich nonlithophysal zone	0	0	4493	0	1,282,315
11-Sep-95	15 + 60.5	15 + 87.4	5208	Topopah Spring crystal rich nonlithophysal zone	26.9	88.3	4581.3	31,060	1,313,375
12-Sep-95	15 + 87.4	16 + 21.1	5318.6	Topopah Spring crystal rich nonlithophysal zone	33.7	110.6	4691.9	36,930	1,350,305
13-Sep-95	16 + 21.1	16 + 51.2	5417.3	Topopah Spring crystal rich nonlithophysal zone	30.1	98.8	4790.7	41,070	1,391,375
14-Sep-95	16 + 51.2	16 + 78.2	5505.9	Topopah Spring crystal rich nonlithophysal zone	27	88.6	4879.3	36,765	1,428,140
15-Sep-95	16 + 78.2	17 + 03.9	5590.2	Topopah Spring crystal rich nonlithophysal zone	25.7	84.3	4963.6	30,380	1,458,520
16-Sep-95	17 + 03.9	17 + 03.9	5590.2	Topopah Spring crystal rich nonlithophysal zone	0	0	4963.6	0	1,458,520
17-Sep-95	17 + 03.9	17 + 03.9	5590.2	Topopah Spring crystal rich nonlithophysal zone	0	0	4963.6	0	1,458,520
18-Sep-95	17 + 03.9	17 + 14.8	5626	Topopah Spring crystal rich nonlithophysal zone	10.9	35.8	4999.4	13,605	1,472,125
19-Sep-95	17 + 14.8	17 + 48.8	5737.5	Topopah Spring crystal rich lithophysal zone	34	111.5	5110.9	33,350	1,505,475
20-Sep-95	17 + 48.8	17 + 86.4	5860.9	Topopah Spring crystal rich lithophysal zone	37.6	123.4	5234.3	39,300	1,544,775
21-Sep-95	17 + 86.4	18 + 18.9	5967.5	Topopah Spring crystal poor upper lithophysal zone	32.5	106.6	5340.9	35,800	1,580,575
22-Sep-95	18 + 18.9	18 + 52.7	6078.4	Topopah Spring crystal poor upper lithophysal zone	33.8	110.9	5451.8	39,426	1,620,001
23-Sep-95	18 + 52.7	18 + 52.7	6078.4	Topopah Spring crystal poor upper lithophysal zone	0	0	5451.8	19,274	1,639,275
24-Sep-95	18 + 52.7	18 + 52.7	6078.4	Topopah Spring crystal poor upper lithophysal zone	0	0	5451.8	0	1,639,275
25-Sep-95	18 + 52.7	18 + 67.6	6127.3	Topopah Spring crystal poor upper lithophysal zone	14.9	48.9	5500.7	20,641	1,659,916
26-Sep-95	18 + 67.6	18 + 98.7	4072.2	Topopah Spring crystal poor upper lithophysal zone	10.4	34	5534.7	34,333	1,694,249
27-Sep-95	18 + 98.7	19 + 24.3	6313.3	Topopah Spring crystal poor upper lithophysal zone	25.6	28	5562.7	32,450	1,726,699
28-Sep-95	19 + 24.3	19 + 52.1	6404.5	Topopah Spring crystal poor upper lithophysal zone	27.8	91.2	5653.9	34,550	1,761,249
29-Sep-95	19 + 52.1	20 + 02.1	6568.6	Topopah Spring crystal poor upper lithophysal zone	50	164	5817.9	45,085	1,806,334
30-Sep-95	20 + 02.1	20 + 02.1	6568.6	Topopah Spring crystal poor upper lithophysal zone	0	0	5817.9	0	1,806,334
01-Oct-95	20 + 02.1	20 + 02.1	6568.6	Topopah Spring crystal poor upper lithophysal zone	0	0	5817.9	0	1,806,334
02-Oct-95	20 + 02.1	20 + 40.3	6693.9	Topopah Spring crystal poor upper lithophysal zone	38.2	125.3	5943.2	38,150	1,844,484
03-Oct-95	20 + 40.3	20 + 82.7	6833	Topopah Spring crystal poor upper lithophysal zone	42.4	139.1	6082.3	34,965	1,879,449
04-Oct-95	20 + 82.7	21 + 21.5	6960.3	Topopah Spring crystal poor upper lithophysal zone	12.9	42.4	6124.7	34,240	1,913,689
05-Oct-95	21 + 21.5	21 + 21.5	6960.3	Topopah Spring crystal poor upper lithophysal zone	0	0	6124.7	1,330	1,915,019
06-Oct-95	21 + 21.5	21 + 21.5	6960.3	Topopah Spring crystal poor upper lithophysal zone	0	0	6124.7	1,542	1,916,561
07-Oct-95	21 + 21.5	21 + 21.5	6960.3	Topopah Spring crystal poor upper lithophysal zone	0	0	6124.7	120	1,916,681
08-Oct-95	21 + 21.5	21 + 21.5	6960.3	Topopah Spring crystal poor upper lithophysal zone	0	0	6124.7	0	1,916,681
09-Oct-95	21 + 21.5	21 + 52.3	7061.4	Topopah Spring crystal poor upper lithophysal zone	10.3	33.7	6158.4	33,143	1,949,824
10-Oct-95	21 + 52.3	21 + 74.8	7135.2	Topopah Spring crystal poor upper lithophysal zone	22.5	73.8	6232.2	25,075	1,974,899
11-Oct-95	21 + 74.8	21 + 99.9	7217.5	Topopah Spring crystal poor upper lithophysal zone	25.1	82.3	6314.5	24,550	1,999,449
12-Oct-95	21 + 99.9	22 + 14.4	7265.1	Topopah Spring crystal poor upper lithophysal zone	14.5	47.6	6362.1	27,450	2,026,899
13-Oct-95	22 + 14.4	22 + 36.8	7338.6	Topopah Spring crystal poor upper lithophysal zone	22.4	73.5	6435.6	36,046	2,062,945
14-Oct-95	22 + 36.8	22 + 36.8	7388.6	Topopah Spring crystal poor upper lithophysal zone	0	0	6435.6	1,679	2,064,624
15-Oct-95	22 + 36.8	22 + 36.8	7388.6	Topopah Spring crystal poor upper lithophysal zone	0	0	6435.6	0	2,064,624
16-Oct-95	22 + 36.8	22 + 62.3	7422.2	Topopah Spring crystal poor upper lithophysal zone	25.5	83.7	6519.3	37,705	2,102,329
17-Oct-95	22 + 62.3	22 + 89.0	7509.8	Topopah Spring crystal poor upper lithophysal zone	26.7	87.6	6606.9	35,150	2,137,479
18-Oct-95	22 + 89.0	23 + 03.8	????	Topopah Spring crystal poor upper lithophysal zone	4.9	16.2	6623.1	25,993	2,163,472
19-Oct-95	23 + 03.8	23 + 23.6	7623.4	Topopah Spring crystal poor upper lithophysal zone	19.8	64	6687.1	32,581	2,196,053
20-Oct-95	23 + 23.6	23 + 46.8	7699.5	Topopah Spring crystal poor upper lithophysal zone	23.2	76.1	6763.2	28,858	2,224,911
21-Oct-95	23 + 46.8	23 + 46.8	7699.5	Topopah Spring crystal poor upper lithophysal zone	0	0	6763.2	484	2,225,395
22-Oct-95	23 + 46.8	23 +46.8	7699.5	Topopah Spring crystal poor upper lithophysal zone	0	0	6763.2	0	2,225,395

Water Usage History in the ESF Tunnel

23-Oct-95	23 + 46.8	23 +74.8	7791.3	Topopah Spring crystal poor upper lithophysal zone	28	91.9	6855.1	29,214	2,254,609	
24-Oct-95	23 +74.8	24 + 06.9	7896.7	Topopah Spring crystal poor upper lithophysal zone	32.1	105.3	6960.4	31,340	2,285,949	
25-Oct-95	24 + 06.9	24 + 28.0	7965.9	Topopah Spring crystal poor upper lithophysal zone	21.1	69.2	7029.6	28,100	2,314,049	
26-Oct-95	24 + 28.0	24 + 62.5	8079.1	Topopah Spring crystal poor upper lithophysal zone	34.5	113.2	7142.8	33,120	2,347,169	
27-Oct-95	24 + 62.5	24 + 89.3	8167	Topopah Spring crystal poor upper lithophysal zone	26.8	87.9	7230.7	33,404	2,380,573	
28-Oct-95	24 + 89.3	24 + 89.3	8167	Topopah Spring crystal poor upper lithophysal zone	0	0	7230.7	0	2,380,573	
29-Oct-95	24 + 89.3	24 + 89.3	8167	Topopah Spring crystal poor upper lithophysal zone	0	0	7230.7	0	2,380,573	
30-Oct-95	24 + 89.3	25 + 16.9	8257.5	Topopah Spring crystal poor upper lithophysal zone	27.6	90.6	7321.3	36,816	2,417,389	
31-Oct-95	25 +16.9	25 + 38.6	8328.7	Topopah Spring crystal poor upper lithophysal zone	21.7	71.2	7392.5	26,670	2,444,059	
01-Nov-95	25 + 38.6	25 + 71.0	8435	Topopah Spring crystal poor upper lithophysal zone	32.4	106.3	7498.8	38,590	2,482,649	
02-Nov-95	25 + 71.0	26 + 00.9	8533.1	Topopah Spring crystal poor upper lithophysal zone	29.9	98.1	7596.9	38,618	2,521,267	
03-Nov-95	26 + 00.9	26 + 30.1	8628.9	Topopah Spring crystal poor upper lithophysal zone	29.2	95.8	7692.7	35,132	2,556,399	
04-Nov-95	26 + 30.1	26 + 30.1	8628.9	Topopah Spring crystal poor upper lithophysal zone	0	0	7692.7	0	2,556,399	
05-Nov-95	26 + 30.1	26 + 30.1	8628.9	Topopah Spring crystal poor upper lithophysal zone	0	0	7692.7	0	2,556,399	
06-Nov-95	26 + 30.1	26 + 54.7	8709.6	Topopah Spring crystal poor upper lithophysal zone	8.2	26.9	7719.6	33,095	2,589,494	
07-Nov-95	26 + 54.7	26 + 85.6	8811	Topopah Spring crystal poor upper lithophysal zone	30.9	101.4	7821	36,895	2,626,389	
08-Nov-95	26 + 85.6	27 + 16.2	8911.4	Topopah Spring crystal poor upper lithophysal zone	30.6	100.4	7921.4	39,180	2,665,569	
09-Nov-95	27 + 16.2	27 + 30.0	8956.7	Topopah Spring crystal poor middle nonlithophysal zone	13.8	45.3	7966.7	32,190	2,697,759	Proposed Repository Horizon
10-Nov-95	27 + 30.0	27 + 30.0	8956.7	Topopah Spring crystal poor middle nonlithophysal zone	0	0	7966.7	0	2,697,759	Proposed Repository Horizon
11-Nov-95	27 + 30.0	27 + 30.0	8956.7	Topopah Spring crystal poor middle nonlithophysal zone	0	0	7966.7	0	2,697,759	Proposed Repository Horizon
12-Nov-95	27 + 30.0	27 + 30.0	8956.7	Topopah Spring crystal poor middle nonlithophysal zone	0	0	7966.7	0	2,697,759	Proposed Repository Horizon
13-Nov-95	27 + 30.0	27 + 55.0	9038.7	Topopah Spring crystal poor middle nonlithophysal zone	25	82	8048.7	26,170	2,723,929	Proposed Repository Horizon
14-Nov-95	27 + 55.0	27 + 90.5	9155.2	Topopah Spring crystal poor middle nonlithophysal zone	35.5	116.5	8165.2	39,460	2,763,389	Proposed Repository Horizon
15-Nov-95	27 + 90.5	28 + 17.8	9244.8	Topopah Spring crystal poor middle nonlithophysal zone	27.3	89.6	8254.8	34,930	2,798,319	Proposed Repository Horizon
16-Nov-95	28 + 17.8	28 + 46.3	9338.3	Topopah Spring crystal poor middle nonlithophysal zone	28.5	93.5	8348.3	38,105	2,836,424	ALCOVE 5 THERMAL TEST FACILITY @ 28 + 27
17-Nov-95	28 + 46.3	28 + 76.8	9438.3	Topopah Spring crystal poor middle nonlithophysal zone	30.5	100.1	8448.4	40,057	2,876,481	Proposed Repository Horizon
18-Nov-95	28 + 76.8	28 + 76.8	9438.3	Topopah Spring crystal poor middle nonlithophysal zone	0	0	8448.4	0	2,876,481	Proposed Repository Horizon
19-Nov-95	28 + 76.8	28 + 76.8	9438.3	Topopah Spring crystal poor middle nonlithophysal zone	0	0	8448.4		2,876,481	Proposed Repository Horizon
20-Nov-95	28 + 76.8	29 + 06.9	9537.1	Topopah Spring crystal poor middle nonlithophysal zone	30.1	98.8	8547.2	37,463	2,913,944	Proposed Repository Horizon
21-Nov-95	29 + 06.9	29 + 43.6	9657.5	Topopah Spring crystal poor middle nonlithophysal zone	36.7	120.4	8667.6	37,883	2,951,827	Proposed Repository Horizon
22-Nov-95	29 + 43.6	29 + 56.8	9700.8	Topopah Spring crystal poor middle nonlithophysal zone	13.2	43.3	8710.9	17,437	2,969,264	Proposed Repository Horizon
23-Nov-95	29 +56.8	29 + 56.8	9700.8	Topopah Spring crystal poor middle nonlithophysal zone	0	0	8710.9	0	2,969,264	Proposed Repository Horizon
24-Nov-95	29 + 56.8	29 + 56.8	9700.8	Topopah Spring crystal poor middle nonlithophysal zone	0	0	8710.9	0	2,969,264	Proposed Repository Horizon
25-Nov-95	29 + 56.8	29 + 56.8	9700.8	Topopah Spring crystal poor middle nonlithophysal zone	0	0	8710.9	0	2,969,264	Proposed Repository Horizon
26-Nov-95	29 + 56.8	29 + 56.8	9700.8	Topopah Spring crystal poor middle nonlithophysal zone	0	0	8710.9	0	2,969,264	Proposed Repository Horizon
27-Nov-95	29 + 56.8	29 + 94.6	9824.6	Topopah Spring crystal poor middle nonlithophysal zone	37.8	124	8834.9	40,773	3,010,037	Proposed Repository Horizon
28-Nov-95	29 + 94.6	30 + 31.6	9946.2	Topopah Spring crystal poor middle nonlithophysal zone	37	121.4	8956.3	0	3,010,037	Proposed Repository Horizon
29-Nov-95	30 + 31.6	30 + 80.1	10105.3	Topopah Spring crystal poor middle nonlithophysal zone	48.5	159.1	9115.4	49,880	3,059,917	Proposed Repository Horizon
30-Nov-95	30 + 80.1	31 + 17.4	10227.7	Topopah Spring crystal poor middle nonlithophysal zone	36.8	120.7	9236.1	42,375	3,102,292	Proposed Repository Horizon
01-Dec-95	31 + 17.4	31 + 75.1	10417	Topopah Spring crystal poor middle nonlithophysal zone	57.7	189.3	9425.4	69,135	3,171,427	Proposed Repository Horizon
02-Dec-95	31 + 75.1	31 + 75.1	10417	Topopah Spring crystal poor middle nonlithophysal zone	0	0	9425.4	0	3,171,427	Proposed Repository Horizon
03-Dec-95	31 + 75.1	31 + 75.1	10417	Topopah Spring crystal poor middle nonlithophysal zone	0	0	9425.4	0	3,171,427	Proposed Repository Horizon
04-Dec-95	31 + 75.1	31 + 75.1	10417	Topopah Spring crystal poor middle nonlithophysal zone	0	0	9425.4	9,265	3,180,692	Proposed Repository Horizon
05-Dec-95	31 + 75.1	31 + 75.1	10417	Topopah Spring crystal poor middle nonlithophysal zone	0	0	9425.4	1,685	3,182,377	Proposed Repository Horizon
06-Dec-95	31 + 75.1	31 + 75.1	10417	Topopah Spring crystal poor middle nonlithophysal zone	0	0	9425.4	1,260	3,183,637	Proposed Repository Horizon
07-Dec-95	31 + 75.1	31 + 75.1	10417	Topopah Spring crystal poor middle nonlithophysal zone	0	0	9425.4	289	3,183,926	Proposed Repository Horizon
08-Dec-95	31 + 75.1	31 + 75.1	10417	Topopah Spring crystal poor middle nonlithophysal zone	0	0	9425.4	891	3,184,817	Proposed Repository Horizon
09-Dec-95	31 + 75.1	31 + 75.1	10417	Topopah Spring crystal poor middle nonlithophysal zone	0	0	9425.4	0	3,184,817	Proposed Repository Horizon
10-Dec-95	31 + 75.1	31 + 75.1	10417	Topopah Spring crystal poor middle nonlithophysal zone	0	0	9425.4	0	3,184,817	Proposed Repository Horizon
11-Dec-95	31 + 75.1	31 + 84.5	10447.8	Topopah Spring crystal poor middle nonlithophysal zone	9.4	30.4	9455.8	25,010	3,209,827	Proposed Repository Horizon
12-Dec-95	31 + 84.5	32 + 25.9	10583.7	Topopah Spring crystal poor middle nonlithophysal zone	41.4	135.8	9591.6	39,700	3,249,527	Proposed Repository Horizon
13-Dec-95	32 + 25.9	32 + 68.0	10721.8	Topopah Spring crystal poor middle nonlithophysal zone	42.1	138.1	9729.7	44,422	3,293,949	Proposed Repository Horizon
14-Dec-95	32 + 68.0	33 + 13.8	10872	Topopah Spring crystal poor middle nonlithophysal zone	45.8	150.3	9880	45,653	3,339,602	Proposed Repository Horizon
15-Dec-95	33 + 13.8	33 + 44.8	10973.8	Topopah Spring crystal poor middle nonlithophysal zone	31	101.7	9981.7	48,981	3,388,583	Proposed Repository Horizon
16-Dec-95	33 + 44.8	33 + 44.8	10973.8	Topopah Spring crystal poor middle nonlithophysal zone	0	0	9981.7	0	3,388,583	Proposed Repository Horizon
17-Dec-95	33 + 44.8	33 + 44.8	10973.8	Topopah Spring crystal poor middle nonlithophysal zone	0	0	9981.7	0	3,388,583	Proposed Repository Horizon
18-Dec-95	33 + 44.8	33 +78.5	11084.3	Topopah Spring crystal poor middle nonlithophysal zone	33.7	110.6	10092.3	41,396	3,429,979	Proposed Repository Horizon
19-Dec-95	33 + 78.5	33 + 89.7	11121.1	Topopah Spring crystal poor middle nonlithophysal zone	11.2	36.7	10129	24,138	3,454,117	Proposed Repository Horizon
20-Dec-95	33 + 89.7	34 + 16.9	11210.3	Topopah Spring crystal poor middle nonlithophysal zone	27.2	89.2	10218.2	44,340	3,498,457	Proposed Repository Horizon
21-Dec-95	34 + 16.9	34 + 50.7		Topopah Spring crystal poor middle nonlithophysal zone			10218.2	53,407	3,551,864	Proposed Repository Horizon
22-Dec-95	34 + 50.7	34 + 69.2	11379	Topopah Spring crystal poor middle nonlithophysal zone	18.5	20.3	10238.5	44,063	3,595,927	Proposed Repository Horizon

