

Nevada
Environmental
Restoration
Project

DOE/NV-917



Salmon Site Completion Report and Long-Term Stewardship Plan

Revision No.: 1

November 2005

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SALMON SITE COMPLETION REPORT AND LONG-TERM STEWARDSHIP PLAN

U.S. Department of Energy
National Nuclear Security Administration
Nevada Site Office
Las Vegas, Nevada

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**SALMON SITE COMPLETION REPORT AND
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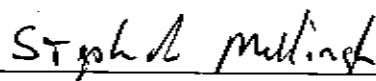
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John B. Jones, Acting Project Manager
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Date: 11/17/05

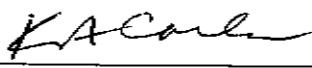
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List of Acronyms and Abbreviations

bgs	Below ground surface
DOE	U.S. Department of Energy
ft	Foot (feet)
hp	Horsepower
LTHMP	Long-Term Hydrologic Monitoring Program
NEPA	<i>National Environmental Policy Act</i>
NNSA/NSO	U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office
pvc	Polyvinyl chloride
RCRA	<i>Resource Conservation and Recovery Act</i>
RI	Remedial Investigation
Shaw	Shaw Environmental, Inc.
VOC	Volatile organic compound
µg/L	Micrograms per liter

1.0 Introduction

The Salmon Site, formerly known as the Tatum Dome Test Site, was used by the U.S. Atomic Energy Commission (predecessor to the U.S. Department of Energy [DOE]) to conduct two nuclear and two non-nuclear gas explosions deep inside the Tatum Salt Dome between 1964 and 1970. These nuclear tests were performed as part of the Vela Uniform Program. In 1992, the DOE initiated a Remedial Investigation (RI) of the site. The investigation was completed in 1999 and a restoration plan was prepared in 2000. The Salmon Site Restoration Plan (DOE/NV, 2000) developed a remedial action alternative that included the installation of new groundwater monitoring wells, repair and/or replacement of existing wells, and the plugging of wells that were no longer needed. The purpose of this report is to describe those activities.

Between the dates of February 22 and April 19, 2002, Shaw Environmental Inc. (Shaw) successfully completed monitoring well rehabilitation, replacement, and abandonment, and site restoration activities of the DOE National Nuclear Security Administration Nevada Site Office (NNSA/NSO) Salmon Site in Lamar County, Mississippi. The scope of work for this field effort had several components:

- Mobilization of personnel and equipment, site setup, and construction activities
- Installation of one new and three replacement monitoring wells
- Plugging and abandonment of 33 non-critical monitoring wells that were no longer required for the Long-Term Hydrologic Monitoring Program (LTHMP)
- Rehabilitation/operational testing of 24 wells required for the LTHMP
- Groundwater sample collection from the 24 existing wells, plus the four new wells included in the LTHMP
- Site restoration activities, including road maintenance and the installation of erosion protection material

A site-wide LTHMP will be developed as part of long-term stewardship activities.

2.0 Mobilization/Site Setup and Construction Activities

On February 22, 2002, personnel, equipment, and supplies were mobilized to the Salmon Site to implement monitoring well installation, rehabilitation, and abandonment, and perform site restoration activities. The three days prior to the drilling subcontractor arriving on site (February 22 to 24), included grading the main access road, cutting underbrush and trees from well sites, establishing a central command post at the east entrance to the property, and conducting a thorough reconnaissance of the work locations in accordance with the NNSA/NSO *National Environmental Policy Act* (NEPA) compliance program. The central command post consisted of a temporary trailer powered by a 30-kilowatt generator and a connex box used for storing equipment and supplies. The connex box was equipped with a first aid kit, fire extinguisher, and an eyewash station.

Work performed at the Salmon Site was conducted by IT Corporation and its subcontractors. Subsequent to performing the activities detailed in this report, IT Corporation's contract with the NNSA/NSO was novated to Shaw Environmental, Inc. (Shaw). As a result of this novation and to standardize reporting, all IT Corporation activities associated with this project are herein referred to as Shaw.

On February 25, 2002, ConExDrill of Victorville, California, mobilized personnel and equipment (i.e., CME-95 drilling rig, one-ton support truck with a goose-neck trailer, equipped with a grout mixer and delivery hose, and a 2 ½-ton truck with portable decontamination trailer).

During initial mobilization activities and prior to work being conducted at each site location, the Shaw Biologist conducted a site investigation of the work zone areas for the presence of the Gopher Tortoise (*Gopherus Polyphemus*). A NEPA Categorical Exclusion was issued for the Gopher Tortoise, which is a federally-listed threatened species, and has been previously observed at the Salmon Site. The categorical exclusion allowed for drilling activities at the Salmon Site, with specific conditions. One tortoise was observed during groundwater sampling activities approximately 200 feet south of Well HM-2L by the Shaw Biologist on March 16, 2002. The Shaw Biologist immediately taped off the area in the vicinity of the tortoise and blocked the entrance to Red Hill Road to minimize vehicular traffic. Due to site management by the Shaw Biologist, the observed Gopher Tortoise was not adversely impacted, and no tortoise was injured as a result of the 2002 Salmon Site field effort.

3.0 Installation of New/Replacement Wells

Three shallow monitoring wells (HMH-5R, HMH-16R, and SA1-12-H) were drilled (by 12-inch, hollow-stem auger method) and completed by ConExDrill on March 11 to 14, 2002. The three wells were installed in the Source Area-1 alluvial aquifer to a depth of 30 feet (ft) below ground surface (bgs). Well construction consisted of 4-inch schedule-80 polyvinyl chloride (PVC) casing with 10 ft of 0.010-slot screen and approximately 20 ft of blank casing to the surface. The filter pack consisted of 20/40-silica sand installed to 5 ft above the top of the screen, followed by a 5-ft bentonite plug. The remaining annular space was filled with grout to the surface. A concrete pad and locking protective cover was installed at each location. Guard posts were installed only at monitoring Well SA1-12-H, which is located on the south side of the main road, adjacent to Half Moon Creek. The two other shallow wells (HMH-5R and HMH-16R) are located in non-vehicular traffic areas. Well construction diagrams, as built, are shown in Figures 3-1 through 3-3.

Well development for the wells consisted of bailing, surging, and pumping to remove the drilling fluids introduced during the well construction process. Well development continued until groundwater parameters stabilized. All development water was containerized in 55-gallon drums and transferred to the on-site frac tank.