Water Usage History in the ESF Tunnel

23-Dec-95	34 + 69.2	34 + 69.2	11379	Topopah Spring crystal poor middle nonlithophysal zone	0	0	10238.5	0	3,595,927	Proposed Repository Horizon
24-Dec-95	34 + 69.2	34 + 69.2	11379	Topopah Spring crystal poor middle nonlithophysal zone	0	0	10238.5	0	3,595,927	Proposed Repository Horizon
25-Dec-95	34 + 69.2	34 + 69.2	11379	Topopah Spring crystal poor middle nonlithophysal zone	0	0	10238.5	0	3,595,927	Proposed Repository Horizon
26-Dec-95	34 + 69.2	34 + 04.7	11498.4	Topopah Spring crystal poor middle nonlithophysal zone	35.5	116.5	10355	55,650	3,651,577	Proposed Repository Horizon
27-Dec-95	35 + 04.7	35 + 19.7	11548.1	Topopah Spring crystal poor middle nonlithophysal zone	15	33.1	10388.1	32,880	3,684,457	Proposed Repository Horizon
28-Dec-95	35 + 19.7	35 + 26.2	11568.9	Topopah Spring crystal poor middle nonlithophysal zone	6.5	21.3	10409.4	20,460	3,704,917	Proposed Repository Horizon
29-Dec-95	35 + 26.2	35 + 53.3	11657.8	Topopah Spring crystal poor middle nonlithophysal zone	27.1	88.9	10498.3	40,225	3,745,142	Proposed Repository Horizon
30-Dec-95	35 + 53.3	35 + 53.3	11657.8	Topopah Spring crystal poor middle nonlithophysal zone	0	0	10498.3	0	3,745,142	Proposed Repository Horizon
31-Dec-95	35 + 53.3	35 + 53.3	11657.8	Topopah Spring crystal poor middle nonlithophysal zone	0	0	10498.3	0	3,745,142	Proposed Repository Horizon
01-Jan-96	35 + 53.3	35 + 53.3	11657.8	Topopah Spring crystal poor middle nonlithophysal zone	0	0	10498.3	0	3,745,142	Proposed Repository Horizon
02-Jan-96	35 + 53.3	35 + 89.4	11776.2	Topopah Spring crystal poor middle nonlithophysal zone	36.1	39.5	10537.8	48,831	3,793,973	Proposed Repository Horizon
03-Jan-96	35 + 89.4	36 + 01.7	11876.6	Topopah Spring crystal poor middle nonlithophysal zone	12.3	40.4	10578.2	32,289	3,826,262	Proposed Repository Horizon
04-Jan-96	36 + 01.7	36 + 44.7	11957.7	Topopah Spring crystal poor middle nonlithophysal zone	43	141.1	10719.3	49,595	3,875,857	Proposed Repository Horizon
05-Jan-96	36 + 44.7	36 + 74.3	12054.8	Topopah Spring crystal poor middle nonlithophysal zone	29.6	97.1	10816.4	48,870	3,924,727	Proposed Repository Horizon
06-Jan-96	36 + 74.3	36 + 74.3	12054.8	Topopah Spring crystal poor middle nonlithophysal zone	0	0	10816.4	0	3,924,727	Proposed Repository Horizon
07-Jan-96	36 + 74.3	36 + 74.3	12054.8	Topopah Spring crystal poor middle nonlithophysal zone	0	0	10816.4	0	3,924,727	Proposed Repository Horizon
08-Jan-96	36 + 74.3	37 + 28.6	12232.9	Topopah Spring crystal poor middle nonlithophysal zone	54.3	178.1	10994.5	59,930	3,984,657	Proposed Repository Horizon
										Alcove 6 - Northern Ghost Dance
09-Jan-96	36 + 28.6	37 + 66.1	12356	Topopah Spring crystal poor middle nonlithophysal zone	37.5	123	11117.5	66,440	4,051,097	**Fault Sta. 37 + 37**
10-Jan-96	37 + 66.1	37 + 96.1	12454.4	Topopah Spring crystal poor middle nonlithophysal zone	30	98.4	11215.9	69,320	4,120,417	Proposed Repository Horizon
11-Jan-96	37 + 96.1	38 + 26.4	12553.8	Topopah Spring crystal poor middle nonlithophysal zone	30.3	99.4	11315.3	68,910	4,189,327	Proposed Repository Horizon
12-Jan-96	38 + 26.4	38 + 41.6	12603.7	Topopah Spring crystal poor middle nonlithophysal zone	15.2	49.9	11365.2	49,877	4,239,204	Proposed Repository Horizon
13-Jan-96	38 + 41.6	38 + 41.6	12603.7	Topopah Spring crystal poor middle nonlithophysal zone	0	0	11365.2	0	4,239,204	Proposed Repository Horizon
14-Jan-96	38 + 41.6	38 + 41.6	12603.7	Topopah Spring crystal poor middle nonlithophysal zone	0	0	11365.2	0	4,239,204	Proposed Repository Horizon
15-Jan-96	38 + 41.6	38 + 41.6	12603.7	Topopah Spring crystal poor middle nonlithophysal zone	0	0	11365.2	0	4,239,204	Proposed Repository Horizon
16-Jan-96	38 + 41.6	38 + 80.0	12729.7	Topopah Spring crystal poor middle nonlithophysal zone	38.4	125	11490.2	70,053	4,309,257	Proposed Repository Horizon
17-Jan-96	38 + 80.0	38 + 94.5	12777.2	Topopah Spring crystal poor middle nonlithophysal zone	14.5	47.6	11537.8	48,705	4,357,962	Proposed Repository Horizon
18-Jan-96	38 + 94.5	38 + 94.5	12777.2	Topopah Spring crystal poor middle nonlithophysal zone	0	0	11537.8	2,011	4,359,973	Proposed Repository Horizon
19-Jan-96	38 + 94.5	38 + 94.5	12777.2	Topopah Spring crystal poor middle nonlithophysal zone	0	0	11537.8	5,344	4,365,317	Proposed Repository Horizon
20-Jan-96	38 + 94.5	38 + 94.5	12777.2	Topopah Spring crystal poor middle nonlithophysal zone	0	0	11537.8	6,532	4,371,849	Proposed Repository Horizon
21-Jan-96	38 + 94.5	38 + 94.5	12777.2	Topopah Spring crystal poor middle nonlithophysal zone	0	0	11537.8	0	4,371,849	Proposed Repository Horizon
22-Jan-96	38 + 94.5	38 + 94.5	12777.2	Topopah Spring crystal poor middle nonlithophysal zone	0	0	11537.8	2,616	4,374,465	Proposed Repository Horizon
23-Jan-96	38 + 94.5	38 + 94.5	12777.2	Topopah Spring crystal poor middle nonlithophysal zone	0	0	11537.8	4,423	4,378,888	Proposed Repository Horizon
24-Jan-96	38 + 94.5	38 + 94.5	12777.2	Topopah Spring crystal poor middle nonlithophysal zone	0	0	11537.8	2,455	4,381,343	Proposed Repository Horizon
25-Jan-96	38 + 94.5	39 + 34.4	12906.8	Topopah Spring crystal poor middle nonlithophysal zone	39.9	130.9	11668.7119	61,925	4,443,268	Proposed Repository Horizon
26-Jan-96	39 + 34.4	39 + 61.8	12998	Topopah Spring crystal poor middle nonlithophysal zone	27.4	89.9	11758.6119	56,675	4,499,943	Proposed Repository Horizon
27-Jan-96	39 + 61.8	39 + 61.8	12998	Topopah Spring crystal poor middle nonlithophysal zone	0	0	11758.6119	0	4,499,943	Proposed Repository Horizon
28-Jan-96	39 + 61.8	39 + 61.8	12998	Topopah Spring crystal poor middle nonlithophysal zone	0	0	11758.6119	0	4,499,943	Proposed Repository Horizon
29-Jan-96	39 + 61.8	39 + 81.3	13062	Topopah Spring crystal poor middle nonlithophysal zone	19.5	64	11822.6119	49,225	4,549,168	Proposed Repository Horizon
30-Jan-96	39 + 81.3	40 + 17.1	13179.5	Topopah Spring crystal poor middle nonlithophysal zone	35.8	117.5	11940.1119	54,765	4,603,933	Proposed Repository Horizon
31-Jan-96	40 + 17.1	40 + 45.7	13273.3	Topopah Spring crystal poor middle nonlithophysal zone	14.3	46.9	11987.0119	32,265	4,636,198	Proposed Repository Horizon
01-Feb-96	40 + 45.7	40 + 58.0	13313.6	Topopah Spring crystal poor middle nonlithophysal zone	12.3	40.4	12027.4119	40,280	4,676,478	Proposed Repository Horizon
02-Feb-96	40 + 58.0	40 + 68.0	13346.5	Topopah Spring crystal poor middle nonlithophysal zone	10	32.8	12060.2119	31,190	4,707,668	Proposed Repository Horizon
03-Feb-96	40 + 68.0	40 + 68.0	13346.5	Topopah Spring crystal poor middle nonlithophysal zone	0	0	12060.2119	0	4,707,668	Proposed Repository Horizon
04-Feb-96	40 + 68.0	40 + 68.0	13346.5	Topopah Spring crystal poor middle nonlithophysal zone	0	0	12060.2119	0	4,707,668	Proposed Repository Horizon
05-Feb-96	40 + 68.0	40 + 85.8	13404.9	Topopah Spring crystal poor middle nonlithophysal zone	17.8	58.4	12118.6119	41,855	4,749,523	Proposed Repository Horizon
06-Feb-96	40 + 85.8	40 + 97.0	13441.6	Topopah Spring crystal poor middle nonlithophysal zone	11.2	36.7	12155.3119	21,685	4,771,208	Proposed Repository Horizon
07-Feb-96	40 + 97.0	41 + 35.0	13566.3	Topopah Spring crystal poor middle nonlithophysal zone	38	124.7	12280.0119	64,390	4,835,598	Proposed Repository Horizon
08-Feb-96	41 + 35.0	41 + 44.3	13596.8	Topopah Spring crystal poor middle nonlithophysal zone	9.3	30.5	12310.5119	30,327	4,865,925	Proposed Repository Horizon
09-Feb-96	41 + 44.3	41 + 59.2	13645.7	Topopah Spring crystal poor middle nonlithophysal zone	14.9	48.9	12359.4119	36,811	4,902,736	Proposed Repository Horizon
10-Feb-96	41 + 59.2	41 + 59.2	13645.7	Topopah Spring crystal poor middle nonlithophysal zone	0	0	12359.4119	0	4,902,736	Proposed Repository Horizon
11-Feb-96	41 + 59.2	41 + 59.2	13645.7	Topopah Spring crystal poor middle nonlithophysal zone	0	0	12359.4119	0	4,902,736	Proposed Repository Horizon
12-Feb-96	41 + 59.2	41 + 69.2	13678.5	Topopah Spring crystal poor middle nonlithophysal zone	10	32.8	12392.2119	39,957	4,942,693	Proposed Repository Horizon
13-Feb-96	41 + 69.2	41 + 90.2	13747.4	Topopah Spring crystal poor middle nonlithophysal zone	21	68.9	12461.1119	64,275	5,006,968	Proposed Repository Horizon
14-Feb-96	41 + 90.2	42 + 27.4	13869.4	Topopah Spring crystal poor middle nonlithophysal zone	37.2	122	12583.1119	43,840	5,050,808	Proposed Repository Horizon
15-Feb-96	42 + 27.4	42 + 35.1	13894.7	Topopah Spring crystal poor middle nonlithophysal zone	7.7	25.3	12608.4119	11,160	5,061,968	Proposed Repository Horizon
16-Feb-96	42 + 35.1	42 + 43.7	13922.9	Topopah Spring crystal poor middle nonlithophysal zone	8.6	28.2	12636.6119	44,702	5,106,670	Proposed Repository Horizon
17-Feb-96	42 + 43.7	42 + 43.7	13922.9	Topopah Spring crystal poor middle nonlithophysal zone	0	0	12636.6119	0	5,106,670	Proposed Repository Horizon
18-Feb-96	42 + 43.7	42 + 43.7	13922.9	Topopah Spring crystal poor middle nonlithophysal zone	0	0	12636.6119	0	5,106,670	Proposed Repository Horizon
19-Feb-96	42 + 43.7	42 + 43.7	13922.9	Topopah Spring crystal poor middle nonlithophysal zone	0	0	12636.6119	0	5,106,670	Proposed Repository Horizon
20-Feb-96	42 + 43.7	42 + 43.7	13922.9	Topopah Spring crystal poor middle nonlithophysal zone	0	0	12636.6119	22,098	5,128,768	Proposed Repository Horizon
21-Feb-96	42 + 43.7	42 +51.0	13946.9	Topopah Spring crystal poor middle nonlithophysal zone	7.3	24	12660.6119	27,371	5,156,139	Proposed Repository Horizon

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22-Feb-96				Topopah Spring crystal poor middle nonlithophysal zone			12660.6119	56,009	5,212,148	Proposed Repository Horizon
23-Feb-96	42 + 85.9	42 + 96.6	14096.5	Topopah Spring crystal poor middle nonlithophysal zone	10.7	35.1	12695.7119	28,868	5,241,016	Proposed Repository Horizon
24-Feb-96	42 + 96.6	42 + 96.6	14096.5	Topopah Spring crystal poor middle nonlithophysal zone	0	0	12695.7119	0	5,241,016	Proposed Repository Horizon
25-Feb-96	42 + 96.6	42 + 96.6	14096.5	Topopah Spring crystal poor middle nonlithophysal zone	0	0	12695.7119	0	5,241,016	Proposed Repository Horizon
26-Feb-96	42 + 96.6	43 + 13.1	14150.6	Topopah Spring crystal poor middle nonlithophysal zone	16.5	54.1	12749.8119	39,552	5,280,568	Proposed Repository Horizon
27-Feb-96	43 + 13.1	43 + 22.1	14180.1	Topopah Spring crystal poor middle nonlithophysal zone	9	29.5	12779.3119	31,010	5,311,578	Proposed Repository Horizon
28-Feb-96	43 + 22.1	43 + 53.4	14282.8	Topopah Spring crystal poor middle nonlithophysal zone	31.3	102.7	12882.0119	55,790	5,367,368	Proposed Repository Horizon
29-Feb-96	43 + 53.4	43 + 71.4	14341.9	Topopah Spring crystal poor middle nonlithophysal zone	18	59.1	12941.1119	44,860	5,412,228	Proposed Repository Horizon
01-Mar-96	43 + 71.4	43 + 87.1	14393.4	Topopah Spring crystal poor middle nonlithophysal zone	15	51.5	12992.6119	39,878	5,452,106	Proposed Repository Horizon
02-Mar-96	43 + 87.1	43 + 87.1	14393.4	Topopah Spring crystal poor middle nonlithophysal zone	0	0	12992.6119	0	5,452,106	Proposed Repository Horizon
03-Mar-96	43 + 87.1	43 + 87.1	14393.4	Topopah Spring crystal poor middle nonlithophysal zone	0	0	12992.6119	0	5,452,106	Proposed Repository Horizon
04-Mar-96	43 + 87.1	44 + 03.3	14446.5	Topopah Spring crystal poor middle nonlithophysal zone	16.2	53.1	13045.7119	37,177	5,489,283	Proposed Repository Horizon
05-Mar-96	44 + 03.3	44 + 17.2	14492.1	Topopah Spring crystal poor middle nonlithophysal zone	13.9	45.6	13091.3119	35,485	5,524,768	Proposed Repository Horizon
06-Mar-96	44 + 17.2	44 + 32.2	14541.3	Topopah Spring crystal poor middle nonlithophysal zone	5	16.4	13107.7119	42,800	5,567,568	Proposed Repository Horizon
07-Mar-96	44 + 32.2	44 + 36.7	14556.1	Topopah Spring crystal poor middle nonlithophysal zone	4.5	14.8	13122.5119	15,756	5,583,324	Proposed Repository Horizon
08-Mar-96	44 + 36.7	44 + 54.3	14613.8	Topopah Spring crystal poor middle nonlithophysal zone	17.6	57.7	13180.2119	37,444	5,620,768	Proposed Repository Horizon
09-Mar-96	44 + 54.3	44 + 54.3	14613.8	Topopah Spring crystal poor middle nonlithophysal zone	0	0	13180.2119	0	5,620,768	Proposed Repository Horizon
10-Mar-96	44 + 54.3	44 + 54.3	14613.8	Topopah Spring crystal poor middle nonlithophysal zone	0	0	13180.2119	0	5,620,768	Proposed Repository Horizon
11-Mar-96	44 + 54.3	44 + 65.3	14650.3	Topopah Spring crystal poor middle nonlithophysal zone	11.1	36.4	13216.6119	27,161	5,647,929	Proposed Repository Horizon
12-Mar-96	44 + 65.4	44 + 80.4	14699.5	Topopah Spring crystal poor middle nonlithophysal zone	15	49.2	13265.8119	26,639	5,674,568	Proposed Repository Horizon
13-Mar-96	44 + 80.4	45 + 05.1	14780.5	Topopah Spring crystal poor middle nonlithophysal zone	24.7	81	13346.8119	47,600	5,722,168	Proposed Repository Horizon
14-Mar-96				Topopah Spring crystal poor middle nonlithophysal zone			13346.8119	49,576	5,771,744	Proposed Repository Horizon
15-Mar-96	45 + 24.3	45 + 39.9	14894.7	Topopah Spring crystal poor middle nonlithophysal zone	15.6	51.2	13398.0119	41,119	5,812,863	Proposed Repository Horizon
16-Mar-96	45 + 39.9	45 + 39.9	14894.7	Topopah Spring crystal poor middle nonlithophysal zone	0	0	13398.0119	0	5,812,863	Proposed Repository Horizon
17-Mar-96	45 + 39.9	45 + 39.9	14894.7	Topopah Spring crystal poor middle nonlithophysal zone	0	0	13398.0119	0	5,812,863	Proposed Repository Horizon
18-Mar-96	45 + 39.9	45 + 59.7	14959.6	Topopah Spring crystal poor middle nonlithophysal zone	19.8	65	13463.0119	48,526	5,861,389	Proposed Repository Horizon
19-Mar-96	45 + 59.7	45 + 75.6	15011.8	Topopah Spring crystal poor middle nonlithophysal zone	15.9	52.2	13515.2119	38,779	5,900,168	Proposed Repository Horizon
20-Mar-96	45 + 75.6	45 + 93.4	15070.2	Topopah Spring crystal poor middle nonlithophysal zone	17.8	58.4	13573.6119	37,780	5,937,948	Proposed Repository Horizon
21-Mar-96	45 + 93.4	46 + 23.0	15167.3	Topopah Spring crystal poor middle nonlithophysal zone	29.6	97.1	13670.7119	58,640	5,996,588	Proposed Repository Horizon
22-Mar-96	46 + 23.0	46 + 23.0	15167.3	Topopah Spring crystal poor middle nonlithophysal zone	0	0	13670.7119	3,220	5,999,808	Proposed Repository Horizon
23-Mar-96	46 + 23.0	46 + 23.0	15167.3	Topopah Spring crystal poor middle nonlithophysal zone	0	0	13670.7119	0	5,999,808	Proposed Repository Horizon
24-Mar-96	46 + 23.0	46 + 23.0	15167.3	Topopah Spring crystal poor middle nonlithophysal zone	0	0	13670.7119	0	5,999,808	Proposed Repository Horizon
25-Mar-96	46 + 23.0	46 + 23.0	15167.3	Topopah Spring crystal poor middle nonlithophysal zone	0	0	13670.7119	1,683	6,001,491	Proposed Repository Horizon
26-Mar-96	46 + 23.0	46 + 23.0	15167.3	Topopah Spring crystal poor middle nonlithophysal zone	0	0	13670.7119	20,872	6,022,363	Proposed Repository Horizon
27-Mar-96	46 + 23.0	46 + 30.3	15191.3	Topopah Spring crystal poor middle nonlithophysal zone	7.3	24	13694.7119	46,250	6,068,613	Proposed Repository Horizon
28-Mar-96	46 + 47.9	46 + 60.6	15290.7	Topopah Spring crystal poor middle nonlithophysal zone	12.7	41.7	13736.4119	44,280	6,112,893	Proposed Repository Horizon
29-Mar-96	46 + 60.6	46 + 68.6	15316.9	Topopah Spring crystal poor middle nonlithophysal zone	8	26.2	13762.6119	44,400	6,157,293	Proposed Repository Horizon
30-Mar-96	46 + 68.6	46 + 68.6	15316.9	Topopah Spring crystal poor middle nonlithophysal zone	0	0	13762.6119	0	6,157,293	Proposed Repository Horizon
31-Mar-96	46 + 68.6	46 + 68.6	15316.9	Topopah Spring crystal poor middle nonlithophysal zone	0	0	13762.6119	0	6,157,293	Proposed Repository Horizon
01-Apr-96	46 + 68.6	46 + 84.5	15369.1	Topopah Spring crystal poor middle nonlithophysal zone	15.9	52.2	13814.8119	33,253	6,190,546	Proposed Repository Horizon
02-Apr-96	46 + 84.5	47 + 04.8	15435.7	Topopah Spring crystal poor middle nonlithophysal zone	20.3	66.6	13881.4119	38,942	6,229,488	Proposed Repository Horizon
03-Apr-96	47 + 04.8	47 + 28.2	15512.5	Topopah Spring crystal poor middle nonlithophysal zone	23.4	76.8	13958.2119	59,445	6,288,933	Proposed Repository Horizon
04-Apr-96	47 + 28.2	47 + 57.8	15609.6	Topopah Spring crystal poor middle nonlithophysal zone	29.6	97.1	14055.3119	52,410	6,341,343	Proposed Repository Horizon
05-Apr-96	47 + 57.8	47 + 86.6	15704.1	Topopah Spring crystal poor middle nonlithophysal zone	28.8	94.5	14149.8119	56,811	6,398,154	Proposed Repository Horizon
06-Apr-96	47 + 86.6	47 + 86.6	15704.1	Topopah Spring crystal poor middle nonlithophysal zone	0	0	14149.8119	0	6,398,154	Proposed Repository Horizon
07-Apr-96	47 + 86.6	47 + 86.6	15704.1	Topopah Spring crystal poor middle nonlithophysal zone	0	0	14149.8119	0	6,398,154	Proposed Repository Horizon
08-Apr-96	47 + 86.6	48 + 06.3	15768.7	Topopah Spring crystal poor middle nonlithophysal zone	19.7	64.6	14214.4119	61,037	6,459,191	Proposed Repository Horizon
09-Apr-96	48 + 06.3	48 + 18.4	15808.4	Topopah Spring crystal poor middle nonlithophysal zone	12.1	39.7	14254.1119	33,372	6,492,563	Proposed Repository Horizon
10-Apr-96	48 + 18.4	48 + 41.7	15884.8	Topopah Spring crystal poor middle nonlithophysal zone	23.3	76.4	14330.5119	43,425	6,535,988	Proposed Repository Horizon
11-Apr-96	48 + 41.7	48 + 66.3	15961.3	Topopah Spring crystal poor middle nonlithophysal zone	24.5	80.5	14411.0119	57,905	6,593,893	Proposed Repository Horizon
12-Apr-96	48 + 66.3	48 + 66.3	15965.6	Topopah Spring crystal poor middle nonlithophysal zone	0	0	14411.0119	17,345	6,611,238	Proposed Repository Horizon
13-Apr-96	48 + 66.3	48 + 66.3	15965.6	Topopah Spring crystal poor middle nonlithophysal zone	0	0	14411.0119	0	6,611,238	Proposed Repository Horizon
14-Apr-96	48 + 66.3	48 + 66.3	15965.6	Topopah Spring crystal poor middle nonlithophysal zone	0	0	14411.0119	0	6,611,238	Proposed Repository Horizon
15-Apr-96	48 + 66.3	48 + 66.3	15965.6	Topopah Spring crystal poor middle nonlithophysal zone	0	0	14411.0119	13,317	6,624,555	Proposed Repository Horizon
16-Apr-96	48 + 66.3	48 + 66.3	15965.6	Topopah Spring crystal poor middle nonlithophysal zone	0	0	14411.0119	12,545	6,637,100	Proposed Repository Horizon
17-Apr-96	48 + 66.3	48 + 66.3	15965.6	Topopah Spring crystal poor middle nonlithophysal zone	0	0	14411.0119	17,100	6,654,200	Proposed Repository Horizon
18-Apr-96	48 + 66.3	48 + 66.3	15965.6	Topopah Spring crystal poor middle nonlithophysal zone	0	0	14411.0119	8,943	6,663,143	Proposed Repository Horizon
19-Apr-96	48 + 66.3	48 + 66.3	15965.6	Topopah Spring crystal poor middle nonlithophysal zone	0	0	14411.0119	10,075	6,673,218	Proposed Repository Horizon
20-Apr-96	48 + 66.3	48 + 66.3	15965.6	Topopah Spring crystal poor middle nonlithophysal zone	0	0	14411.0119	0	6,673,218	Proposed Repository Horizon
21-Apr-96	48 + 66.3	48 + 66.3	15965.6	Topopah Spring crystal poor middle nonlithophysal zone	0	0	14411.0119	0	6,673,218	Proposed Repository Horizon
22-Apr-96	48 + 66.3	48 + 73.2	15988.2	Topopah Spring crystal poor middle nonlithophysal zone	6.9	22.6	14433.6119	26,160	6,699,378	Proposed Repository Horizon
23-Apr-96	48 + 73.2	48 + 92.3	16050.9	Topopah Spring crystal poor middle nonlithophysal zone	19.1	62.7	14496.3119	47,250	6,746,628	Proposed Repository Horizon

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24-Apr-96	48 + 92.3	49 + 13.9	16121.7	Topopah Spring crystal poor middle nonlithophysal zone	21.6	70.9	14567.2119	48,145	6,794,773	Proposed Repository Horizon
25-Apr-96	49 + 13.9	49 + 52.2	16247.4	Topopah Spring crystal poor middle nonlithophysal zone	38.3	125.7	14692.9119	95,076	6,889,849	Proposed Repository Horizon
26-Apr-96	49 + 52.2	49 + 76.4	16326.8	Topopah Spring crystal poor middle nonlithophysal zone	24.2	79.4	14772.3119	41,631	6,931,480	Proposed Repository Horizon
27-Apr-96	49 + 76.4	49 + 76.4	16326.8	Topopah Spring crystal poor middle nonlithophysal zone	0	0	14772.3119	1,739	6,933,219	Proposed Repository Horizon
28-Apr-96	49 + 76.4	49 + 76.4	16326.8	Topopah Spring crystal poor middle nonlithophysal zone	0	0	14772.3119	4,095	6,937,314	Proposed Repository Horizon
29-Apr-96	49 + 76.4	49 + 76.4	16326.8	Topopah Spring crystal poor middle nonlithophysal zone	0	0	14772.3119	55,485	6,992,799	Proposed Repository Horizon
30-Apr-96	50 + 07.6	50 + 43.6	16547.2	Topopah Spring crystal poor middle nonlithophysal zone	36	118.1	14890.4119	60,428	7,053,227	Proposed Repository Horizon
01-May-96	50 + 43.6	50 + 71.0	16637.1	Topopah Spring crystal poor middle nonlithophysal zone	27.4	89.9	14980.3119	42,902	7,096,129	Proposed Repository Horizon
02-May-96	50 + 71.0	51 + 10.7	16767.4	Topopah Spring crystal poor middle nonlithophysal zone	39.7	130.2	15110.5119	58,930	7,155,059	Proposed Repository Horizon
03-May-96	51 + 10.7	51 + 39.3	16861.2	Topopah Spring crystal poor middle nonlithophysal zone	28.6	93.8	15204.3119	64,580	7,219,639	Proposed Repository Horizon
04-May-96	51 + 39.3	51 + 39.3	16861.2	Topopah Spring crystal poor middle nonlithophysal zone	0	0	15204.3119	0	7,219,639	Proposed Repository Horizon
05-May-96	51 + 39.3	51 + 39.3	16861.2	Topopah Spring crystal poor middle nonlithophysal zone	0	0	15204.3119	0	7,219,639	Proposed Repository Horizon
06-May-96	51 + 39.3	51 + 62.9	16938.6	Topopah Spring crystal poor middle nonlithophysal zone	23.6	77.4	15281.7119	57,160	7,276,799	Proposed Repository Horizon
07-May-96	51 + 62.9	52 + 06.4	17081.4	Topopah Spring crystal poor middle nonlithophysal zone	43.5	142.7	15424.4119	64,620	7,341,419	Proposed Repository Horizon
08-May-96	52 + 06.4	52 + 38.2	17185.7	Topopah Spring crystal poor middle nonlithophysal zone	31.8	104.3	15528.7119	72,803	7,414,222	Proposed Repository Horizon
09-May-96	52 + 38.2	52 + 70.8	17292.7	Topopah Spring crystal poor middle nonlithophysal zone	32.6	107	15635.7119	76,992	7,491,214	Proposed Repository Horizon
10-May-96	52 + 70.8	52 + 70.8	17292.7	Topopah Spring crystal poor middle nonlithophysal zone	0	0	15635.7119	19,515	7,510,729	Proposed Repository Horizon
11-May-96	52 + 70.8	52 + 70.8	17292.7	Topopah Spring crystal poor middle nonlithophysal zone	0	0	15635.7119	11,250	7,521,979	Proposed Repository Horizon
12-May-96	52 + 70.8	52 + 70.8	17292.7	Topopah Spring crystal poor middle nonlithophysal zone	0	0	15635.7119	0	7,521,979	Proposed Repository Horizon
13-May-96	52 + 70.8	52 + 83.1	17333	Topopah Spring crystal poor middle nonlithophysal zone	12.3	40.4	15676.1119	44,667	7,566,646	Proposed Repository Horizon
14-May-96	52 + 83.1	53 + 04.7	17403.9	Topopah Spring crystal poor middle nonlithophysal zone	21.6	70.9	15747.0119	70,547	7,637,193	Proposed Repository Horizon
15-May-96	53 + 04.7	53 + 12.3	17428.8	Topopah Spring crystal poor middle nonlithophysal zone	7.6	24.9	15771.9119	38,085	7,675,278	Proposed Repository Horizon
16-May-96	53 + 12.3	53 + 58.2	17580.3	Topopah Spring crystal poor middle nonlithophysal zone	45.9	150.6	15922.5098	71,505	7,746,783	Proposed Repository Horizon
17-May-96	53 + 58.2	53 + 77.8	17639.2	Topopah Spring crystal poor middle nonlithophysal zone	19.6	64.3	15986.8098	51,720	7,798,503	Proposed Repository Horizon
18-May-96	53 + 77.8	53 + 77.8	17639.2	Topopah Spring crystal poor middle nonlithophysal zone	0	0	15986.8098	0	7,798,503	Proposed Repository Horizon
19-May-96	53 + 77.8	53 + 77.8	17639.2	Topopah Spring crystal poor middle nonlithophysal zone	0	0	15986.8098	0	7,798,503	Proposed Repository Horizon
20-May-96	53 + 77.8	53 + 88.2	17677.8	Topopah Spring crystal poor middle nonlithophysal zone	10.4	34.1	16020.9098	35,640	7,834,143	Proposed Repository Horizon
21-May-96	53 + 88.2	54 + 17.6	17774.3	Topopah Spring crystal poor middle nonlithophysal zone	29.4	96.5	16117.4098	61,200	7,895,343	Proposed Repository Horizon
22-May-96	54 + 17.6	54 + 26.8	17804.5	Topopah Spring crystal poor middle nonlithophysal zone	9.2	30.2	16147.6098	25,640	7,920,983	Proposed Repository Horizon
23-May-96	54 + 26.8	54 + 58.0	17906.8	Topopah Spring crystal poor middle nonlithophysal zone	31.2	102.4	16250.0098	56,250	7,977,233	Proposed Repository Horizon
24-May-96	54 + 58.0	54 + 75.0	17958	Topopah Spring crystal poor middle nonlithophysal zone	17	55.8	16305.8098	41,410	8,018,643	Proposed Repository Horizon
25-May-96	54 + 75.0	54 + 75.0	17958	Topopah Spring crystal poor middle nonlithophysal zone	0	0	16305.8098	0	8,018,643	Proposed Repository Horizon
26-May-96	54 + 75.0	54 + 75.0	17958	Topopah Spring crystal poor middle nonlithophysal zone	0	0	16305.8098	0	8,018,643	Proposed Repository Horizon
27-May-96	54 + 75.0	54 + 75.0	17958	Topopah Spring crystal poor middle nonlithophysal zone	0	0	16305.8098	0	8,018,643	Proposed Repository Horizon
28-May-96	54 + 75.0	55 + 04.7	18060	Topopah Spring crystal poor middle nonlithophysal zone	29.7	97.4	16403.2098	55,290	8,073,933	Proposed Repository Horizon
29-May-96	55 + 04.7	55 + 26.9	18132.9	Topopah Spring crystal poor middle nonlithophysal zone	22.2	72.8	16476.0098	43,200	8,117,133	Proposed Repository Horizon
30-May-96	55 + 26.9	55 + 56.3	18229.3	Topopah Spring crystal poor middle nonlithophysal zone	9.8	32.2	16508.2098	48,060	8,165,193	Proposed Repository Horizon
31-May-96	55 + 56.30	55 + 72.4	18282.2	Topopah Spring crystal poor middle nonlithophysal zone	16.1	52.8	16561.0098	40,000	8,205,193	Proposed Repository Horizon
01-Jun-96	55 + 72.4	55 + 72.4	18282.2	Topopah Spring crystal poor middle nonlithophysal zone	0	0	16561.0098	0	8,205,193	Proposed Repository Horizon
02-Jun-96	55 + 72.4	55 + 72.4	18282.2	Topopah Spring crystal poor middle nonlithophysal zone	0	0	16561.0098	0	8,205,193	Proposed Repository Horizon
03-Jun-96	55 + 72.4	55 + 85.3	18282.2	Topopah Spring crystal poor middle nonlithophysal zone	0	0	16561.0098	40,640	8,245,833	Proposed Repository Horizon
04-Jun-96	55 + 85.3	55 + 98.4	18367.5	Topopah Spring crystal poor middle nonlithophysal zone	13.1	43	16604.0098	41,650	8,287,483	Proposed Repository Horizon
05-Jun-96	55 + 98.4	56 + 11.0	18406.8	Topopah Spring crystal poor middle nonlithophysal zone	12.6	41.3	16645.3098	41,750	8,329,233	Proposed Repository Horizon
06-Jun-96	56 + 11.0	56 + 19.6	18437	Topopah Spring crystal poor middle nonlithophysal zone	8.5	27.8	16673.1098	30,700	8,359,933	Proposed Repository Horizon
07-Jun-96	56 + 19.6	56 + 30.6	18473.1	Topopah Spring crystal poor middle nonlithophysal zone	3.7	12	16685.1098	35,670	8,395,603	Proposed Repository Horizon
08-Jun-96	56 + 30.6	56 + 30.6	18473.1	Topopah Spring crystal poor middle nonlithophysal zone	0	0	16685.1098	0	8,395,603	Proposed Repository Horizon
09-Jun-96	56 + 30.6	56 + 30.6	18473.1	Topopah Spring crystal poor middle nonlithophysal zone	0	0	16685.1098	0	8,395,603	Proposed Repository Horizon
10-Jun-96	56 + 30.6	56 + 41.8	18509.8	Topopah Spring crystal poor middle nonlithophysal zone	11.2	36.7	16721.8098	49,750	8,445,353	Proposed Repository Horizon
11-Jun-96	56 + 41.8	56 + 58.7	18565.3	Topopah Spring crystal poor middle nonlithophysal zone	16.9	55.4	16777.2098	42,090	8,487,443	Proposed Repository Horizon
12-Jun-96	56 + 58.7	56 + 61.9	18575.8	Topopah Spring crystal poor middle nonlithophysal zone	3.2	10.5	16787.7098	23,952	8,511,395	Proposed Repository Horizon
13-Jun-96	56 + 61.9	56 + 77.9	18628.3	Topopah Spring crystal poor middle nonlithophysal zone	16	52.5	16840.2098	58,562	8,569,957	Proposed Repository Horizon
14-Jun-96	56 + 77.9	56 + 93.7	18680.1	Topopah Spring crystal poor middle nonlithophysal zone	15.8	51.8	16892.0098	44,726	8,614,683	Proposed Repository Horizon
15-Jun-96	56 + 93.7	56 + 93.7	18680.1	Topopah Spring crystal poor middle nonlithophysal zone	0	0	16892.0098	0	8,614,683	Proposed Repository Horizon
16-Jun-96	56 + 93.7	56 + 93.7	18680.1	Topopah Spring crystal poor middle nonlithophysal zone	0	0	16892.0098	0	8,614,683	Proposed Repository Horizon
17-Jun-96	56 + 93.7	57 + 02.5	18709	Topopah Spring crystal poor middle nonlithophysal zone	8.8	28.9	16920.9098	24,810	8,639,493	Proposed Repository Horizon
18-Jun-96	57 + 02.5	57 + 17.6	18758.5	Topopah Spring crystal poor middle nonlithophysal zone	15.1	49.5	16970.4098	38,445	8,677,938	Proposed Repository Horizon
19-Jun-96	57 + 17.6	57 + 40.6	18834	Topopah Spring crystal poor middle nonlithophysal zone	23	75.5	17045.9098	50,560	8,728,498	Proposed Repository Horizon
20-Jun-96	57 + 40.6	57 + 58.7	18893.4	Topopah Spring crystal poor middle nonlithophysal zone	18.1	59.4	17105.3098	38,265	8,766,763	Proposed Repository Horizon
21-Jun-96	57 + 58.7	57 + 85.1	18980	Topopah Spring crystal poor middle nonlithophysal zone	26.4	86.6	17191.9098	47,930	8,814,693	Proposed Repository Horizon
22-Jun-96	57 + 85.1	57 + 85.1	18980	Topopah Spring crystal poor middle nonlithophysal zone	0	0	17191.9098	0	8,814,693	Proposed Repository Horizon
23-Jun-96	57 + 85.1	57 + 85.1	18980	Topopah Spring crystal poor middle nonlithophysal zone	0	0	17191.9098	0	8,814,693	Proposed Repository Horizon
24-Jun-96	57 + 85.1	58 + 15.6	19080.1	Topopah Spring crystal poor middle nonlithophysal zone	30.5	100.1	17292.0098	54,270	8,868,963	Proposed Repository Horizon