The Local Aquifer monitoring well (SA4-5-L) was drilled by mud-rotary method on April 15, 2002, to a depth of 220 ft bgs. Geophysical logs were run in the well and indicated approximately 10 ft of sand from a depth of 160 to 170 ft bgs. The borehole was over-reamed to a diameter of 10 inches to 180 ft bgs. Well construction consisted of 5-inch schedule-80 PVC casing with 10 ft of blank casing set at 180 ft, followed by 10 ft of 0.010-slot screen from 170 to 160 ft, followed by approximately 160 ft of blank casing to the surface. The filter pack consisted of 20/40-silica sand installed to 5 ft above the top of the screen, followed by a 10-ft bentonite seal. The remaining annular space was filled with grout to the surface. A concrete pad, locking protective cover, and guard posts were installed at the well location. The well construction diagram for Well SA4-5-L is presented in Figure 3-4.

The well was developed by circulating fresh water to clean the inside of the casing followed by pumping to remove the drilling fluids introduced during the well construction process. Well

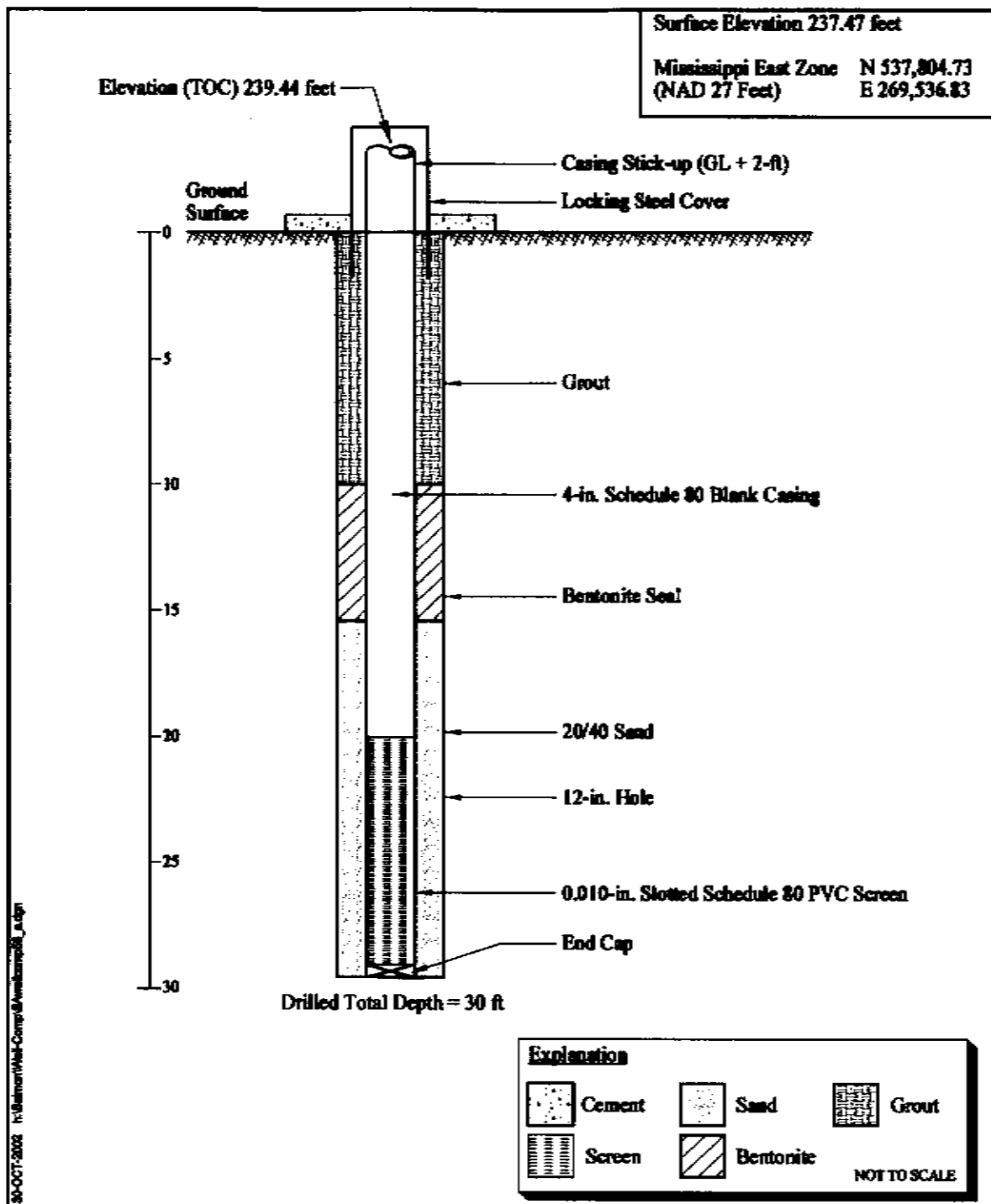


Figure 3-1
Well Completion Diagram for Well HMH-5R

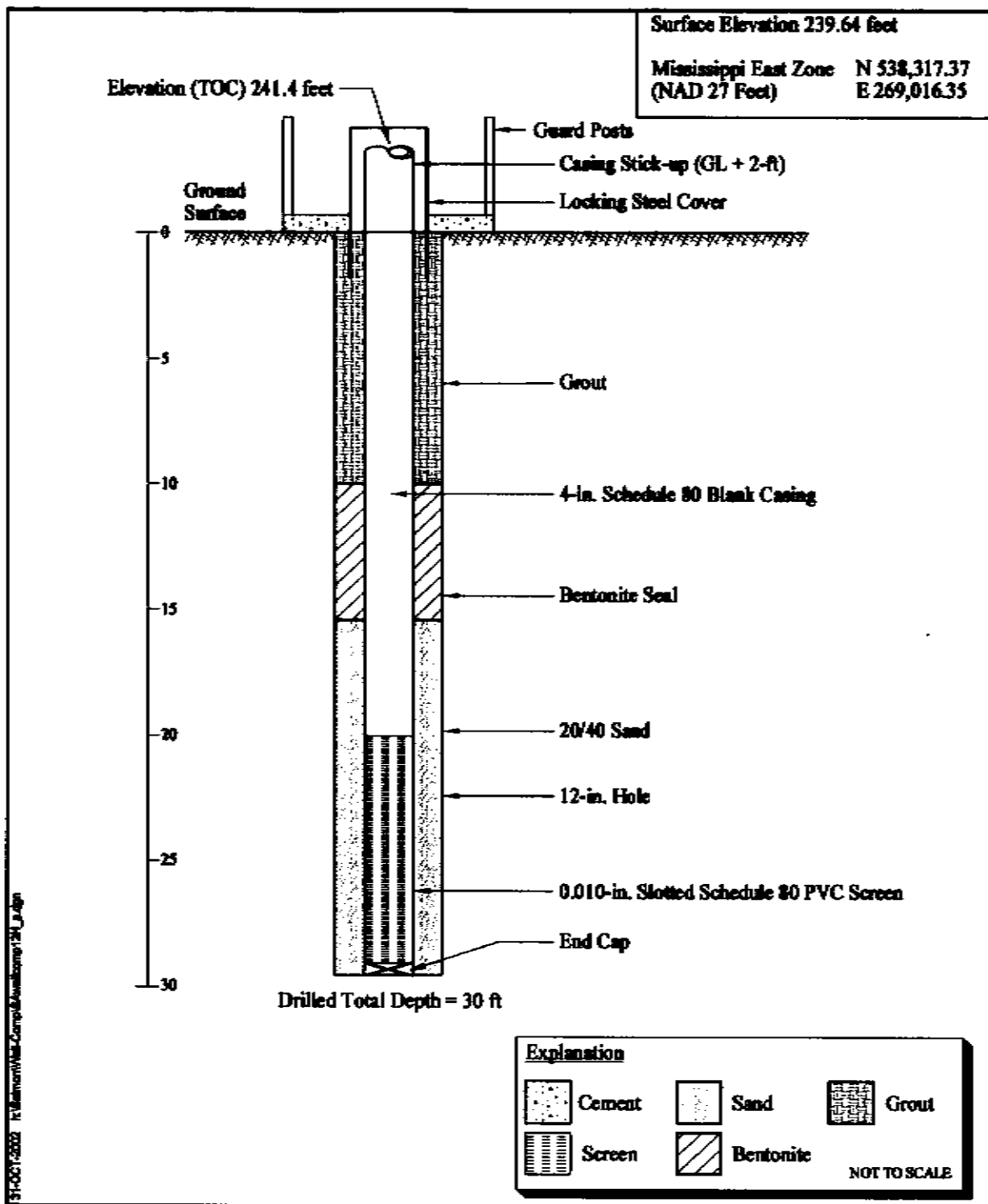


Figure 3-3
Well Completion Diagram for Well SA1-12-H

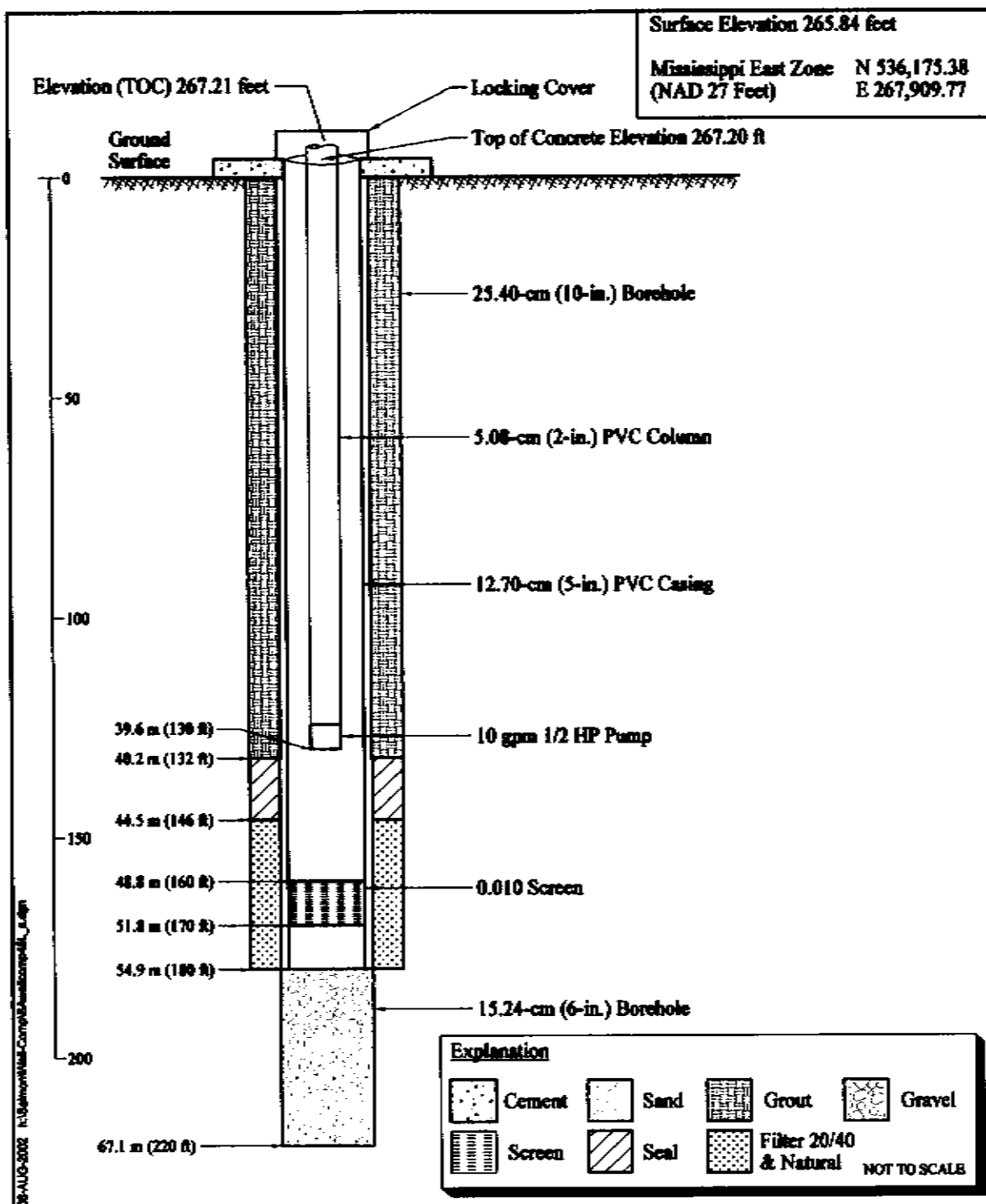


Figure 3-4
Well Completion Diagram for Well SA4-5-L

development continued until the groundwater parameters stabilized. All development water was containerized in an on-site frac tank.

The well was sampled on April 17, 2002. Following sampling, a 10-gpm, permanent pump was installed to a depth of 130 ft bgs. A sanitary seal/landing plate with an access port for water level measurements was installed to support the pump.

The four new monitoring wells were surveyed for horizontal and vertical coordinates on April 16 and 17, 2002, by MapTech (Registered Mississippi Land Surveyor) of Jackson, Mississippi. Horizontal coordinates and elevations were established to the nearest 0.01-foot tolerance, and recorded in Universal Transverse Mercator coordinates, Mississippi State Planar coordinate system, and latitude and longitude coordinates in decimal degrees. Well heads were established with ground surface elevations measured on the north side of the well casing. In addition, a reference or measurement elevation was established for a point located on the north side of the casing. Well head marking consisted of a stamped metal plate permanently affixed to the well head cover plate indicating the well identification number. The ground surface elevation of the well head was also stamped on the plate, relative to mean sea level. The well head coordinates, noted in Mississippi State Planar coordinates, were also stamped on the plate.

4.0 **Plugging and Abandonment Activities**

A total of 22 shallow wells (less than 50 ft in depth) including: HMH-1 to 6, HMH-8 to 16, SA3-1-M, SA3-3-M, SA3-5-H, SA4-1-M, and SA5-1-M through SA5-3-M were abandoned by ConExDrill from February 26 and 27, 2002. Abandonment of the shallow wells (which consisted of simple PVC construction) included the removal and disposal of the concrete pad and cover (where appropriate), removal of all surface appurtenances, and pulling the casing from the ground (by hand or forklift), and grouting to the surface. The borehole was backfilled with bentonite pellets and allowed to hydrate. The PVC casings were placed in roll-off boxes for off-site disposal. Well HMH-7 was determined to be submerged under water by beaver dam building activities; therefore, this well was not plugged and abandoned (see Table 4-1).

Table 4-1
Plugged Monitoring Wells, Shallow Aquifers

Well	Aquifer	Well	Aquifer	Well	Aquifer
HMH-1	HMCAA ^a	HMH-10	HMCAA	SA4-1-M	Miocene
HMH-2	HMCAA	HMH-11	HMCAA	SA5-1-M	Miocene
HMH-3	HMCAA	HMH-12	HMCAA	SA5-2-M	Miocene
HMH-4	HMCAA	HMH-13	HMCAA	SA5-3-M	Miocene
HMH-5	HMCAA	HMH-14	HMCAA	SA3-3-M	Miocene
HMH-6	HMCAA	HMH-15	HMCAA	SA3-5-H	HMCAA
HMH-8	HMCAA	HMH-16	HMCAA		
HMH-9	HMCAA	SA1-3-M	Miocene ^b		

^a Half Moon Creek Alluvial Aquifer

^b Miocene, undifferentiated

A total of 10 deep wells (greater than 50 ft in depth) including: HT-2C, HT-4, HT-5, OW-2, SA1-10-2b, SA1-9-2a, SA2-3-L, SA2-5-L, SA3-8-1, and SA3-10-2b were abandoned by ConExDrill from February 28 through March 8, 2002. Plugging of the deep wells consisted of removal of protective covers, concrete pads, and removal of pumps, tubing, and packers from the well. Grouting consisted of a neat cement grout mixture tremmie piped into the well to ensure no bridges in the grout plug. Groundwater displaced during the grouting procedure was containerized and transferred into the on-site frac tank (see Table 4-2).

Table 4-2
Plugged Monitoring Wells, Deep Aquifers

Well	Aquifer	Well	Aquifer
HT-2C	Local	SA1-9-2a	2a
HT-4	1	SA2-3-L	Local
HT-5	2a	SA2-5-L	Local
OW-2	Local	SA3-8-1	1
SA1-10-2b	2b	SA3-10-2b	2b

Well plugging and abandonment forms were prepared as required by the State of Mississippi and submitted by a Mississippi-licensed water well driller. These forms are in Appendix A. The activities and status of all wells at the Salmon Site are summarized in Table 4-3.

**Table 4-3
Summary of Activities and Status for Each Well**

Well	Activity/Status	Date	Well	Activity/Status	Dates
Shallow Aquifer Wells (Operable Unit 1)					
HMH-1	Plugged	2/26/2002	SA1-1-H	Sampled	3/13/2002
HMH-2	Plugged	2/26/2002	SA1-2-H	Sampled	3/13/2002
HMH-3	Plugged	2/26/2002	SA1-3-H	Sampled	3/13/2002
HMH-4	Plugged	2/26/2002	SA1-4-H	Sampled	3/14/2002
HMH-5	Plugged	2/26/2002	SA1-5-H	Sampled	3/14/2002
HMH-6	Plugged	2/26/2002	SA1-6-H	Sampled	3/14/2002
HMH-7	Abandoned	2/26/2002	SA1-7-H	Sampled	3/14/2002
HMH-8	Plugged	2/26/2002	SA1-12-H	Installed/sampled	3/22/2002
HMH-9	Plugged	2/26/2002	HMH-5R	Installed/sampled	3/21/2002
HMH-10	Plugged	2/26/2002	HMH-16R	Installed/sampled	3/21/2002
HMH-11	Plugged	2/26/2002	SA3-1-M	Plugged	2/26/2002
HMH-12	Plugged	2/26/2002	SA3-3-M	Plugged	2/26/2002
HMH-13	Plugged	2/26/2002	SA3-4-H	Tested/Sampled	3/15/2002
HMH-14	Plugged	2/26/2002	SA3-5-H	Plugged	2/26/2002
HMH-15	Plugged	2/26/2002	SA5-1-M	Plugged	2/27/2002
HMH-16	Plugged	2/26/2002	SA5-2-M	Plugged	2/27/2002
HM-S	Sampled	3/11/2002	SA5-3-M	Plugged	2/27/2002
SA4-1-M	Plugged	2/27/2002			
Local Aquifer Wells (Operable Unit 2)					
SA1-8-L	Tested/sampled	3/16/2002	SA2-5-L	Plugged	2/28/2002
HM-L	Tested/sampled	3/15/2002	OW-2	Plugged	3/2/2002
SA2-1-L	Tested/sampled	3/16/2002	HM-2L	Tested/sampled	3/16/2002
SA2-2-L	Pump replaced/ tested/sampled	3/23/2002	SA4-5-L	Installed/tested/sampled	4/17/2002
SA2-3-L	Plugged	2/28/2002	HT-2c	Plugged	3/5/2002
SA2-4-L	Tested/sampled	3/16/2002			
Aquifers 1, 2a, 2b, and 3 Wells (Operable Unit 2)					
HM-1	Tested/sampled	3/15/2002	SA3-8-1	Plugged	3/1/2002
HM-2a	Tested/sampled	3/15/2002	SA3-10-2	Plugged	3/4/2002
HM-2b	Tested/sampled	3/15/2002	SA3-11-3	Tested/Sampled	3/18/2002
HM-3	Pump replaced/ tested/sampled	3/19/2002	HT-4	Plugged	3/6/2002
SA1-9-2a	Plugged	3/7/2002	HT-5	Plugged	3/6/2002
SA1-10-2b	Plugged	3/8/2002	E-7	Tested/sampled	3/21/2002
SA1-11-3	Tested/Sampled	3/16/2002			
Aquifer 4 Wells (Operable Unit 3)					
SA5-4-4	Pump replaced/ tested/sampled	3/23/2002	SA5-5-4	Tested/sampled	3/22/2002

5.0 Operational Testing/Rehabilitation of LTHMP Well Network

To satisfy the closure requirements for the Salmon Site, the 24 monitoring wells included in the LTHMP well network were operationally tested/rehabilitated to ensure they were in good repair and functioning as intended.