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25-Jun-96	58 + 15.6	58 + 33.8	19139.8	Topopah Spring crystal poor middle nonlithophysal zone	18.2	59.7	17351.7098	46,780	8,915,743	Proposed Repository Horizon
26-Jun-96	58 + 33.8	58 + 54.3	19207	Topopah Spring crystal poor middle nonlithophysal zone	20.5	67.3	17419.0098	49,140	8,964,883	Proposed Repository Horizon
27-Jun-96	58 + 54.3	58 + 75.0	19274.9	Topopah Spring crystal poor middle nonlithophysal zone	20.7	67.9	17486.9098	48,050	9,012,933	Proposed Repository Horizon
28-Jun-96	58 + 75.0	58 + 83.1	19301.5	Topopah Spring crystal poor middle nonlithophysal zone	8.1	26.6	17513.5098	32,800	9,045,733	Proposed Repository Horizon
29-Jun-96	58 + 83.1	58 + 83.1	19301.5	Topopah Spring crystal poor middle nonlithophysal zone	0	0	17513.5098	0	9,045,733	Proposed Repository Horizon
30-Jun-96	58 + 83.1	58 + 83.1	19301.5	Topopah Spring crystal poor middle nonlithophysal zone	0	0	17513.5098	0	9,045,733	Proposed Repository Horizon
01-Jul-96	58 + 83.1	58 + 97.9	19350.1	Topopah Spring crystal poor middle nonlithophysal zone	14.8	48.6	17562.1098	36,310	9,082,043	Proposed Repository Horizon
02-Jul-96	58 + 97.9	59 + 21.8	19428.5	Topopah Spring crystal poor middle nonlithophysal zone	23.9	78.4	17640.5098	50,470	9,132,513	Proposed Repository Horizon
03-Jul-96	59 + 21.8	59 + 46.1	19508.2	Topopah Spring crystal poor middle nonlithophysal zone	24.3	79.7	17720.2098	53,120	9,185,633	Proposed Repository Horizon
04-Jul-96	59 + 46.1	59 + 46.1	19508.2	Topopah Spring crystal poor middle nonlithophysal zone	0	0	17720.2098	0	9,185,633	Proposed Repository Horizon
05-Jul-96	59 + 46.1	59 + 46.1	19508.2	Topopah Spring crystal poor middle nonlithophysal zone	0	0	17720.2098	0	9,185,633	Proposed Repository Horizon
06-Jul-96	59 + 46.1	59 + 46.1	19508.2	Topopah Spring crystal poor middle nonlithophysal zone	0	0	17720.2098	0	9,185,633	Proposed Repository Horizon
07-Jul-96	59 + 46.1	59 + 46.1	19508.2	Topopah Spring crystal poor middle nonlithophysal zone	0	0	17720.2098	0	9,185,633	Proposed Repository Horizon
08-Jul-96	59 + 46.1	59 + 61.3	19558.1	Topopah Spring crystal poor middle nonlithophysal zone	15.2	49.9	17770.1098	46,060	9,231,693	Proposed Repository Horizon
09-Jul-96	59 + 61.3	59 + 61.3	19558.1	Topopah Spring crystal poor middle nonlithophysal zone	0	0	17770.1098	4,170	9,235,863	Proposed Repository Horizon
10-Jul-96	59 + 61.3	59 + 61.3	19558.1	Topopah Spring crystal poor middle nonlithophysal zone	0	0	17770.1098	8,305	9,244,168	Proposed Repository Horizon
11-Jul-96	59 + 61.3	59 + 62.7	19562.7	Topopah Spring crystal poor middle nonlithophysal zone	1.4	4.6	17774.7098	13,470	9,257,638	Proposed Repository Horizon
12-Jul-96	59 + 62.7	59 + 79.0	19616.1	Topopah Spring crystal poor middle nonlithophysal zone	16.3	53.5	17828.2098	47,445	9,305,083	Proposed Repository Horizon
13-Jul-96	59 + 79.0	59 + 79.0	19616.1	Topopah Spring crystal poor middle nonlithophysal zone	0	0	17828.2098	0	9,305,083	Proposed Repository Horizon
14-Jul-96	59 + 79.0	59 + 79.0	19616.1	Topopah Spring crystal poor middle nonlithophysal zone	0	0	17828.2098	0	9,305,083	Proposed Repository Horizon
15-Jul-96	59 + 79.0	59 + 99.7	19684.1	Topopah Spring crystal poor middle nonlithophysal zone	20.7	67.9	17896.1098	52,750	9,357,833	Proposed Repository Horizon
16-Jul-96	59 + 99.7	60 + 25.0	19767.1	Topopah Spring crystal poor middle nonlithophysal zone	25.3	83	17979.1098	55,890	9,413,723	Proposed Repository Horizon
17-Jul-96	60 + 25.0	60 + 28.4	19778.4	Topopah Spring crystal poor middle nonlithophysal zone	3.4	11.2	17990.3098	20,380	9,434,103	Proposed Repository Horizon
18-Jul-96	60 + 28.4	60 + 33.5	19794.9	Topopah Spring crystal poor middle nonlithophysal zone	5.1	16.7	18007.0098	30,490	9,464,593	Proposed Repository Horizon
19-Jul-96	60 + 33.5	60 + 37	19806.4	Topopah Spring crystal poor middle nonlithophysal zone	3.5	11.5	18018.5098	29,555	9,494,148	Proposed Repository Horizon
20-Jul-96	60 + 37	60 + 37	19806.4	Topopah Spring crystal poor middle nonlithophysal zone	0	0	18018.5098	0	9,494,148	Proposed Repository Horizon
21-Jul-96	60 + 37	60 + 37	19806.4	Topopah Spring crystal poor middle nonlithophysal zone	0	0	18018.5098	0	9,494,148	Proposed Repository Horizon
22-Jul-96	60 + 37	60 + 40.6	19818.2	Topopah Spring crystal poor middle nonlithophysal zone	3.6	11.8	18030.3098	31,685	9,525,833	Proposed Repository Horizon
23-Jul-96	60 + 40.6	60 + 47.7	19814.5	Topopah Spring crystal poor middle nonlithophysal zone	7.1	23.3	18053.6098	39,970	9,565,803	Proposed Repository Horizon
24-Jul-96	60 + 47.7	60 + 53.7	19861.2	Topopah Spring crystal poor middle nonlithophysal zone	6	19.7	18073.3098	32,410	9,598,213	Proposed Repository Horizon
25-Jul-96	60 + 53.7	60+ 58.8	19878	Topopah Spring crystal poor middle nonlithophysal zone	5.2	16.9	18090.2098	42,045	9,640,258	Proposed Repository Horizon
26-Jul-96	60 + 58.8	60 + 58.8	19878	Topopah Spring crystal poor middle nonlithophysal zone	0	0	18090.2098	13,575	9,653,833	Proposed Repository Horizon
27-Jul-96	60 + 58.8	60 + 58.8	19878	Topopah Spring crystal poor middle nonlithophysal zone	0	0	18090.2098	0	9,653,833	Proposed Repository Horizon
28-Jul-96	60 + 58.8	60 + 58.8	19878	Topopah Spring crystal poor middle nonlithophysal zone	0	0	18090.2098	0	9,653,833	Proposed Repository Horizon
29-Jul-96	60 + 58.8	60 + 69.7	19913.7	Topopah Spring crystal poor middle nonlithophysal zone	3.6	11.9	18102.1098	45,520	9,699,353	Proposed Repository Horizon
30-Jul-96	60 + 69.7	60 + 92.4	19988.2	Topopah Spring crystal poor middle nonlithophysal zone	22.7	74.5	18176.6098	52,070	9,751,423	Proposed Repository Horizon
31-Jul-96	60 + 92.4	61 + 05.7	20031.8	Topopah Spring crystal poor middle nonlithophysal zone	13.3	43.6	18220.2098	55,125	9,806,548	Proposed Repository Horizon
01-Aug-96	61 + 5.7	61 + 15.3	20063.3	Topopah Spring crystal poor middle nonlithophysal zone	9.6	31.5	18251.7098	42,895	9,849,443	Proposed Repository Horizon
02-Aug-96	61 + 15.3	61 + 21.4	20083.3	Topopah Spring crystal poor middle nonlithophysal zone	6.1	20	18271.7098	48,620	9,898,063	Proposed Repository Horizon
03-Aug-96	61 + 21.4	61 + 21.4	20083.3	Topopah Spring crystal poor middle nonlithophysal zone	0	0	18271.7098	0	9,898,063	Proposed Repository Horizon
04-Aug-96	61 + 21.4	61 + 21.4	20083.3	Topopah Spring crystal poor middle nonlithophysal zone	0	0	18271.7098	0	9,898,063	Proposed Repository Horizon
05-Aug-96	61 + 21.4	61 + 31.0	20114.8	Topopah Spring crystal poor middle nonlithophysal zone	9.6	31.5	18303.2098	58,810	9,956,873	Proposed Repository Horizon
06-Aug-96	61 + 31.0	61 + 43.0	20154.2	Topopah Spring crystal poor middle nonlithophysal zone	12	39.4	18342.6098	56,930	10,013,803	
07-Aug-96	61 + 43.0	61 + 55.4	20194.9	Topopah Spring crystal poor middle nonlithophysal zone	12.4	40.7	18383.3098	52,750	10,066,553	
08-Aug-96	61 + 55.4	61 + 68.3	20237.2	Topopah Spring crystal poor middle nonlithophysal zone	12.9	42.3	18425.6098	47,790	10,114,343	
09-Aug-96	61 + 68.3	**	**	Topopah Spring crystal poor middle nonlithophysal zone			18425.6098	49,495	10,163,838	
10-Aug-96	**	61 + 87.4	20299.9	Topopah Spring crystal poor middle nonlithophysal zone	19.1	62.7	18488.3098	0	10,163,838	
11-Aug-96	61 + 87.4	61 + 87.4	20299.9	Topopah Spring crystal poor middle nonlithophysal zone	0	0	18488.3098	0	10,163,838	
12-Aug-96	61 + 87.4	61 +94.0	20321.5	Topopah Spring crystal poor middle nonlithophysal zone	6.6	21.7	18510.0098	36,190	10,200,028	
13-Aug-96	61 + 94.0	62 + 10.3	20375	Topopah Spring crystal poor middle nonlithophysal zone	16.3	53.5	18563.5098	41,825	10,241,853	
14-Aug-96	62 + 10.3	62 + 19.0	20403.5	Topopah Spring crystal poor middle nonlithophysal zone	8.7	28.5	18592.0098	40,305	10,282,158	
15-Aug-96	62 + 19.0	62 + 24.7	20422.2	Topopah Spring crystal poor middle nonlithophysal zone	5.7	18.7	18610.7098	36,845	10,319,003	
16-Aug-96	62 + 24.7	62 + 28.3	20434.1	Topopah Spring crystal poor middle nonlithophysal zone	3.6	11.8	18622.5098	47,090	10,366,093	
17-Aug-96	62 + 28.3	62 + 28.3	20434.1	Topopah Spring crystal poor middle nonlithophysal zone	0	0	18622.5098	0	10,366,093	
18-Aug-96	62 + 28.3	62 + 28.3	20434.1	Topopah Spring crystal poor middle nonlithophysal zone	0	0	18622.5098	0	10,366,093	
19-Aug-96	62 + 28.3	62 + 34.3	20453.7	Topopah Spring crystal poor middle nonlithophysal zone	6	19.7	18642.2098	38,910	10,405,003	
20-Aug-96	62 + 34.3	62 + 38.3	20466.9	Topopah Spring crystal poor middle nonlithophysal zone	4	13.1	18655.3098	34,170	10,439,173	
21-Aug-96	62 + 38.3	62 + 45.7	20491.1	Topopah Spring crystal poor middle nonlithophysal zone	7.4	24.3	18679.6098	35,860	10,475,033	
22-Aug-96	62 + 45.7	62 + 64.0	20551.2	Topopah Spring crystal poor middle nonlithophysal zone	18.3	60	18739.6098	59,510	10,534,543	
23-Aug-96	62 + 64.0	62 + 81.6	20608.9	Topopah Spring crystal poor middle nonlithophysal zone	17.6	57.7	18797.3098	53,305	10,587,848	
24-Aug-96	62 + 81.6	62 + 81.6	20608.9	Topopah Spring crystal poor middle nonlithophysal zone	0	0	18797.3098	0	10,587,848	
25-Aug-96	62 + 81.6	62 + 81.6	20608.9	Topopah Spring crystal poor middle nonlithophysal zone	0	0	18797.3098	0	10,587,848	