Operational testing was conducted on the installed pumps. The testing consisted of starting the pump to verify it is operational and that it would lift water to the surface within approximate design specifications. The pump was allowed to flow for approximately 30 minutes, and the yield was measured and monitored to determine if the water contains excess sediment. The pump amperage was also monitored to determine if the pump was laboring excessively. All wells containing pumps were operational-tested and within design specifications except SA5-4-4. Well SA5-4-4 was replaced and returned to service (see TJC MDL 03/13/02). The shallow wells located in the vicinity of Source Area-1 were operational-tested by placing a submersible pump in the well and monitoring the flow rate and yield for excessive sediment. All shallow wells were determined to produce sediment-free, clear water. Rehabilitation activities were performed on the following three wells: HM-3, SA2-2-L, and SA5-4-4 (broken impeller, black outer surface from over heating).

5.1 Well HM-3 Testing and Pump Replacement

Previous sampling events have indicated elevated levels of chromium in Well HM-3. The concentration of chromium exceeds the National Primary Drinking Water Standard for chromium. The testing conducted on HM-3 intended to determine the source of the chromium, and included cleaning and inspecting the well bore, and determining the condition of the pump. Groundwater samples were initially collected prior to removing the pump from the well. Groundwater samples were collected at approximately 15 minute intervals; based on an approximate flow rate of 55 gallons per minute, three well volumes took approximately 90 minutes to purge. The seven samples were collected at 0, 15, 30, 45, 60, 75, and 90 minutes. The chromium results ranged from approximately 100 to 130 micrograms per liter ($\mu\text{g/L}$) and did not decrease over time. The results of this sampling are given in Table 5-1.

Table 5-1
Analytical Results of Chromium Sampling, Well HM-3

Sample	Time	Results	Units	Water Volume (gallons)	Date
HM-3001	8:10:00 AM	110	µg/L	0	27-Feb-2002
HM-3002	8:25:00 AM	110	µg/L	825	27-Feb-2002
HM-3003	8:40:00 AM	98	µg/L	1650	27-Feb-2002
HM-3004	8:55:00 AM	120	µg/L	2475	27-Feb-2002
HM-3005	9:10:00 AM	120	µg/L	3300	27-Feb-2002
HM-3006	9:25:00 AM	120	µg/L	4125	27-Feb-2002
HM-3007	9:40:00 AM	120	µg/L	4950	27-Feb-2002
HM-3008*	9:40:00 AM	120	µg/L	4950	27-Feb-2002

*Quality Control

After groundwater sampling activities were completed, the pump and tubing were removed from HM-3 and inspected. The pump that was installed in 1979 performed operationally within its original design specifications; however, it was coated with a black organic-like material, possibly resulting from microbial activity in the warm (31 degrees Celsius) and brackish water. The well casing and both sections of the screen (i.e., 774.3 to 827 and 841 to 862 ft bgs) were swabbed to remove the black organic-like material. The well bore was then bailed to remove the majority of the material dislodged from the casing wall. The well was then pumped with the original pump until groundwater parameters stabilized.

The well was allowed to stabilize for approximately one week prior to video logging activities. Herndon Well & Supply, Inc. of Shannon, Mississippi, provided the video logging equipment. The video log indicated that the casing and both sections of the screen appeared to be in good condition, with no obvious cracks or ruptures. Well HM-3 was originally completed to 875 ft bgs in 1979. The video logging tool reached 865 ft bgs, indicating approximately 10 ft of material in the sediment sump below the screened interval. Water was observed flowing through both sections of the screen.

Well HM-3 was refitted with a new 5-horsepower (hp), 3-phase submersible pump, with carbon-steel tubing, and installed at the original depth of 228 ft bgs. The pump was operationally tested to ensure

the flow rate and amperage readings were within design specifications. All purge water was containerized in the frac tank located at surface ground zero.

5.2 Well SA2-2-L Pump Replacement

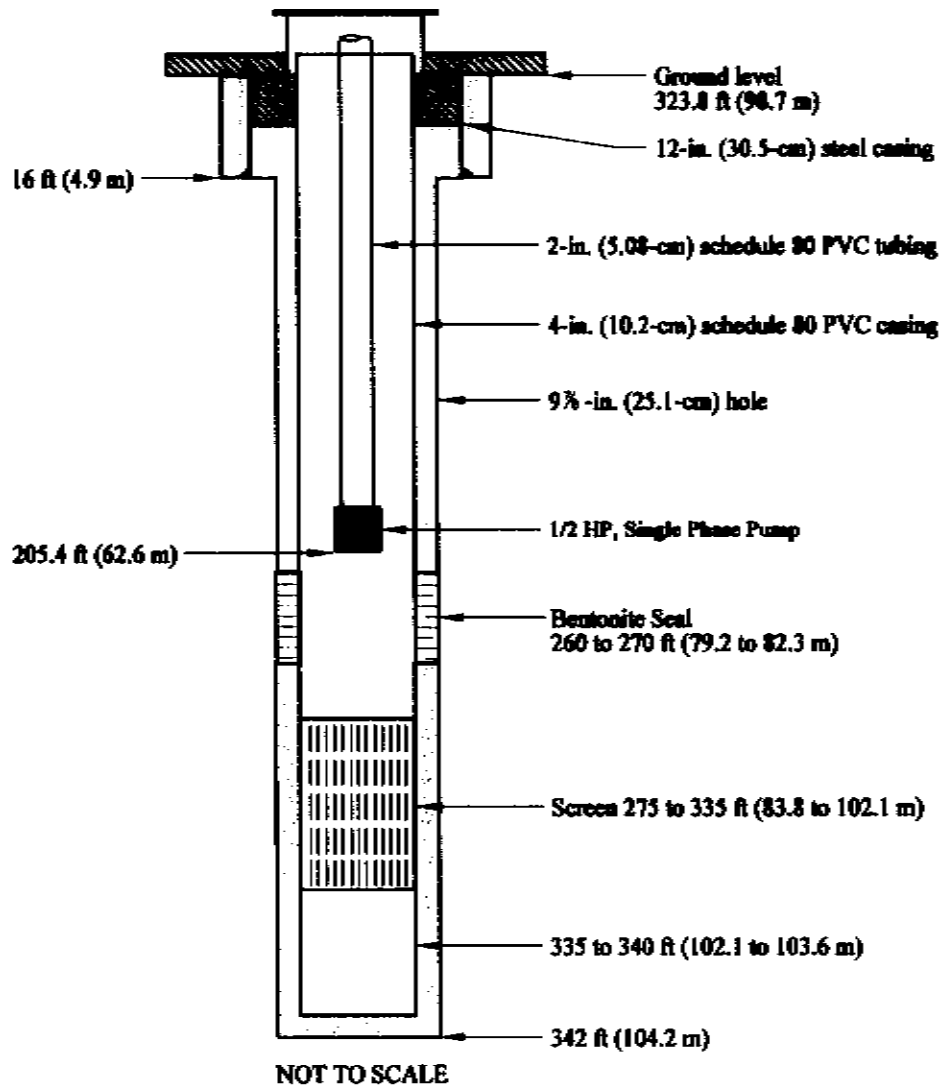
The EPA reported that Well SA2-2-L performed poorly during the most recent sampling event. The pump was removed by ConExDrill on February 25, 2002, and was found to be faulty (water inside the pump motor). The well was swabbed, bailed, and pumped on February 25 and 26, and again on March 4 and 5, 2002, until it yielded sediment-free water and the groundwater parameters stabilized.

Well SA2-2-L was refitted with a new ½-hp, single-phase submersible pump, with schedule 80-PVC tubing, and installed at the original depth of 205 ft bgs. The packer was not reinstalled in the well. The pump was operationally tested and determined to operate at design specifications. A revised well construction diagram is given in Figure 5-1.

5.3 Well SA5-4-4 Pump Replacement

Operational testing of Well SA5-4-4 indicated a flow rate of approximately 1½ to 3 gallons per minute and elevated current readings on the pump, both of which indicated that the pump was not performing as designed. ConExDrill removed the pump from the well on March 13, 2002, and the pump was found to be faulty (i.e., black surface on the pump, indicating overheating and broken impeller). Well SA5-4-4 was refitted with a new, ¾-hp, single-phase submersible pump. The original fiberglass tubing was reinstalled in the well. The pump depth was set at 182.3 ft bgs, which is 30 ft higher than the original depth, as the bottom of the tubing was unable to be placed inside the 4½-inch liner set at 1,777.2 ft bgs. A revised well construction diagram for Well SA5-4-4 is given in Figure 5-2. Following installation, the pump was tested and determined to operate within design specifications.

Mississippi Coordinates:
 N539,169.70 E271,374.80
 Mississippi East (1927)
 Area: Salmon Site, Lamar County, Mississippi
 Permit Number MS-GW-15855
 Figure revised July 2002 to reflect removal of
 a packer.



08-AUG-2002 11:04am/06/02/02A 11:02N

Figure 5-1
Well Construction Diagram for Well SA2-2-L

Mississippi Coordinates:
 N532,759.10 E265,662.63
 Mississippi East (1927)
 Area: Salmon Site, Lamar County, Mississippi
 Permit Number MS-GW-15066
 Figure revised July 2002 to reflect new pump
 depth.

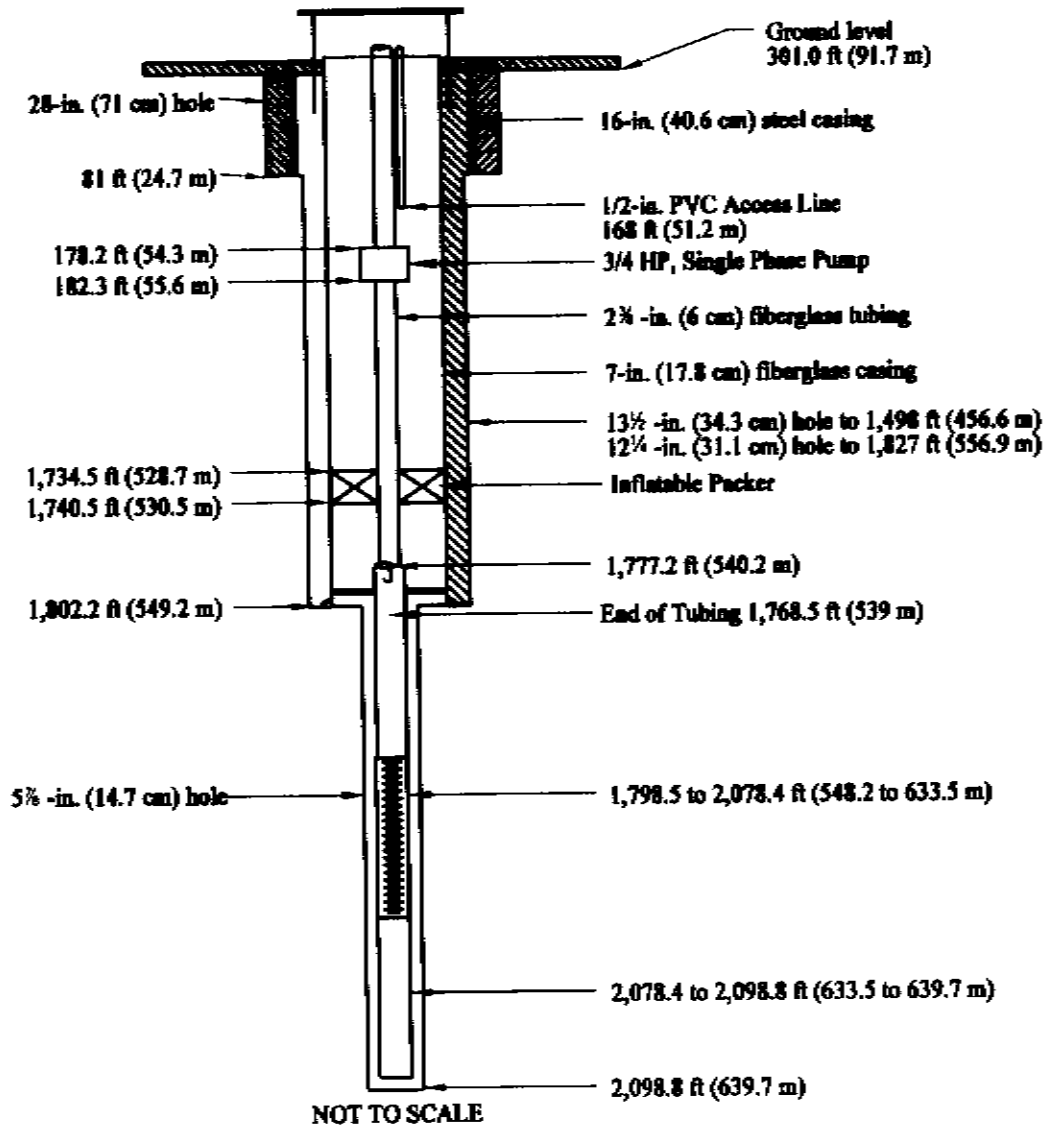


Figure 5-2
 Well Construction Diagram for Well SA5-4-4

6.0 Groundwater Sample Collection

A total of 28 groundwater samples were collected from the monitoring wells remaining. In addition, samples were collected from the newly installed wells in the LTHMP well network. The wells were sampled for total volatile organic compounds (VOC), *Resource Conservation and Recovery Act* (RCRA) metals, and tritium which have been identified in the Salmon Site Remedial Investigation Report (1999) as being constituents of concern. All of the sampled wells are shown on Plate 1. The complete analytical results for each of the wells are presented by Operable Unit in Appendices B, C, and D. The wells were sampled in accordance with applicable Shaw Standard Quality Practices. Wells were purged a minimum of three casing volumes and the water quality parameters (i.e., pH, temperature, and conductivity) were monitored during the purging. There were no nonconformances or unusual events associated with any of the samples collected. Quality assurance and quality control samples were collected at a frequency of one per twenty samples. Analytical results for each of the three Operable Units are discussed in the following sections.