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26-Aug-96	62 + 81.6	62 + 93.7	20648.6	Topopah Spring crystal poor middle nonlithophysal zone	12.1	39.7	18837.0098	43,305	10,631,153	
27-Aug-96	62 + 93.7	63 + 06.3	20690	Topopah Spring crystal poor middle nonlithophysal zone	12.6	41.3	18878.3098	48,950	10,680,103	
28-Aug-96	63 + 06.3	63 + 25.0	20751.3	Topopah Spring crystal poor upper lithophysal	18.7	61.4	18939.7098	49,598	10,729,701	
29-Aug-96	63 + 25.0	63 + 47.1	20823.8	Topopah Spring crystal poor upper lithophysal	22.1	72.5	19012.2098	59,242	10,788,943	
30-Aug-96	63 + 47.1	63 + 47.1	20823.8	Topopah Spring crystal poor upper lithophysal	0	0	19012.2098	16,735	10,805,678	TBM shut down for ventilation
31-Aug-96	63 + 47.1	63 + 47.1	20823.8	Topopah Spring crystal poor upper lithophysal	0	0	19012.2098		10,805,678	TBM shut down for ventilation
01-Sep-96	63 + 47.1	63 + 47.1	20823.8	Topopah Spring crystal poor upper lithophysal	0	0	19012.2098		10,805,678	TBM shut down for ventilation
02-Sep-96	63 + 47.1	63 + 47.1	20823.8	Topopah Spring crystal poor upper lithophysal	0	0	19012.2098		10,805,678	TBM shut down for ventilation
03-Sep-96	63 + 47.1	63 + 47.1	20823.8	Topopah Spring crystal poor upper lithophysal	0	0	19012.2098	0	10,805,678	TBM shut down for ventilation
04-Sep-96	63 + 47.1	63 + 47.1	20823.8	Topopah Spring crystal poor upper lithophysal	0	0	19012.2098	11,879	10,817,557	TBM shut down for ventilation
05-Sep-96	63 + 47.1	63 + 47.1	20823.8	Topopah Spring crystal poor upper lithophysal	0	0	19012.2098	17,911	10,835,468	TBM shut down for ventilation
06-Sep-96	63 + 47.1	63 + 47.1	20823.8	Topopah Spring crystal poor upper lithophysal	0	0	19012.2098	7,583	10,843,051	
07-Sep-96	63 + 47.1	63 + 47.1	20823.8	Topopah Spring crystal poor upper lithophysal	0	0	19012.2098	14,272	10,857,323	
08-Sep-96	63 + 47.1	63 + 47.1	20823.8	Topopah Spring crystal poor upper lithophysal	0	0	19012.2098		10,857,323	
09-Sep-96	63 + 47.1	63 + 47.1	20823.8	Topopah Spring crystal poor upper lithophysal	0	0	19012.2098		10,857,323	
10-Sep-96	63 + 47.1	63 + 47.1	20823.8	Topopah Spring crystal poor upper lithophysal	0	0	19012.2098		10,857,323	TBM shut down for ventilation/sealing leaks
11-Sep-96	63 + 47.1	63 + 47.1	20823.8	Topopah Spring crystal poor upper lithophysal	0	0	19012.2098		10,857,323	
12-Sep-96	63 + 47.1	63 + 47.1	20823.8	Topopah Spring crystal poor upper lithophysal	0	0	19012.2098		10,857,323	
13-Sep-96	63 + 47.1	63 + 54.1	20846.8	Topopah Spring crystal poor upper lithophysal	2.3	7.7	19019.9098		10,857,323	
14-Sep-96	63 + 54.1	63 + 54.1	20846.8	Topopah Spring crystal poor upper lithophysal	0	0	19019.9098		10,857,323	
15-Sep-96	63 + 54.1	63 + 54.1	20846.8	Topopah Spring crystal poor upper lithophysal	0	0	19019.9098		10,857,323	
16-Sep-96	63 + 54.1	63 + 63.4	20877.3	Topopah Spring crystal poor upper lithophysal	9.3	30.5	19050.4098		10,857,323	
17-Sep-96	63 + 63.4	63 + 72.7	20907.8	Topopah Spring crystal poor upper lithophysal	3.1	10.2	19060.6098		10,857,323	
18-Sep-96	63 + 72.7	63 + 82.6	20940.3	Topopah Spring crystal poor upper lithophysal	9.9	32.5	19093.1098		10,857,323	
19-Sep-96	63 + 82.6	63 + 91.7	20970.1	Topopah Spring crystal poor upper lithophysal	9.1	29.9	19123.0098		10,857,323	
20-Sep-96	63 + 91.7	63 + 96.4	20985.6	Topopah Spring crystal poor upper lithophysal	4.7	15.4	19138.4098		10,857,323	
21-Sep-96	63 + 96.4	63 + 96.4	20985.6	Topopah Spring crystal poor upper lithophysal	0	0	19138.4098		10,857,323	
22-Sep-96	63 + 96.4	63 + 96.4	20985.6	Topopah Spring crystal poor upper lithophysal	0	0	19138.4098		10,857,323	
23-Sep-96	63 + 96.4	64 + 20.4	21064.3	Topopah Spring crystal poor upper lithophysal	8	26.2	19164.6098	50,410	10,907,733	
24-Sep-96	64 + 20.4	64 + 35.7	21114.5	Topopah Spring crystal poor upper lithophysal	15.3	50.2	19214.8098	34,410	10,942,143	
25-Sep-96	64 + 35.7	64 + 48.5	21156.5	Topopah Spring crystal poor upper lithophysal	12.8	42	19256.8098	37,160	10,979,303	
26-Sep-96	64 + 48.5	64 + 65.1	21211	Topopah Spring crystal poor upper lithophysal	16.6	54.5	19311.3098	34,000	11,013,303	
27-Sep-96	64 + 65.1	64 + 77.8	21252.6	Topopah Spring crystal rich lithophysal	12.7	41.7	19353.0098	35,820	11,049,123	
28-Sep-96	64 + 77.8	64 + 77.8	21252.6	Topopah Spring crystal rich lithophysal	0	0	19353.0098	1,819	11,050,942	
29-Sep-96	64 + 77.8	64 + 77.8	21252.6	Topopah Spring crystal rich lithophysal	0	0	19353.0098	0	11,050,942	
30-Sep-96	64 + 77.8	64 + 77.8	21252.6	Topopah Spring crystal rich lithophysal	0	0	19353.0098	8,111	11,059,053	Completed topsoil removal on South Portal Access road
01-Oct-96	64 + 77.8	64 + 77.8	21252.6	Topopah Spring crystal rich lithophysal	0	0	19353.0098	13,500	11,072,553	
02-Oct-96	64 + 77.8	64 + 77.8	21252.6	Topopah Spring crystal rich lithophysal	0	0	19353.0098	11,550	11,084,103	
03-Oct-96	64 + 77.8	64 + 77.8	21252.6	Topopah Spring crystal rich lithophysal	0	0	19353.0098	14,078	11,098,181	
04-Oct-96	64 + 77.8	64 + 77.8	21252.6	Topopah Spring crystal rich lithophysal	0	0	19353.0098	15,684	11,113,865	
05-Oct-96	64 + 77.8	64 + 77.8	21252.6	Topopah Spring crystal rich lithophysal	0	0	19353.0098	12,717	11,126,582	
06-Oct-96	64 + 77.8	64 + 77.8	21252.6	Topopah Spring crystal rich lithophysal	0	0	19353.0098	0	11,126,582	
07-Oct-96	64 + 77.8	65 + 02.3	21333	Topopah Spring crystal rich lithophysal	24.5	80.4	19433.4098	46,996	11,173,578	
08-Oct-96	65 + 02.3	65 + 35.7	21442.6	Topopah Spring crystal rich nonlithophysal	33.4	109.6	19543.0098	57,885	11,231,463	
09-Oct-96	65 + 35.7	65 + 63.0	21532.2	Topopah Spring crystal rich nonlithophysal	27.3	89.6	19632.6098	52,399	11,283,862	
10-Oct-96	65 + 63.0	65 + 90.7	21623	Topopah Spring crystal rich nonlithophysal	27.7	90.9	19723.5098	54,701	11,338,563	
11-Oct-96	65 + 90.7	66 + 14.0	21669.5	Topopah Spring crystal rich nonlithophysal	23.3	76.4	19799.9098	55,615	11,394,178	
12-Oct-96	66 + 14.0	66 + 14.0	21669.5	Topopah Spring crystal rich nonlithophysal	0	0	19799.9098	0	11,394,178	
13-Oct-96	66 + 14.0	66 + 14.0	21669.5	Topopah Spring crystal rich nonlithophysal	0	0	19799.9098	0	11,394,178	
14-Oct-96	66 + 14.0	66 + 49.2	21815	Topopah Spring vitric	35.2	115.5	19915.4098	74,050	11,468,228	PTn contact @ 66 + 38
15-Oct-96	66 + 49.2	66 + 61.3	21854.7	Pre-Pah Canyon bedded tuffs	12.1	39.7	19955.1098	46,805	11,515,033	
16-Oct-96	66 + 61.3	66 + 75.7	21901.9		14.4	47.2	20002.3098	35,420	11,550,453	
17-Oct-96	66 +75.7	67 + 15.3	22031.8		39.6	129.9	20132.2098	72,919	11,623,372	
18-Oct-96	67 + 15.3	67 + 15.3	22031.8		0	0	20132.2098	3,776	11,627,148	
19-Oct-96	67 + 15.3	67 + 15.3	22031.8		0	0	20132.2098	4,635	11,631,783	
20-Oct-96	67 + 15.3	67 + 15.3	22031.8		0	0	20132.2098	0	11,631,783	
21-Oct-96	67 + 15.3	67 + 15.3	22031.8		0	0	20132.2098	12,064	11,643,847	
22-Oct-96	67 + 15.3	67 + 15.3	22031.8		0	0	20132.2098	12,016	11,655,863	
23-Oct-96	67 + 15.3	67 + 42.5	22122.1		27.2	89.2	20221.453	55,660	11,711,523	
24-Oct-96	67 + 42.5	67 + 66.5	22200.9		24	78.7	20300.197	76,130	11,787,653	

Water Usage History in the ESF Tunnel

25-Oct-96	67 + 66.5	67 + 66.5	22200.9		0	0	20300.197	15,250	11,802,903	
26-Oct-96	67 + 66.5	67 + 66.5	22200.9		0	0	20300.197	4,965	11,807,868	
27-Oct-96	67 + 66.5	67 + 66.5	22200.9		0	0	20300.197	0	11,807,868	
28-Oct-96	67 + 66.5	67 + 66.5	22200.9		0	0	20300.197	9,585	11,817,453	
29-Oct-96	67 + 66.5	67 + 66.5	22200.9		0	0	20300.197	17,750	11,835,203	
30-Oct-96							20300.197	55,190	11,890,393	
31-Oct-96	67 + 89.3	68 + 07.7	22336	Dune Wash fault	18.4	60.4	20360.597	56,742	11,947,135	
01-Nov-96	68 + 07.7	68 + 42.5	22450	Topopah Spring crystal poor upper lithophysal zone	34.8	114.2	20474.797	62,885	12,010,020	
02-Nov-96	68 + 42.5	68 + 42.5	22450	Topopah Spring crystal poor upper lithophysal zone	0	0	20474.797	0	12,010,020	
03-Nov-96	68 + 42.5	68 + 42.5	22450	Topopah Spring crystal poor upper lithophysal zone	0	0	20474.797	0	12,010,020	
04-Nov-96	68 + 42.5	68 + 67.0	22531	Topopah Spring crystal rich lithophysal zone	24.5	80.4	20555.197	55,193	12,065,213	
05-Nov-96	68 + 67.0	68 + 93.4	22617	Topopah Spring crystal rich lithophysal zone	26.4	86.6	20641.797	46,990	12,112,203	
06-Nov-96	68 + 93.4	68 + 93.4	22617	Topopah Spring crystal rich nonlithophysal zone	0	0	20641.797	11,054	12,123,257	
07-Nov-96	68 + 93.4	68 + 93.4	22617	Topopah Spring crystal rich nonlithophysal zone	0	0	20641.797	6,721	12,129,978	
08-Nov-96	68 + 93.4	68 + 93.4	22617	Topopah Spring crystal rich nonlithophysal zone	0	0	20641.797	9,705	12,139,683	
09-Nov-96	68 + 93.4	68 + 93.4	22617	Topopah Spring crystal rich nonlithophysal zone	0	0	20641.797	9,537	12,149,220	
10-Nov-96	68 + 93.4	68 + 93.4	22617	Topopah Spring crystal rich nonlithophysal zone	0	0	20641.797	0	12,149,220	
11-Nov-96	68 + 93.4	68 + 93.4	22617	Topopah Spring Crystal rich nonlithophysal zone	0	0	20641.797	0	12,149,220	
12-Nov-96	68 + 93.4	69 + 05.3	22656	Topopah Spring Crystal rich nonlithophysal zone	11.9	39	20680.797	30,428	12,179,648	
13-Nov-96	69 + 05.3	69 + 23.6	22716	Topopah Spring Crystal rich nonlithophysal zone	18.3	60	20740.797	52,174	12,231,822	
14-Nov-96	69 + 23.6	69 + 37.3	22761	Topopah spring Crystal rich nonlithophysal zone	13.7	44.9	20785.697	43,932	12,275,754	
15-Nov-96	69 + 37.3	69 + 62.1	22843	Topopah Spring Crystal rich nonlithophysal zone	24.8	81.4	20867.097	64,765	12,340,519	
16-Nov-96	69 + 62.1	69 + 62.1	22843	Topopah Spring Crystal rich nonlithophysal zone	0	0	20867.097	6,801	12,347,320	
17-Nov-96	69 + 62.1	69 + 62.1	22843	Topopah Spring Crystal rich nonlithophysal zone	0	0	20867.097	0	12,347,320	
18-Nov-96	69 + 62.1	69 + 70.6	22871	Topopah Spring Crystal rich nonlithophysal zone	8.5	27.9	20894.997	41,238	12,388,558	
19-Nov-96	69 + 70.6	69 + 79.2	22899	Topopah Spring Crystal rich nonlithophysal zone	8.6	28.2	20923.197	37,340	12,425,898	
20-Nov-96	69 + 79.2	70 + 01.4	22972	Topopah Spring crystal rich vitric zone	22.2	72.8	20995.997	39,060	12,464,978	
21-Nov-96	70 + 01.4	70 + 16.9	23022	Bedded tuffs	15.5	50.9	21046.897	37,712	12,502,690	
22-Nov-96	70 + 16.9	70 + 38.3	23093	Bedded tuffs	21.4	70.2	21117.097	56,277	12,558,967	
23-Nov-96	70 + 38.3	70 + 38.3	23093	Bedded tuffs	0	0	21117.097	6,036	12,565,003	
24-Nov-96	70 + 38.3	70 + 38.3	23093	Bedded tuffs	0	0	21117.097	0	12,565,003	
25-Nov-96							21117.097	46,177	12,611,180	
26-Nov-96	70 + 61.4	70 + 71.8	23203	Topopah Spring crystal poor middle nonlithophysal zone	10.4	34.1	21151.197	47,298	12,658,478	
27-Nov-96	70 + 71.8	70 + 71.8	23203	Topopah Spring crystal poor upper lithophysal zone	0	0	21151.197	25,492	12,683,970	Holiday shutdown
28-Nov-96	70 + 71.8	70 + 71.8	23203	Topopah Spring crystal poor upper lithophysal zone	0	0	21151.197	0	12,683,970	
29-Nov-96	70 + 71.8	70 + 71.8	23203	Topopah Spring crystal poor upper lithophysal zone	0	0	21151.197	0	12,683,970	
30-Nov-96	70 + 71.8	70 + 71.8	23203	Topopah Spring crystal poor upper lithophysal zone	0	0	21151.197	0	12,683,970	
01-Dec-96	70 + 71.8	70 + 71.8	23203	Topopah Spring crystal poor upper lithophysal zone	0	0	21151.197	0	12,683,970	
02-Dec-96	70 + 71.8	70 + 82.0		Topopah Spring crystal poor upper lithophysal zone			21151.197		12,683,970	
03-Dec-96	70 + 82.0	70 + 93.3	23273	Topopah Spring crystal poor upper lithophysal zone	11.3	37.1	21188.297		12,683,970	
04-Dec-96	70 + 93.3	70 + 94.4	23277	Topopah Spring crystal poor upper lithophysal zone	1.1	3.6	21191.897		12,683,970	
05-Dec-96	70 + 94.4	71 + 10.3	23329	Topopah Spring crystal poor upper lithophysal zone	15.9	52.2	21244.097		12,683,970	
06-Dec-96	71 + 10.3			Topopah Spring crystal poor upper lithophysal zone			21244.097		12,683,970	
07-Dec-96				Topopah Spring crystal poor upper lithophysal zone			21244.097		12,683,970	
08-Dec-96				Topopah Spring crystal poor upper lithophysal zone			21244.097		12,683,970	
09-Dec-96	71 + 18.9	71 + 21.0	23364	Topopah Spring crystal poor upper lithophysal zone	1.1	3.4	21247.497	30,394	12,714,364	
10-Dec-96	71 + 21.0	71 + 22.0	23367	Topopah Spring crystal poor upper lithophysal zone	1	3.3	21250.797	16,248	12,730,612	
11-Dec-96	71 + 22.0	71 + 22.0	23367	Topopah Spring crystal poor upper lithophysal zone	0	0	21250.797	8,231	12,738,843	
12-Dec-96	71 + 22.0	71 + 23.4	23372	Topopah Spring crystal poor upper lithophysal zone	1.4	4.6	21255.397	24,044	12,762,887	
13-Dec-96	71 + 23.43	71 + 24.55	23375.6	Topopah Spring crystal poor upper lithophysal zone	1.12		21255.397	32,512	12,795,399	
14-Dec-96	71 + 24.55	71 + 24.55	23375.6	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397	1,513	12,796,912	
15-Dec-96	71 + 24.55	71 + 24.55	23375.6	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397	0	12,796,912	
16-Dec-96	71 + 24.55	71 + 26.01	23380.4	Topopah Spring crystal poor upper lithophysal zone	1.46		21255.397	28,227	12,825,139	
17-Dec-96	71 + 26.01	71 + 26.62	23382.4	Topopah Spring crystal poor upper lithophysal zone	0.61		21255.397	27,970	12,853,109	
18-Dec-96	71 + 26.62	71 + 28.76	23389.4	Topopah Spring crystal poor upper lithophysal zone	2.14		21255.397	29,167	12,882,276	
19-Dec-96	71 + 28.76	71 + 28.76	23289.4	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397	26,347	12,908,623	
20-Dec-96	71 + 28.76	71 + 30.06	23393.7	Topopah Spring crystal poor upper lithophysal zone	1.3		21255.397	15,981	12,924,604	
21-Dec-96	71 + 30.06	71 + 30.06	23393.7	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397	1,477	12,926,081	
22-Dec-96	71 + 30.06	71 + 30.06	23393.7	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397	0	12,926,081	
23-Dec-96	71 + 30.06	71 + 30.06	23393.7	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397	5,647	12,931,728	
24-Dec-96	71 + 30.06	71 + 30.06	23393.7	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397	6,296	12,938,024	
25-Dec-96	71 + 30.06	71 + 30.06	23393.7	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397	0	12,938,024	