6.1 Operable Unit 1

The results of samples that exceeded the analyte-specific detection limits are given in Table 6-1. Analytes that also exceeded the MCLs are trichloroethene, cis-1,2-dichloroethene, vinyl chloride, mercury, and tritium. Arsenic was also identified in 3 samples as exceeding the detection limit, however, under current regulations these samples do not exceed the MCL (50 µg/L). The newly installed well, HMH-5R, had trichloroethene, cis-1,2-dichloroethene, and trans-1,2-dichloroethene at levels that exceed the detection levels. Trichloroethene and cis-1,2-dichloroethene also exceeded the MCL (230 and 120 µg/L, respectively). Vinyl chloride was identified above the MCL (2 µg/L) in Well SA1-2-H. Complete results for the samples collected from Operable Unit 1 are included in Appendix B, Table 6-2, and Table 6-3.

6.2 Operable Unit 2

Analytical results for samples where concentrations of analytes exceeded the detection limit are given in Table 6-4. Arsenic was identified as a constituent of concern in the Remedial Investigation Report (1999) for the Local Aquifer. In this sampling event, Wells SA2-1-L and SA2-2-L had levels of arsenic (12 µg/L and 14 µg/L), respectively, that exceeded the detection limit (10 µg/L). Analytical

Table 6-1
Analytical Results that Exceed the Detection Limit for Operable Unit 1

Well	Sample Date	Parameter	Result	Units	Detection* Limit	MCL (µg/L)
METALS (RCRA) (EPA 6010)						
SA1-1-H	13-Mar-2002	ARSENIC	11.0	µg/L	10.0	50
SA1-1-H	13-Mar-2002	BARIUM	310	µg/L	100	2,000
SA1-3-H	13-Mar-2002	ARSENIC	12.0	µg/L	10.0	50
SA1-4-H	14-Mar-2002	BARIUM	390	µg/L	100	2,000
SA1-7-H	14-Mar-2002	ARSENIC	20.0	µg/L	10.0	50
SA1-7-H	14-Mar-2002	BARIUM	390	µg/L	100	2,000
SA1-7-H	14-Mar-2002	MERCURY ^b	11	µg/L	10.0	2
HMH-5R	21-Mar-2002	BARIUM	510	µg/L	100	2,000
VOLATILE ORGANIC COMPOUNDS (VOC) (EPA 8260)						
SA1-1-H	13-Mar-2002	CIS-1,2-DICHLOROETHENE	18	µg/L	5.00	70
SA1-1-H	13-Mar-2002	TRICHLOROETHENE	9.8	µg/L	5.00	5
SA1-2-H	13-Mar-2002	CIS-1,2-DICHLOROETHENE	48	µg/L	5.00	70
SA1-2-H	13-Mar-2002	VINYL CHLORIDE	3.9	µg/L	10.00	2
SA1-3-H	13-Mar-2002	CIS-1,2-DICHLOROETHENE	13	µg/L	5.00	70
SA1-3-H	13-Mar-2002	TRANS-1,2-DICHLOROETHENE	6.5	µg/L	5.00	100
SA1-5-H	14-Mar-2002	CIS-1,2-DICHLOROETHENE	11	µg/L	5.00	70
SA1-5-H	14-Mar-2002	TRANS-1,2-DICHLOROETHENE	5	µg/L	5.00	70
HMH-5R	21-Mar-2002	CIS-1,2-DICHLOROETHENE	120	µg/L	5.00	70
HMH-5R	21-Mar-2002	TRANS-1,2-DICHLOROETHENE	7.9	µg/L	5.00	100
HMH-5RRR1 ^c	21-Mar-2002	TRICHLOROETHENE	230	µg/L	10.00	5
TRITIUM						
HM-S	11-Mar-2002	TRITIUM	1750	pCi/L	400.00	20,000
HMH-5R	21-Mar-2002	TRITIUM	8700	pCi/L	380.00	20,000
SA1-1-H	13-Mar-2002	TRITIUM	25100	pCi/L	400.00	20,000
SA1-2-H	13-Mar-2002	TRITIUM	2430	pCi/L	400.00	20,000
SA1-5-H	14-Mar-2002	TRITIUM	830	pCi/L	390.00	20,000

*Volatile organic compounds (SW-846-8260B), total Resource Conservation and Recovery Act metals (SW846-6010B/7470A), and tritium (EPA 906.0)

^bFinal data had qualifiers of "U" undetected and "J" estimated.

^cIndicates a "rerun" of the sample by the laboratory because the initial value exceeded the linear range of the instrument.

Note: Bold values indicate results exceeded Maximum Contaminant Level (MCL)

Table 6-2
Historical Results of Trichloroethene Sampling in Operable Unit 1 (Shallow Aquifer)

Well	Dec-1995/Jan-1996			Feb-1997			Oct-1997			Apr-2001			Mar-2002		
	Result (µg/L)	Detection Limit (µg/L)	Q*	Result (µg/L)	Detection Limit (µg/L)	Q	Result (µg/L)	Detection Limit (µg/L)	Q	Result (µg/L)	Detection Limit (µg/L)	Q	Result (µg/L)	Detection Limit (µg/L)	Q
HM-S	NS ^b			NS			3.9	1.0							
SA1-1-H	69.0	5.0		26.0	5.0		30.0	1.0	R	10.0	5.0	J	9.8	5.0	
SA1-2-H	4.0	5.0	J	2.0	5.0	J	2.3	1.0		2.6	5.0	J	4.3	5.0	J
SA1-3-H	5.0	5.0	U	5.0	5.0	U	0.8	1.0	J	5.0	5.0	UJ	5.0	5.0	U
SA1-4-H	5.0	5.0	U	5.0	5.0	U	0.3	1.0	J	5.0	5.0	UJ	5.0	5.0	U
SA1-5-H	5.0	5.0	U	2.0	5.0	J	1.5	1.0		1.8	5.0	J	1.6	5.0	J
SA1-6-H	3.0	5.0	J	5.0	5.0	U	1.0	1.0	U	5.0	5.0	UJ	5.0	5.0	U
SA1-7-H	5.0	5.0	U	5.0	5.0	U	1.0	1.0	U	5.0	5.0	UJ	5.0	5.0	U
SA3-4-H	5.0	5.0	U	5.0	5.0	U	1.0	1.0	U	5.0	5.0	UJ	10.0	5.0	U
SA3-5-H	5.0	5.0	U	5.0	5.0	U	1.0	1.0	U	5.0	5.0	UJ	NS		
SA1-12-H	NS			NS			NS			NS			5.0	5.0	U
HMH-5R	NS			NS			NS			NS			230.0	5.0	
HMH-16R	NS			NS			NS			NS			5.0	5.0	U