Water Usage History in the ESF Tunnel

26-Dec-96	71 + 30.06	71 + 30.06	23393.7	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397	0	12,938,024	
27-Dec-96	71 + 30.06	71 + 30.06	23393.7	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397	0	12,938,024	
28-Dec-96	71 + 30.06	71 + 30.06	23393.7	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397	0	12,938,024	
29-Dec-96	71 + 30.06	71 + 30.06	23393.7	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397	0	12,938,024	
30-Dec-96	71 + 30.76	71 + 30.76	23396	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397		12,938,024	
31-Dec-96				Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397		12,938,024	
01-Jan-97	71 + 30.76	71 + 30.76	23396	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397		12,938,024	
02-Jan-97	71 + 30.76	71 + 30.76	23396	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397		12,938,024	
03-Jan-97	71 + 30.76	71 + 30.76	23396	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397		12,938,024	
04-Jan-97	71 + 30.76	71 + 30.76	23396	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397		12,938,024	
05-Jan-97	71 + 30.76	71 + 30.76	23396	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397		12,938,024	
06-Jan-97	71 + 30.76	71 + 30.76	23396	Topopah Spring crystal poor upper lithophysal zone	0	0	21255.397	22,795	12,960,819	
07-Jan-97	71 + 30.76	71+ 31.45	23398.3	Topopah Spring crystal poor upper lithophysal zone	0.69	2.3	21257.697	37,224	12,998,043	
08-Jan-97	71 + 31.45	71 + 33.16	23403.9	Topopah Spring crystal poor upper lithophysal zone	1.7	5.6	21263.297	37,364	13,035,407	
09-Jan-97	71 + 33.16	71 + 34.97	23409.8	Topopah Spring crystal poor upper lithophysal zone	1.81	5.9	21269.197	38,651	13,074,058	
10-Jan-97	71 + 34.97	71 + 34.97	23409.8	Topopah Spring crystal poor upper lithophysal zone	0	0	21269.197	26,427	13,100,485	
11-Jan-97	71 + 34.97	71 + 34.97	23409.8	Topopah Spring crystal poor upper lithophysal zone	0	0	21269.197	14,177	13,114,662	
12-Jan-97	71 + 34.97	71 + 34.97	23409.8	Topopah Spring crystal poor upper lithophysal zone	0	0	21269.197	0	13,114,662	
13-Jan-97	71 + 34.97	71 + 35.46	23411.1	Topopah Spring crystal poor upper lithophysal zone	0.49	1.6	21270.797	45,605	13,160,267	
14-Jan-97	71 + 35.46	71 + 36.50	23414.8	Topopah Spring crystal poor upper lithophysal zone	1.04	3.4	21274.197	41,607	13,201,874	
15-Jan-97	71 + 36.50	71 + 37.11	23416.8	Topopah Spring crystal poor upper lithophysal zone	0.61	2	21276.197	35,959	13,237,833	
16-Jan-97	71 + 37.11	71 + 37.60	23418.4	Topopah Spring crystal poor upper lithophysal zone	0.49	1.6	21277.797	32,789	13,270,622	
17-Jan-97	71 + 37.60	71 + 37.60	23418.4	Topopah Spring crystal poor upper lithophysal zone	0	0	21277.797	41,005	13,311,627	
18-Jan-97	71 + 37.60	71 + 37.60	23418.4	Topopah Spring crystal poor upper lithophysal zone	0	0	21277.797	37,066	13,348,693	
19-Jan-97	71 + 37.60	71 + 37.60	23418.8	Topopah Spring crystal poor upper lithophysal zone	0	0	21277.797	0	13,348,693	
20-Jan-97	71 + 37.60			Topopah Spring crystal poor upper lithophysal zone			21277.797	39,041	13,387,734	
21-Jan-97				Topopah Spring crystal poor upper lithophysal zone			21277.797	18,949	13,406,683	
22-Jan-97	71 + 39.61	71 + 40.71	23428.7	Topopah Spring crystal poor upper lithophysal zone	1.1	3.7	21281.497	36,160	13,442,843	
23-Jan-97	71 + 40.71	71 + 41.40	23430.9	Topopah Spring crystal poor upper lithophysal zone	0.69	2.2	21283.697	30,774	13,473,617	
24-Jan-97	71 + 41.40	71 + 42.62	23434.9	Topopah Spring crystal poor upper lithophysal zone	1.22	4	21287.697	36,235	13,509,852	
25-Jan-97	71 + 42.62	71 + 43.34	23437.3	Topopah Spring crystal poor upper lithophysal zone	0.72	2.4	21290.097	30,633	13,540,485	
26-Jan-97	71 + 43.34	71 + 43.34	23137.3	Topopah Spring crystal poor upper lithophysal zone	0	0	21290.097	0	13,540,485	
27-Jan-97	71 + 43.34	71 + 44.87	23442.3	Topopah Spring crystal poor upper lithophysal zone	1.53	5	21295.097	31,943	13,572,428	
28-Jan-97	71 + 44.87	71 + 45.60	23444.7	Topopah Spring crystal poor upper lithophysal zone	0.73	2.4	21297.497	20,133	13,592,561	
29-Jan-97	71 + 45.60	71 + 46.86	23448.8	Topopah Spring crystal poor upper lithophysal zone	1.26	4.1	21301.597	16,046	13,608,607	
30-Jan-97	71 + 46.86	71 + 49.89	23458.7	Topopah Spring crystal poor upper lithophysal zone	3.03	9.9	21311.497	28,541	13,637,148	
31-Jan-97	71 + 49.89	71 + 53.34	23470	Topopah Spring crystal poor upper lithophysal zone	3.45	11.3	21322.797	22,556	13,659,704	Tptpul
01-Feb-97	71 + 53.34	71 + 53.34	23470	Topopah Spring crystal poor upper lithophysal zone	0	0	21322.797	0	13,659,704	Tptpul
02-Feb-97	71 + 53.34	71 + 53.34	23470	Topopah Spring crystal poor upper lithophysal zone	0	0	21322.797	0	13,659,704	Tptpul
03-Feb-97	71+ 53.34	71 + 60.6	23493.9	Topopah Spring crystal poor upper lithophysal zone	7.26	16.8	21339.597	29,710	13,689,414	Tptpul
04-Feb-97	71 + 60.60	71 + 77.20	23548.4	Topopah Spring crystal poor upper lithophysal zone	16.6	54.4	21393.997	31,558	13,720,972	Tptpul
05-Feb-97	71 + 77.20	72 + 03.81	23635.7	Topopah Spring crystal poor upper lithophysal zone	26.61	87.3	21481.297	56,235	13,777,207	Tptpul
06-Feb-97	72 + 03.81	72 + 25.85	23708	Topopah Spring crystal poor upper lithophysal zone	22.04	72.3	21553.597	45,627	13,822,834	Tptpul
07-Feb-97	72 + 25.85	72 + 52.59	23795.7	Topopah Spring crystal poor upper lithophysal zone	26.74	87.7	21641.297	53,568	13,876,402	Tptpul
08-Feb-97	72 + 52.59	72 + 52.59	23795.7	Topopah Spring crystal poor upper lithophysal zone	0	0	21641.297	3,420	13,879,822	Tptpul
09-Feb-97	72 + 52.59	72 + 52.59	23795.7	Topopah Spring crystal poor upper lithophysal zone	0	0	21641.297	0	13,879,822	Tptpul
10-Feb-97	72 + 52.59	72 + 72.82	23862.1	Topopah Spring crystal poor upper lithophysal zone	20.23	66.4	21707.697	33,040	13,912,862	Tptpul
11-Feb-97	72 + 72.82	72 + 82.52	23893.9	Topopah Spring crystal poor upper lithophysal zone	9.7	31.8	21739.497	29,260	13,942,122	Tptpul
12-Feb-97	72 + 82.52	72 + 87.92	23911.6	Topopah Spring crystal poor upper lithophysal zone	5.4	17.7	21757.197	28,913	13,971,035	Tptpul
13-Feb-97	72 + 87.92	72 + 94.74	23934	Topopah Spring crystal poor upper lithophysal zone	6.82	22.4	21779.597	40,057	14,011,092	Tptpul
14-Feb-97	72 + 94.74	72 + 94.74	23934	Topopah Spring crystal poor upper lithophysal zone	0	0	21779.597	38,736	14,049,828	Tptpul
15-Feb-97	72 + 94.74	73 + 07.75	23976.7	Topopah Spring crystal poor upper lithophysal zone	13.01	42.7	21822.297	0	14,049,828	Tptpul
16-Feb-97	73 + 07.75	73 + 07.75	23976.7	Topopah Spring crystal poor upper lithophysal zone	0	0	21822.297	0	14,049,828	Tptpul
17-Feb-97	73 + 07.75	73 + 07.75	23976.7	Topopah Spring crystal poor upper lithophysal zone	0	0	21822.297	0	14,049,828	Tptpul
18-Feb-97	73 + 07.75	73 + 28.19	24043.7	Topopah Spring crystal poor upper lithophysal zone	20.44	67	21889.297	49,234	14,099,062	Tptpul
19-Feb-97	73 + 28.19	73 + 54.92	24043.7	Topopah Spring crystal poor upper lithophysal zone	26.73	87.7	21976.997	43,410	14,142,472	Tptpul
20-Feb-97	73 + 54.92	73 + 87.64	24238.8	Topopah Spring crystal poor upper lithophysal zone	32.72	107.4	22084.397	54,390	14,196,862	Tptpul
21-Feb-97	73 + 87.64	74 + 11.90	24318.4	Topopah Spring crystal poor upper lithophysal zone	24.26	79.6	22163.997	45,666	14,242,528	Tptpul
22-Feb-97	74 + 11.90	74 + 11.90	24318.4	Topopah Spring crystal poor upper lithophysal zone	0	0	22163.997	10,124	14,252,652	
23-Feb-97	74 + 11.90	74 + 11.90	24318.4	Topopah Spring crystal poor upper lithophysal zone	0	0	22163.997	0	14,252,652	
24-Feb-97	74 + 11.90	74 + 61.08	24479.8	Topopah Spring crystal poor upper lithophysal zone	49.18	161.4	22325.397	55,730	14,308,382	
25-Feb-97	74 + 61.08	74 + 90.96	24577.8	Topopah Spring crystal poor upper lithophysal zone	29.88	98	22423.397	49,870	14,358,252	

Water Usage History in the ESF Tunnel

26-Feb-97	74 + 90.96	75 + 14.28	24654.3		23.32	76.5	22499.897	58,277	14,416,529	
27-Feb-97	75 + 14.28	75 + 28.97	24702.5		14.69	48.2	22548.097	42,311	14,458,840	
28-Feb-97	75 + 28.97	75 + 34.09	24719.3		5.12	16.8	22564.897	22,802	14,481,642	
01-Mar-97	75 + 34.09	75 + 34.09	24702.5		0	0	22564.897	0	14,481,642	
02-Mar-97	75 + 34.09	75 + 34.09	24702.5		0	0	22564.897	0	14,481,642	
03-Mar-97	75 + 34.09	75 + 41.17	24742.5		7.06	23.2	22588.097		14,481,642	Tpcpv
04-Mar-97	75 + 41.17	75 + 74.51	24851.9		33.34	109.4	22697.497		14,481,642	Tpcpv
05-Mar-97	75 + 74.51	75 + 88.0	24896.6		13.59	44.6	22742.097		14,481,642	Tpcpv
06-Mar-97	75 + 88.10	76 + 20.22	25001.9		32.12	105.4	22847.497		14,481,642	Tpcpv
07-Mar-97	76 + 20.22	76 + 46.39	25087.8		26.17	85.9	22933.397		14,481,642	Tpcpv
08-Mar-97	76 + 46.39	76 + 46.39	25087.8		0	0	22933.397		14,481,642	Tpcpv
09-Mar-97	76 + 46.39	76 + 46.39	25087.8		0	0	22933.397		14,481,642	Tpcpv
10-Mar-97	76 + 46.39	76 + 58.94	25128.9		12.55	41.1	22974.497	57,731	14,539,373	
11-Mar-97	76 + 58.94	76 + 77.29	25189.1		18.35	60.2	23034.697	59,311	14,598,684	
12-Mar-97	76 + 77.29	76 + 88.18	25224.8		10.89	35.73	23070.427	61,822	14,660,506	
13-Mar-97	76 + 88.18	76 + 90.48	25232.5		2.3	7.56	23077.987	0	14,660,506	
14-Mar-97	76 + 90.48	76 + 90.48	25232.5	Tpcpln	0	0	23077.987	32,949	14,693,455	
15-Mar-97	76 + 90.48	76 + 98.12	25257.5	Tpcpln	7.64	25	23102.987	0	14,693,455	
16-Mar-97	76 + 98.12	76 + 98.12	25257.5	Tpcpln	0	0	23102.987	0	14,693,455	
17-Mar-97	76 + 98.12	77 + 15.04	25313	Tpcpln	16.92	55.5	23158.487	49,850	14,743,305	
18-Mar-97	77 + 15.04	77 + 18.58	25324.6	Tpcpmn	3.54	11.6	23170.087	18,995	14,762,300	
19-Mar-97	77 + 18.58	77 + 21.10	25332.9		2.52	8.3	23178.387	10,406	14,772,706	Tpcpmn
20-Mar-97	77 + 21.10	77 + 23.62	25341.1		2.52	8.2	23186.587	8,266	14,780,972	
21-Mar-97	77 + 23.62	77 + 27.39	25353.5		3.77	12.4	23198.987	16,267	14,797,239	
22-Mar-97	77 + 27.39	77 + 30.81	25364.7		3.42	11.2	23210.187	23,344	14,820,583	
23-Mar-97	77 + 30.81	77 + 30.81	25364.7		0	0	23210.187	0	14,820,583	
24-Mar-97	77 + 30.81	77 + 33.28	25372.8	Tpcpmn	2.47	8.1	23218.287	12,912	14,833,495	
25-Mar-97	77 + 33.28	77 + 36.92	25384.7	Tpcpmn	3.64	11.9	23230.187	21,577	14,855,072	
26-Mar-97	77 + 36.92	77 + 40.75	25397.4	Tpcpmn	3.83	12.6	23242.787	37,478	14,892,550	
27-Mar-97	77 + 40.75	77 + 42.38	25402.7	Tpcpmn	1.63	5.3	23248.087	21,667	14,914,217	
28-Mar-97	77 + 42.38	77 + 42.38	25402.7	Tpcpmn	0	0	23248.087	8,114	14,922,331	
29-Mar-97	77 + 42.38	77 + 42.38	25402.7	Tpcpmn	0	0	23248.087	0	14,922,331	
30-Mar-97	77 + 42.38	77 + 42.38	25402.7	Tpcpmn	0	0	23248.087	0	14,922,331	
31-Mar-97	77 + 42.38	77 + 45.66	25413.5	Tpcpmn	3.28	10.8	23258.887	24,686	14,947,017	
01-Apr-97	77 + 45.66	77 + 46.80	25417.2	Tpcpmn	1.14	3.7	23262.587	35,077	14,982,094	
02-Apr-97	77 + 46.80	77 + 50.49	25429.3	Tpcpmn	3.69	12.1	23274.687	19,489	15,001,583	
03-Apr-97	77 + 50.49	77 + 60.38	25461.08	Tpcpmn	9.89	32.4	23307.067	37,312	15,038,895	
04-Apr-97	77 + 60.38	77 + 75.05	25509.9	Tiva Canyon crystal poor middle nonlithophysal	14.67	48.1	23355.187	35,272	15,074,167	
05-Apr-97	77 + 75.05	77 + 87.38	25550.4	Tiva Canyon crystal poor middle nonlithophysal	12.33	40.5	23395.687	50,658	15,124,825	
06-Apr-97	77 + 87.38	77 + 87.38	25550.4	Tiva Canyon crystal poor middle nonlithophysal	0	0	23395.687	0	15,124,825	
07-Apr-97	77 + 87.38	78 + 04.30	25605.9	Tiva Canyon crystal poor middle nonlithophysal	16.92	55.5	23451.187	59,297	15,184,122	
08-Apr-97	78 + 04.30	78 + 18.92	25653.8	Tiva Canyon crystal poor middle nonlithophysal	14.62	47.9	23499.087	44,033	15,228,155	
09-Apr-97	78 + 18.92	78 + 29.68	25689.1	Tiva Canyon crystal poor middle nonlithophysal	10.76	35.4	23534.487	48,789	15,276,944	
10-Apr-97	78 + 29.68	78 + 33.52	25701.8	Tiva Canyon crystal poor middle nonlithophysal	3.84	12.6	23547.087	21,711	15,298,655	
11-Apr-97	78 + 33.52	78 + 37.05	25713.3	Tiva Canyon crystal poor middle nonlithophysal	3.53	12.6	23559.687	46,512	15,345,167	
12-Apr-97	78 + 37.05	78 + 37.05	25713.3	Tiva Canyon crystal poor middle nonlithophysal	0	0	23559.687	7,068	15,352,235	
13-Apr-97	78 + 37.05	78 + 37.05	25713.3	Tiva Canyon crystal poor middle nonlithophysal	0	0	23559.687	0	15,352,235	
14-Apr-97	78 + 37.05	78 + 51.33	25760.2	Tiva Canyon crystal poor middle nonlithophysal	14.28	46.9	23606.587	53,295	15,405,530	
15-Apr-97	78 + 51.33	78 + 73.03	25813.4	Tiva Canyon crystal poor middle nonlithophysal	21.7	71.2	23677.787	90,600	15,496,130	
16-Apr-97	78 + 73.03	78 + 73.03	25831.4	Tiva Canyon crystal poor middle nonlithophysal	0	0	23677.787	31,355	15,527,485	
17-Apr-97	78 + 73.03	78 + 73.03	25831.4	Tiva Canyon crystal poor middle nonlithophysal	0	0	23677.787	19,680	15,547,165	
18-Apr-97	78 + 73.03	78 + 73.03	25831.4	Tiva Canyon crystal poor middle nonlithophysal	0	0	23677.787	25,624	15,572,789	
19-Apr-97	78 + 73.03	78 + 73.03	25831.4	Tiva Canyon crystal poor middle nonlithophysal	0	0	23677.787	0	15,572,789	
20-Apr-97	78 + 73.03	78 + 73.03	25831.4	Tiva Canyon crystal poor middle nonlithophysal	0	0	23677.787	0	15,572,789	
21-Apr-97	78 + 73.03	78 + 73.03	25831.4	Tiva Canyon crystal poor middle nonlithophysal	0	0	23677.787	19,668	15,592,457	
22-Apr-97	78 + 73.03	78 + 73.03	25831.4	Tiva Canyon crystal poor middle nonlithophysal	0	0	23677.787	29,803	15,622,260	
23-Apr-97	78 + 73.03	78 + 73.03	25831.4	Tiva Canyon crystal poor middle nonlithophysal	0	0	23677.787	32,973	15,655,233	
24-Apr-97	78 + 73.03	78 + 73.03	25831.4	Tpcpul	0	0	23677.787	24,800	15,680,033	
25-Apr-97	78 + 73.03	78 + 77.03	25844.5	Tpcpul	4	13.1	23690.887	33,928	15,713,961	
26-Apr-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		10,559	15,724,520	
27-Apr-97	78 + 77.03	78 + 77.06	25844.5	Tpcpul	0	0		0	15,724,520	
28-Apr-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		25,902	15,750,422	

Water Usage History in the ESF Tunnel

29-Apr-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	18,845	15,769,267	
30-Apr-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	22,811	15,792,078	
01-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	24,267	15,816,345	
02-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	26,050	15,842,395	
03-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	9,348	15,851,743	
04-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	0	15,851,743	
05-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	25,346	15,877,089	
06-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	13,300	15,890,389	
07-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	27,333	15,917,722	
08-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	21,489	15,939,211	
09-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	27,934	15,967,145	
10-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	0	15,967,145	
11-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	0	15,967,145	
12-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	19,411	15,986,556	
13-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	20,193	16,006,749	
14-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	16,540	16,023,289	
15-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	19,106	16,042,395	
16-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	17,974	16,060,369	
17-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	0	16,060,369	
18-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	0	16,060,369	
19-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	22,409	16,082,778	
20-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	23,678	16,106,456	
21-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	17,833	16,124,289	
22-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	24,459	16,148,748	
23-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	6,567	16,155,315	
24-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	0	16,155,315	
25-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	0	16,155,315	
26-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	0	16,155,315	
27-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	18,270	16,173,585	
28-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	26,040	16,199,625	NEW WATER METER
29-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	20,494	16,220,119	
30-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	17,900	16,238,019	
31-May-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	0	16,238,019	
01-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	0	16,238,019	
02-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		16,238,019	
03-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		16,238,019	
04-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		16,238,019	
05-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		16,238,019	
06-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		16,238,019	
07-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		16,238,019	
08-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		16,238,019	
09-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	14,785	16,252,804	
10-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	11,885	16,264,689	
11-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	7,869	16,272,558	
12-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	7,771	16,280,329	
13-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	9,570	16,289,899	
14-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	0	16,289,899	
15-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	0	16,289,899	
16-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	6,265	16,296,164	Day shift spent on dust control, WETTING DOWN INVERTS. GY SHIFT MOBILIZED SCRUBBER FOR DUST CONTROL IN TUNNEL.
17-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	18,015	16,314,179	DAY SHIFT CONTINUED WETTING TUNNEL INVERT FOR DUST CONTROL.
18-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	13,570	16,327,749	DAY SHIFT CONTINUED WETTING TUNNEL INVERT FOR DUST CONTROL
19-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0	13,135	16,340,884	

Water Usage History in the ESF Tunnel

20-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		7,365	16,348,249	DAY SHIFT CONTINUED WETTING TUNNEL INVERT FOR DUST CONTROL
21-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		0	16,348,249	
22-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		0	16,348,249	
23-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		24,740	16,372,989	DAY SHIFT CONTINUED WETTING TUNNEL INVERT FOR DUST CONTROL
24-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		13,030	16,386,019	
25-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		7,745	16,393,764	DAY SHIFT CONTINUED WETTING TUNNEL INVERT FOR DUST CONTROL
26-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		9,583	16,403,347	
27-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		872	16,404,219	DAY SHIFT CONTINUED WETTING TUNNEL INVERT FOR DUST CONTROL
28-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		0	16,404,219	
29-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		0	16,404,219	
30-Jun-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		9,641	16,413,860	DAY SHIFT CONTINUED WETTING TUNNEL INVERT FOR DUST CONTROL
01-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		2,459	16,416,319	DAY SHIFT CONTINUED WETTING TUNNEL INVERT FOR DUST CONTROL
02-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		3,800	16,420,119	DAY SHIFT CONTINUED WETTING TUNNEL INVERT FOR DUST CONTROL
03-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		555	16,420,674	DAY SHIFT CONTINUED WETTING TUNNEL INVERT FOR DUST CONTROL
04-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		0	16,420,674	
05-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		0	16,420,674	
06-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		0	16,420,674	
07-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		680	16,421,354	DAY SHIFT CONTINUED WETTING TUNNEL INVERT FOR DUST CONTROL
08-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		1,175	16,422,529	DAY SHIFT CONTINUED WETTING TUNNEL INVERT FOR DUST CONTROL
09-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		3,000	16,425,529	[redacted]
10-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		65	16,425,594	Cleaning invert using vacuum
11-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		1,445	16,427,039	Vacuuming tunnel invert between Alcove 2 & 3
12-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		0	16,427,039	
13-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		0	16,427,039	
14-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		1,480	16,428,519	Vacuuming tunnel invert between Alcove 2 & 3
15-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		40	16,428,559	
16-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		1,090	16,429,649	
17-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		6,405	16,436,054	DAY SHIFT WETTING DOWN TUNNEL INVERT FOR DUST CONTROL.
18-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		3,272	16,439,326	DAY SHIFT WETTING DOWN TUNNEL INVERT FOR DUST CONTROL. Vacuumed tunnel invert between Alcoves 3 & 4.
19-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		0	16,439,326	
20-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		0	16,439,326	

Water Usage History in the ESF Tunnel

21-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		12,981	16,452,307	WETDOWN TUNNEL IVERT FOR DUST CONTROL. vacuumed TUNNEL INVERT BETWEEN ALCOVE 2 & 3
22-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		7,172	16,459,479	WETDOWN TUNNEL INVERT FOR DUST CONTROL.
23-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		8,905	16,468,384	Drilling TPN test holes in tunnel ~sta 61 + 65, Wetting down tunnel invert
24-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		8,265	16,476,649	Drilling TPN test holes in tunnel ~sta 61 + 65
25-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		11,075	16,487,724	Drilling TPN test holes 8 of 40 completed
26-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		0	16,487,724	
27-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		0	16,487,724	
28-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		17,015	16,504,739	Drilling TPN test holes. Wet down tunnel invert for dust control.
29-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		8,961	16,513,700	WET down invert for dust control
30-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		11,175	16,524,875	
31-Jul-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		12,913	16,537,788	
01-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		2,643	16,540,431	Coring PTN test holes
02-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		0	16,540,431	
03-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0	0		0	16,540,431	
04-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			12,597	16,553,028	Continued coring PTN test holes.
05-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			2,700	16,555,728	Continue PTN test holes. Wet down tunnel inverts for dust control
06-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			7,595	16,563,323	
07-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			748	16,564,071	Continue PTN test holes.
08-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			6,686	16,570,757	Continue PTN test holes. Wet down invert for dust control.
09-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,570,757	
10-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,570,757	
11-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			6,260	16,577,017	
12-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			6,645	16,583,662	Continue PTN test holes. Wet down invert for dust control.
13-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			1,058	16,584,720	
14-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			15,351	16,600,071	Core drilling PTn test holes.
15-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			12,535	16,612,606	Core drilling PTn test holes.
16-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			6,083	16,618,689	
17-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,618,689	
18-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			1,237	16,619,926	
19-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			12,804	16,632,730	Drilling PTN test holes. Wet down tunnel inverts for dust control
20-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			11,649	16,644,379	Drilling PTN test holes. Wet down tunnel inverts for dust control
21-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			1,369	16,645,748	Drilling Ptn test holes
22-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			7,028	16,652,776	
23-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,652,776	
24-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,652,776	
25-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			7,610	16,660,386	Drilling PTN test holes
26-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			3,600	16,663,986	Coring PTN test holes
27-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			10,985	16,674,971	Coring PTN test holes
28-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			7,678	16,682,649	Coring Ptn test holes
29-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			10,867	16,693,516	Continued PTN test holes
30-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,693,516	
31-Aug-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,693,516	
01-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,693,516	Holiday
02-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			5,081	16,698,597	CHANGE HOUSE BLDG #5008 OCCUPIED 9/2/97
03-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			6,391	16,704,988	
04-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			11,124	16,716,112	Coring Ptn Test Holes
05-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			12,991	16,729,103	
06-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,729,103	

Water Usage History in the ESF Tunnel

07-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,729,103	
08-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			7,538	16,736,641	Drilling Ptn holes. Wet down invert between Alcove 6 & 7 for dust control.
09-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			8,300	16,744,941	Completed Drilling Test holes #23, demobilized the drill.
10-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			8,255	16,753,196	Mobilizing to drill 5 moisture study holes
11-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			9,229	16,762,425	Began working the bulkhead at the South Portal.
12-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			16,007	16,778,432	Continued work on tunnel bulkhead
13-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,778,432	
14-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,778,432	
15-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			12,202	16,790,634	Continued work on tunnel bulkhead
16-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			10,274	16,800,908	
17-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			12,094	16,813,002	
18-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			4,515	16,817,517	
19-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			8,624	16,826,141	
20-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,826,141	
21-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,826,141	
22-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			1,591	16,827,732	
23-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			6,801	16,834,533	Worked on CCL list, replacing bent lagging at the steel sets #1145 & replacing bolts at steel set #1229.
24-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			651	16,835,184	Worked on CCL List
25-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			2,107	16,837,291	worked on CCL list
26-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			998	16,838,289	No construction activity, Moved in tail pulley for #4conveyor belt
27-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,838,289	
28-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,838,289	
29-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			2,892	16,841,181	Cut & laid back 34 conveyor belt, removed conveyor support brackets in preparation for installing conveyor tail pulley. Wet down invert for dust control.
30-Sep-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			1,350	16,842,531	Continued installation of tail pulley. Wet down invert for dust control. Started removing discharge line at south portal. Remove loading chute used for mucking niche #2 from tunnel conveyor.
01-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			2,332	16,844,863	Finished installation of main tunnel tail pulley , Wet down invert for dust control
02-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			1,703	16,846,566	Moved trailing floor cars #13 &14 out of tunnel at South Portal. Wet down the invert.
03-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			1,605	16,848,171	No construction activity
04-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,848,171	
05-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,848,171	
06-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			5,493	16,853,664	Hooking up power cables between the 2 Xfmrs @ Alcove 5, allowing for backup system for Alcove 5 in case of power loss in either circuit. Wet down invert for dust control
07-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			7,507	16,861,171	Wet down invert
08-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			6,623	16,867,794	Checking cables to DCS Cabinets & trouble shooting on high temp cables.
09-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			1,629	16,869,423	
10-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			1,238	16,870,661	Wet down invert
11-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,870,661	

Water Usage History in the ESF Tunnel

12-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,870,661	
13-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			2,674	16,873,335	Swing shift started to remove fish plates in preparation to remove the outside rails at North Portal.
14-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			1,254	16,874,589	Removed wood ramp @ South Portal & began removing TBM Cradle outside tunnel. Continued removing fish plates from outside rail at North Portal. ~300 m rail taken up for use in the ECRB.
15-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			1,587	16,876,176	Continue work on ramp @ South Portal, installing ramp steel beams.
16-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			1,704	16,877,880	Working on ramp @ South Portal.
17-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			679	16,878,559	Working on ramp @ South Portal installing rail & welding ramp to steel support beams..
18-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,878,559	
19-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,878,559	
20-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			1,151	16,879,710	Started removing boart rockbolt drills from TBM. Continued removal of fish plates from outside rails @ North Portal. AM-75 Alpine Miner shipped back.
21-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			1,087	16,880,797	Continue removing Boart Drills from TBM - These drills will be mounted on the TBM to be used for the ECRB. Removing fish plates from outside rails between Alcove 2 & 3.
22-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			2,349	16,883,146	Surveyors laid out walkway along rt.rib from North portal to Alcove#2. Picking up fish plates & track bolts.
23-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			282	16,883,428	
24-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			668	16,884,096	Continue removing rail from Sta. 3 +00 to 6 + 00.
25-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,884,096	
26-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,884,096	
27-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			1,468	16,885,564	
28-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			740	16,886,304	SEALED THE BULKHEAD AT STA. 75 + 00. Reconnecting power to booster fan #8, replaced 2 sections of vent line in front of bulkhead.
29-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			972	16,887,276	Removing outside rail from tunnel @ sta 8 +00 to 12 + 00
30-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			687	16,887,963	Installed Phone cables for Alcove #4 DCS units. Removing rail from Sta 12 + 00 to 14 + 00
31-Oct-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			1,786	16,889,749	Beefed up curtain on temporary bulkhead & extended ventline thru the temporary bulkhead.
01-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,889,749	
02-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,889,749	
03-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			7,226	16,896,975	Surveyors laying out walkway along rt.rib from North portal to Alcove#2.
04-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			6,538	16,903,513	Surveyors laying out walkway along rt.rib from North portal to Alcove#2. Wet down invert from Sta 67 + 00 to 75 + 00
05-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			20,083	16,923,596	BROKEN WATER HOSE IN ALCOVE #7 !!!!! Began excavating for tunnel bulkhead @ Sta 78 + 50.

Water Usage History in the ESF Tunnel

06-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			3,175	16,926,771	Chipping rib for bulkhead frame @ Sta 78 + 50. Installed access door thru the temp bulkhead @ 75 + 00. Continue excavating for bulkhead frame on ribs @ Sta 78 + 50.3.
07-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			2,260	16,929,031	Surveyors laid out control for Niche #3 @ Sta. 31 + 06.9.
08-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,929,031	
09-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,929,031	
10-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			600	16,929,631	Continue Layout of Niche #3 & installed switch @ South Portal.
11-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,929,631	Holiday
12-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			617	16,930,248	Installed protective cover over power cables across ECRB start tunnel. Finish installing switch @ S. Portal. Removed outside rails in tunnel from Sta 14 +00 – 16 + 00, Working on bulkhead.
13-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			673	16,930,921	Installing plywood over electrical cables across from ECRB to protect cables from blasting. Surveyors layout ECRB & control for test holes @ Niche #3. Installing power cable to south portal shack.
14-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			1,460	16,932,381	
15-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,932,381	
16-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,932,381	
17-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			2,809	16,935,190	Installing convey #4 Tail Pulley @ Sta 19 + 73. Installed Xfmr platform Sta 19 +50.
18-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			762	16,935,952	Continue layout of ECRB Bulkhead, worked on tail pulley bracing, removed conveyor support brackets in the ECRB starter tunnel area.Removing air, water, and discharge lines across ECRB area & worked on Xfmr.
19-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			699	16,936,651	Brought in Tamrock Drill Jumbo & installed steel sets to support bulkhead frame fro ECRB.
20-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			3,476	16,940,127	Installing steel set support fram & weld on ECRB bulkhead @ sta 20 + 13. 12.47kv term. Made at xfmer #2.
21-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			4,100	16,944,227	
22-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			26	16,944,253	
23-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,944,253	
24-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			2,069	16,946,322	
25-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			1,114	16,947,436	Continued welding & lagging ECRB bulkhead, hung doors, laid out holes for first shot.
26-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			3,600	16,951,036	
27-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,951,036	Holiday
28-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,951,036	Holiday
29-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,951,036	
30-Nov-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			0	16,951,036	
01-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			3,013	16,954,049	Welding on ECRB Bulkhead, installed 2 sections of fan line (10 sections now in place).

Water Usage History in the ESF Tunnel

02-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		1,310	16,955,359	Installed belt guides #4 conveyor tail pulley, connecting power to fan starter, put down fill between rail @ ECRB, work on ECRB bulkhead lagging
03-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		370	16,955,729	Worked on #4 Conveyor, installed muck hopper, term. Power cable to fan & cntrl pnls, tested fan. Removed fan line from portal side of the ECRB Bulkhead from Main Tunnel Fan Line. Worked on muck hopper, surveyors layout holes fro first shot. Removed rolled channels in way of ECRB.
04-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		3,560	16,959,289	STARTED TUNNEL, brought in Tamrock Drill Jumbo & commenced frilling holes for first round.
05-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		3,372	16,962,661	Repaired Tamrock Drill Jumbo & resumed drilling round #1 for ECRB. Cut/removed channels in the way of ECRB cutout.
06-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	16,962,661	
07-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	16,962,661	
08-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		1,922	16,964,583	Installing hangers for blasting mats @ the ECRB, Started hanging blasting mats, welding on #4 muck hopper @ ECRB.
09-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		1,338	16,965,921	SHOT RNDS 1 & 2 @ 1015 & 1600 HRS FOR ECRB CUTOUT. SHOT RNDS 3 & 4 @ 1935 & 2214 HRS. WORKED ON ECRB MUCK HOPPER.
10-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		4,292	16,970,213	
11-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		4,408	16,974,621	Removed rail spacers on tracks from north portal to ECRB
12-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		6,710	16,981,331	Pour concrete apron south portal bulkhead @ 78 + 50.3. Removing rail spacer in main tunnel from No. portal to E/W Drift.
13-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	16,981,331	
14-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	16,981,331	
15-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		5,872	16,987,203	Chipping invert segment curbs @ S. Portal bulkhead @ 77 + 80.3. Disconnected & removed unused cable between Al. 5 & 6 for future use in E/W tunnel. Removing rai spacer rods between N. Portal & ECRB.
16-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		7,453	16,994,656	Started installing bulkhead frome @ station 78 + 50.3m, Preparing invert for concrete apron pour @ bulkhead sta. 77 + 80.3.
17-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		6,815	17,001,471	Continued installation of S. Portal bulkhead @ sta. 78 + 50.3. Continued remove rail spacers between N. Portal & E/W tunnel.
18-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		4,120	17,005,591	Continue work on bulkhead frame @ Sta 78 + 50.3. Set-up to pour apron @ S. portal bulkhead @ Sta. 78 + 8-.3, breaking/chipping niche for electrical panel box on right rib @ ~Sta. 78 + 52.

Water Usage History in the ESF Tunnel

19-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		5,422	17,011,013	
20-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,011,013	
21-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,011,013	
22-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		3,920	17,014,933	Continue work on S. Portal bulkhead #1 welding steel members @ Sta. 78 + 50.3.
23-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		2,161	17,017,094	Continue work on S. Portal bulkhead #1 @ Sta. 78 + 50.3. Moved LY-38 Drill to Sta. 63 + 92 & setting up to drill ESF-XWATT Test Hole #3.
24-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		188	17,017,282	Installing bulkhead #1 frame work at Sta. 78 + 50.3. Setting up LY-38 drill @ Sta 63 + 92 on ESF-CWAT #3 test hole.
25-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,017,282	Holiday
26-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,017,282	Holiday
27-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,017,282	Holiday
28-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,017,282	Holiday
29-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		5,063	17,022,365	Continue work on S. Portal Bulkhead #1 @ Sta. 78 + 50.3. Stared drilling on ESF- CWAT #3 test hole @ Sta. 63 + 92. Worked on tunnel lighting near the south portal.
30-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		3,441	17,025,806	
31-Dec-97	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,025,806	
01-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,025,806	
02-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,025,806	Continued work on S. Portal Bulkhead @ Sta 78 + 50.3
03-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,025,806	
04-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,025,806	
05-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		5,378	17,031,184	Continued work on S. Portal Bulkhead @ Sta 78 + 50.3. Drilling ESF-CWAT #3 test hole @ sta. 63 + 92.
06-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		6,274	17,037,458	Continued work on S. Portal Bulkhead @ Sta 78 + 50.3. Completed drilling ESF-CWAT #3 test hole @ sta. 63 + 92. Repired waterline leaks. Removed rail spaced in main tunnel betewen sta. 13 + 50 to 14 + 50.
07-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		5,478	17,042,936	Continued work on S. Portal Blkhead #1 @ Sta. 78 + 50.3. General tunnel cleanup Alcove #5 to S. Portal.
08-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		6,827	17,049,763	Continued work on S. Portal Bulkhead #1. Removing rail spaces between N. Portal & ECRB.
09-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		937	17,050,700	Continued work on S. Portal Bulkhead #1. Welding steel sheet covers onto bulkhead.
10-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		4,428	17,055,128	
11-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,055,128	
12-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		7,938	17,063,066	Continued work on S. Portal Bulkhead #1. Welding steel sheet covers onto bulkhead.
13-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		2,250	17,065,316	Continued work on S. Portal Bulkhead #1. Welding on steel plates to bulkhead to enclosed bulkhead.

Water Usage History in the ESF Tunnel

14-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		4,805	17,070,121	Continue Welding cover plates onto S. Portal Bulkhead #1. Electricians remvoed TBM Power Cable near S. Portal.
15-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		6,080	17,076,201	Continue work on S. Portal Bulkhead #1. Removing rail spacers between N. Portal & ECRB. Electricians removing TBM power cable near S. Portal.
16-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		6,160	17,082,361	Continue Welding cover plates onto S. Portal Bulkhead #1. Electricians remvoed TBM Power Cable near S. Portal.
17-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		1,410	17,083,771	
18-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		1,799	17,085,570	
19-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,085,570	Holiday
20-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		10,200	17,095,770	Welding cover plates to steel supports of S. Portal bulkhead.
21-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		13,040	17,108,810	Hauled Material & gegan fabrication of bulkhead #2 @ Sta. 77 + 83.6.
22-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		6,815	17,115,625	Continued fabrication of structural steel for bulkhead #2 @ 77 + 83.6.
23-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		18,655	17,134,280	continued cutting, fitting and welding structural steel beams for South Portal bulkhead #2 at sta. 77+83.6
24-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		2,850	17,137,130	continued cutting, fitting and welding structural steel beams for South Portal bulkhead #2 at sta. 77+83.6
25-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,137,130	continued cutting, fitting and welding structural steel beams for South Portal bulkhead #2 at sta. 77+83.6
26-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		7,180	17,144,310	Continued welding of structural steel @ S. Portal Bulkhead #2 @ sta. 77 + 83.6, Began installing brackets for overhead door of bulhead #1 @ sta. 78 + 50.3. Removed power cable near s. Portal & removed one section o 66" dia. Vent line near ECRB bulkhead.
27-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		5,110	17,149,420	continued fabrication of South Portal bulkhead #2 at sta. 77+83.6, continued removing power cable near South Portal
28-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		3,080	17,152,500	continued work on South Portal bulkhead #2, removed rail spreaders between sta. 9+00 and 10+00 and between 10+00 and 12+00, continued installing overhead door support brackets for bulkhead #1
29-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		2,410	17,154,910	continued work on bulkhead #2, began reinstalling conveyor #4 tail pulley at sta. 49+60, continued removing power cable from South Portal
30-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		1,089	17,155,999	continued fabrication south portal bulkheads #4 and #2, power cable removed to south portal, installed brackets to support conveyer belt #4 reinstallation across ECRB opening
31-Jan-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,155,999	
01-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,155,999	
02-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		3,536	17,159,535	

Water Usage History in the ESF Tunnel

03-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		825	17,160,360	continued installing skin on South Portal bulkhead #2 at sta. 77+83.6, continued work on conveyer belt #4, continued removing power cable at South Portal
04-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		4,630	17,164,990	continued installing skin on South Portal bulkhead #2 at sta. 77+83.6, prepared to move over track in order to bring in the TBM, installed power cable from tunnel to east-west tunnel, continued removing TBM power cable from Alcove #7 to South Portal
05-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		3,970	17,168,960	continued installing skin on South Portal bulkhead #2, continued installation of electric feeder cable, removed tunnel bulkhead at sta. 20+23,
06-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		390	17,169,350	installed frame for door on bulkhead #1, installed ground wire in ESF tunnel
07-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,169,350	
08-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,169,350	
09-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,169,350	continued work on bulkhead #1 door, continued removing power cable between Alcove #7 and South Portal
10-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,169,350	worked on South Portal bulkheads #1 and #2, started rail clips in preparation for moving track over to bring in TBM,
11-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,169,350	installed a section of fan line thru South Portal bulkhead #1,
12-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,169,350	continued work on bulkheads at South Portal, removed grate at North Portal ramp to move it over for rails, moved ramp over and started moving rails over
13-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,169,350	continued work on South Portal bulkheads, backfilled North Portal ramp with select backfill, removed conveyer booster #1 transformer and switch gear and brought it out onto pad
14-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,169,350	
15-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,169,350	
16-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,169,350	
17-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		3,510	17,172,860	continued work on South bulkheads #1 and #2 doors, continued installing backfill in North Portal ramp
18-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		2,730	17,175,590	hung door on South Portal bulkhead #1, removed transformer platform at Conveyer Booster #1
19-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		2,040	17,177,630	continued work on bulkhead #1 door, prepared to hang fan, started moving rail over in main tunnel in preparation for movement of TBM down to ECRB

Water Usage History in the ESF Tunnel

20-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		793	17,178,423	continued work on South Portal bulkhead #1 door and controls, continued to move tracks over, removed transformer and switch gear at Conveyer Booster Drive #2
21-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		267	17,178,690	
22-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,178,690	
23-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		421	17,179,111	continued work on Bulkhead #1 control system and hung fan # 9, resumed moving over track for TBM clearance, swing shift personnel evacuated due to rising water at 40 mile wash
24-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		289	17,179,400	worked finishing skin on bulkhead #2, hung fan line between Bulkheads #1 and #2, continued to move over rail in main tunnel
25-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		90	17,179,490	*continued hanging fan line between* Bulkheads #1 and #2, continued moving track over for TBM clearance down main tunnel(completed from North Portal to 7+00)
26-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		600	17,180,090	continued hanging fan line, continued moving rail in main tunnel for TBM clearance, drilled holes for seismic test at CS 39+10
27-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		1,000	17,181,090	continued hanging fan line past bulkhead #2, continued to move rail over, drilled holes for seismic test at CS 20+00
28-Feb-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,181,090	continued hanging fan line past bulkhead #2, continued to move rail over, drilled holes for seismic test at CS 20+00
01-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,181,090	continued hanging fan line past bulkhead #2, continued to move rail over, drilled holes for seismic test at CS 20+00
02-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		837	17,181,927	started installing rollup door at Bulkhead #2, continued moving rail over, installed rock bolts in high wall right rib for electrical cable support at North Portal
03-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		1,363	17,183,290	continued work on rollup door at Bulkhead #2, continued moving track over in main tunnel
04-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		216	17,183,506	finished installing rollup door, started pulling power cable to be used at ECRB from North Portal, completed moving rail over
05-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		1,364	17,184,870	pulled in feeder cable for South Portal fan #9, hung ECRB feeder cable in North Portal, aligned track
06-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		350	17,185,220	finished bracing rollup doors on Bulkheads #1 and #2, aligned track and continued to hang ECRB feeder cable,
07-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,185,220	finished bracing rollup doors on Bulkheads #1 and #2, aligned track and continued to hang ECRB feeder cable,

Water Usage History in the ESF Tunnel

08-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,185,220	finished bracing rollup doors on Bulkheads #1 and #2, aligned track and continued to hang ECRB feeder cable,
09-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		880	17,186,100	continued drilling and installing rockboltsto hang fan line exhaust snorkle on face of South Portal, miners putting down balast material under rails at low spots in tunnel invert, continued hanging feeder between North Portal and ECRB,
10-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		1,430	17,187,530	electricians connected power cable to fan #9, continued blocking and aligning track to take TBM down to ECRB, continued hanging ECRB feeder cable
11-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		580	17,188,110	worked on ECRB feeder cable splice plugs, re-aligned track due to movement while bringing in the TBM
12-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		602	17,188,712	finished welding up support bracket for exhaust snorkle on South Portal face, continued wiring up fan #9, continued work on ECRB ffeder cable splice plugs
13-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		1,798	17,190,510	installed exhaust stack at South Portal, continued work on fan #9 hookup, installed split sets and support brackets for installing vent line into ECRB
14-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,190,510	installed exhaust stack at South Portal, continued work on fan #9 hookup, installed split sets and support brackets for installing vent line into ECRB
15-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,190,510	installed exhaust stack at South Portal, continued work on fan #9 hookup, installed split sets and support brackets for installing vent line into ECRB
16-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		1,710	17,192,220	worked on South Portal bulkheads #1 and #2, repaired mine phones between ECRB and North Portal
17-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		1,630	17,193,850	cleaned out and grouted rockbolt holes supporting fanline exhaust stack at South Portal face, continued work on ECRB feeder cable plice plugs,
18-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		1,420	17,195,270	continued work on South Portal bulkheads #1 and #2, continued work on ECRB feeder cable splice plugs
19-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		1,590	17,196,860	reinstalled #4 Conveyer Tail Pulley at ECRB, worked on ECRB feeder cable splice plugs and terminating cable into switch gear box ar sta. 10+67
20-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		1,140	17,198,000	worked on South Portal bulkheads, worked on ECRB feeder power cable in main tunnel, installed elbow on exhaust line at South Portal

Water Usage History in the ESF Tunnel

21-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		1,520	17,199,520	worked on South Portal bulkheads, worked on ECRB feeder power cable in main tunnel, installed elbow on exhaust line at South Portal
22-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,199,520	worked on South Portal bulkheads, worked on ECRB feeder power cable in main tunnel, installed elbow on exhaust line at South Portal
23-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,199,520	supported elbow and installed filter section of fanline to connect into elbow at South Portal
24-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,199,520	wrapped tunnel booster fan #2 with insulation material to reduce noise, removed 24" vent line between North Portal and Alcove #2
25-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,199,520	extended track outside at South Portal to facilitate loading of material to be taken into tunnel, installed insulation on fan #1 for noise abatement, installed 36" fanline from Alcove #2 to North Portal
26-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,199,520	continued extending track at South Portal, continued installing 36" fan line from Alcovbe #2 to North Portal
27-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,199,520	installed fan line from South Portal Bulkhead #2 towards fan #8, continued installing 36" fan line from Alcove #2 to North Portal, installed fan at Alcove #2,
28-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,199,520	installed fan line from South Portal Bulkhead #2 towards fan #8, continued installing 36" fan line from Alcove #2 to North Portal, installed fan at Alcove #2,
29-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,199,520	installed fan line from South Portal Bulkhead #2 towards fan #8, continued installing 36" fan line from Alcove #2 to North Portal, installed fan at Alcove #2,
30-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		10,540	17,210,060	installed skirting around Bulkhead fan line to seal around duct, wet down tunnel area from North Portal, removing conveyer shards from from tunnel rib between North Portal and ECRB
31-Mar-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		7,220	17,217,280	wet down invert between North Portal and ECRB for dust control and cleaned up rock spillage under conveyer belt
01-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		7,120	17,224,400	wet down tunnel invert between ECRB and North Portal for dust control, continued to clean conveyer shards from left rib of tunnel between ECRB and North Portal, worked on mine phones
02-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		5,900	17,230,300	wet down tunnel invert between ECRB and North Portal for dust control, continued to clean conveyer shards from left rib of tunnel, switched Alcove 2 fan around to conform to ventilation plan

Water Usage History in the ESF Tunnel

03-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		10,263	17,240,563	turned vent elbow at Alcove 5 180 degrees
04-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,240,563	turned vent elbow at Alcove 5 180 degrees
05-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,240,563	turned vent elbow at Alcove 5 180 degrees
06-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		10,067	17,250,630	shotcreted around perimeter of South Portal Bulkhead #1 to seal air leakage around the Bulkhead
07-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		9,050	17,259,680	finished shotcreting South Portal Bulkheads around perimeter to seal off air leakage, cleaned up conveyor shards from tunnel left rib between ECRB and South Portal
08-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		20,090	17,279,770	cleaned up at South Portal from shotcreting operations on the Bulkheads, removed rail clips on the ramp at the North Portal to eliminate tripping hazards for visitors going to Alcove #2
09-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		14,520	17,294,290	removed channels in North Portal and cleaned up muck spillage by Conveyor Booster #1
10-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		20,440	17,314,730	installed electrical controls to operate South Portal Bulkhead doors
11-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,314,730	installed electrical controls to operate South Portal Bulkhead doors
12-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,314,730	installed electrical controls to operate South Portal Bulkhead doors
13-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		18,390	17,333,120	finished work on the South Portal door controls on Bulkheads 1 and 2, hand mucked spillage from #4 conveyor belt at conveyor booster #1
14-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		12,857	17,345,977	removed switch in tunnel at Alcove 5, hand mucked spilled material from Conveyor #4 belt at Booster #2
15-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		8,059	17,354,036	worked on South Portal door signal controls, cleaned up spillage at Booster #3, finished removing switch at Alcove 5, hand mucked spillage from #4 Conveyor belt
16-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		1,434	17,355,470	continued work on South Portal bulkhead door signals and limit switches, hand mucked Conveyor spillage between North Portal and Alcove 3 and between Alcoves 2 and 4
17-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		9,984	17,365,454	electricians worked on South Portal Bulkhead door signal controls, cleaned up spillage between North Portal and Alcove #3
18-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,365,454	electricians worked on South Portal Bulkhead door signal controls, cleaned up spillage between North Portal and Alcove #3

Water Usage History in the ESF Tunnel

19-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		0	17,365,454	electricians worked on South Portal Bulkhead door signal controls, cleaned up spillage between North Portal and Alcove #3
20-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,365,454	electricians work on South Portal door signals at Bulkheads, wet down invert between North Portal and ECRB for dust control
21-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,365,454	continue work on South Portal Bulkhead door signals, wet down tunnel invert for dust control, worked on Conveyor #4 belt alignment
22-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,365,454	continued work on South Portal Bulkhead door signals, wet down invert and hand mucked Conveyor spillage between Alcove 4 and ECRB, hand mucked Conveyor spillage at Booster drives 1 and 2
23-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,365,454	continued work on South Portal Bulkhead door signals running conduit, wet down tunnel invert for dust control, mucked Conveyor spillage at Booster Drives #1 and #2
24-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,365,454	electricians continued working on South Portal door signal conduit, wet down invert for dust control
25-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,365,454	electricians continued working on South Portal door signal conduit, wet down invert for dust control
26-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,365,454	electricians continued working on South Portal door signal conduit, wet down invert for dust control
27-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,365,454	electricians continued working on South Portal door signal conduit, wet down invert for dust control
28-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,365,454	no work
29-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,365,454	electricians continued working on South Portal door signal controls, wet down invert for dust control
30-Apr-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,365,454	electricians continued working on South Portal door signal controls, wet down invert for dust control, hand mucked Conveyor spillage between Alcoves 2 and 4
01-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,365,454	continue work on South Portal door signals and controls, cleaned up Conveyor spillage between North Portal and ECRB, worked on new switch by Alcove 5, moved Coveyor #4 tail pulley from ECRB to Sta. 49+60 and started reinstalling it
02-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0			17,365,454	continue work on South Portal door signals and controls, cleaned up Conveyor spillage between North Portal and ECRB, worked on new switch by Alcove 5, moved Coveyor #4 tail pulley from ECRB to Sta. 49+60 and started reinstalling it

Water Usage History in the ESF Tunnel

03-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	continue work on South Portal door signals and controls, cleaned up Conveyor spillage between North Portal and ECRB, worked on new switch by Alcove 5, moved Coveyor #4 tail pulley from ECRB to Sta. 49+60 and started reinstalling it
04-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	day shift completed installing switch at ECRB intersection
05-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	all three shifts worked on reinstalling transformers at Conveyor Boosters #1 and #2
06-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	wired in transformer at Booster #2, drilled 3-inch diameter, 6 inch deep holes on right rib starting at sta. 26+50 in the main drift every 15 meters to sta. 53+40, holes will be part of LBNL seismic testing, completed about 1/4 of the holes
07-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	continued drilling holes on right rib for LBNL seismic testing
08-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	worked on Conveyor #4 framework in main tunnel across ECRB opening, continued drilling holes on the right ribfor seismic testing, continued coring, working on borehole ESF-MD-NICHE4788#6
09-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	worked on Conveyor #4 framework in main tunnel across ECRB opening, continued drilling holes on the right ribfor seismic testing, continued coring, working on borehole ESF-MD-NICHE4788#6
10-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	worked on Conveyor #4 framework in main tunnel across ECRB opening, continued drilling holes on the right ribfor seismic testing, continued coring, working on borehole ESF-MD-NICHE4788#6
11-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	worked on main tunnel conveyor, cleaned up belt spillage between ECRB and Alcove #4, continued drilling holes for seismic testing
12-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	continued work on Conveyor across ECRB opening, continued drilling holes for seismic testing, started excavating for standby generator pad at South Portal,
13-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	continued work on Conveyor across ECRB opening, electricians resumed work on South Portal bulkhead controls, continued coring hole ESF-NICHE4788#6
14-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	continued to hang Conveyor across ECRB intersection, no drilling activity
15-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	electricians continued work on South Portal bulkhead door controls, hand mucked conveyor spillage from invert between Alcove 4 and ECRB,

Water Usage History in the ESF Tunnel

16-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	electricians continued work on South Portal bulkhead door controls, hand mucked conveyor spillage from invert between Alcove 4 and ECRB,
17-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	electricians continued work on South Portal bulkhead door controls, hand mucked conveyor spillage from invert between Alcove 4 and ECRB, installed conduit for South Portal standby generator pad, cleaned up conveyor spillage between Alcove 4
18-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	and ECRB
19-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	hand mucked conveyor spillage from invert between Alcove 4 and ECRB, continued work on generator pad at South Portal,continued drilling borehole ESF-MD-NICHE 4788#6
20-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	hand mucked conveyor spillage from invert between Alcove 4 and ECRB, continued work on generator pad at South Portal,moved drill rig to begin borehole ESF-MD-NICHE4788#5
21-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	hand mucked conveyor spillage from invert between Alcove 5 and ECRB, continued work on generator pad at South Portal,completed core run #1-#6 on borehole ESF-MD-NICHE4788#5, braced return belt on Booster #1 to use it for Conveyor Belt #4 Tail Pulley
22-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	continued installing conduit in preparation for pouring South Portal generator pad, hand mucked between ECRB and Alcove 5 and mucked invert from South Portal to sta. 77+00, continued work on seismic monitoring holes in ESF tunnel starting at sta. 35+03, continued coring operations on borehole, completed runs #12-#17
23-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	continued installing conduit in preparation for pouring South Portal generator pad, hand mucked between ECRB and Alcove 5 and mucked invert from South Portal to sta. 77+00, continued work on seismic monitoring holes in ESF tunnel starting at sta. 35+03, continued coring operations on borehole, completed runs #12-#17

Water Usage History in the ESF Tunnel

24-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	continued installing conduit in preparation for pouring South Portal generator pad, hand mucked between ECRB and Alcove 5 and mucked invert from South Portal to sta. 77+00, continued work on seismic monitoring holes in ESF tunnel starting at sta. 35+03, continued coring operations on borehole, completed runs #12-#17
25-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	continued installing conduit in preparation for pouring South Portal generator pad, hand mucked between ECRB and Alcove 5 and mucked invert from South Portal to sta. 77+00, continued work on seismic monitoring holes in ESF tunnel starting at sta. 35+03, continued coring operations on borehole, completed runs #12-#17
26-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	continued work on South Portal generator pad, continued drilling seismic instrument holes in the Main Drift, began drilling borehole #ESF-MD-NICHE4788#4, completed core runs #1 through #7
27-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	continued work on South Portal generator pad, continued drilling seismic instrument holes in the Main Drift, completed drilling borehole #ESF-MD-NICHE4788#4, completed core runs #8 through #16, took rigging down and prepared to move to next location
28-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	hand mucked invert between sta. 77+00 and 78+00, continued drilling seismic test holes between sta. 43+00 and 45+00, they are about 95% complete, continued work on South Portal conduit for standby generator pad,
29-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	continued installing conduit in preparation for concrete pour of South Portal generator pad, completed drilling seismic test holes,
30-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	
31-May-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	
01-Jun-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	
02-Jun-98	78 + 77.03	78 + 77.03	25844.5	Tpcpul	0		17,365,454	