*Data Qualifiers:

U = Compound was analyzed for, but not detected J = Estimated Value UJ = Quantitation limit was quantitatively estimated R = Result rejected

^bNot sampled

Note: Bold values indicate results exceeded Maximum Contaminant Level (MCL)

Table 6-3
Historical Results of Tritium Sampling in Operable Unit 1 (Shallow Aquifer)

Well	Dec 1995/Jan 1996				Feb-1997				Oct-1997				Mar-2002			
	Results pCi/L	Error +/-	MDA ^a	Q ^b	Results pCi/L	Error +/-	MDA	Q	Results pCi/L	Error +/-	MDA	Q	Results pCi/L	Error +/-	MDA	Q
SA1-1-H	23,600	2,390	265		21,900	2,180	176		27,800	1,700	210		25,100	3,200	400	
SA1-2-H	6,040	675	273		3,900	675	204		3,490	410	210		2,430	420	400	
SA1-3-H	984	214	265		909	157	179		780	200	210		420	250	400	U
SA1-4-H	786	209	284		426	126	183		220	140	210	U	80	230	390	U
SA1-5-H	1,090	154	157		514	210	325		940	220	220		830	270	390	
SA1-6-H	1,630	195	145		769	149	183		1,690	280	210		-100	230	390	U
SA1-7-H	-30	84	145		-57	130	227		20	120	210	U	-150	230	390	U
HM-S	NS ^c				NS				2,960	370	210		1,750	350	400	
SA3-4-H	-3	141	246		-15	102	176		-40	110	210	U	-120	230	390	U
SA3-5-H	14	159	276		-101	131	230		60	120	210	U	NS			
HMH-5R	NS				NS				NS				8,700	1,200	380	
HMH-16R	NS				NS				NS				-50	230	380	U
SA1-12-H	NS				NS				NS				-40	230	380	U

^aMinimum detectable activity

^bData Qualifier:

U = Compound was analyzed for, but not detected

^cNot sampled

Table 6-4
Analytical Results that Exceeded the Detection Limit for Operable Unit 2
(Local Aquifer, Aquifers 1, 2a, 2b, and 3)

Well	Sample Date	Parameter	Result	Units	Detection Limit	MCL ^a (µg/L)
METALS (RCRA) (EPA 6010)						
E-7	21-Mar-2002	BARIUM	140	µg/L	100	2,000
HM-3	19-Mar-2002	BARIUM	280	µg/L	100	2,000
HM-3	19-Mar-2002	CHROMIUM	130	µg/L	10	100
HM-L	15-Mar-2002	BARIUM	210	µg/L	100	2,000
HM-L	15-Mar-2002	CHROMIUM	11	µg/L	10	100
HM-L2	16-Mar-2002	BARIUM	120	µg/L	100	2,000
SA1-8-L	16-Mar-2002	BARIUM	170	µg/L	100	2,000
SA2-1-L	16-Mar-2002	ARSENIC	12.0	µg/L	10	50
SA2-2-L	23-Mar-2002	ARSENIC	14.0	µg/L	10	50
SA2-2-L	23-Mar-2002	CHROMIUM	31	µg/L	10	100
SA4-5-L	17-Apr-2002	BARIUM	260	µg/L	100	2,000
SA4-5-L	17-Apr-2002	CHROMIUM	16	µg/L	10	100
SA4-5-L	17-Apr-2002	LEAD	24	µg/L	0.3	15
VOLATILE ORGANIC COMPOUNDS (VOC) (EPA 8260)						
HM-3	19-Mar-2002	NAPHTHALENE	6	µg/L	5	NA
SA4-5-L	17-Apr-2002	TOLUENE	24	µg/L	5	1,000

^aMaximum Contaminant Level

Note: Bold values indicate results exceeded Maximum Contaminant Level

results from Operable Unit 2 indicate a general decline in the concentration of arsenic when compared with results from previous sampling events (Table 6-5). The new Well SA4-5-L, identified chromium (16 µg/L) and lead (24 µg/L) exceeding the detection limit.

6.3 Operable Unit 3

None of the samples collected from the two wells (SA5-4-4 and SA5-5-4) had analytical results which exceeded the detection limit.

Table 6-5
Historical Results of Arsenic Sampling in Operable Unit 2 (Local Aquifer)

Well	Jan-1997			Oct-1997			Apr-1999			Apr-2001			Mar-2002		
	Result	Units	Q ^a	Result	Units	Q	Result	Units	Q	Result	Units	Q	Result	Units	Q
HM-2L	NS ^b	µg/L		3.0	µg/L	U	NS	µg/L		10.0	µg/L	U	10	µg/L	U
HM-L	NS	µg/L		3.0	µg/L	U	NS	µg/L		10.0	µg/L	U	10	µg/L	U
HT-2C	NS	µg/L		6.0	µg/L		NS	µg/L		NS			NS		
OW-2	NS	µg/L		3.0	µg/L	U	NS	µg/L		NS			NS		
SA1-8-L	9.3	µg/L	B	4.1	µg/L		7.7	µg/L		3.8	µg/L	B	4.6	µg/L	B
SA2-1-L	13.6	µg/L		14.9	µg/L		14.0	µg/L		12.0	µg/L		12	µg/L	
SA2-2-L	44.2	µg/L		23.5	µg/L		19.0	µg/L		NS	µg/L		14	µg/L	UJ
SA2-3-L	24.0	µg/L		NS	µg/L		17.0	µg/L		13.0	µg/L		NS	µg/L	
SA2-4-L	22.1	µg/L		26.7	µg/L		15.0	µg/L		11	µg/L		6.8	µg/L	B
SA2-5-L	17.3	µg/L		9.3	µg/L		6.6	µg/L		4.0	µg/L	B	NS	µg/L	
SA4-5-L	NS			NS			NS			NS			5.9	µg/L	B

^aData Qualifiers:

B = Less than Practical Quantitation Limit but greater than or equal to the Instrument Detection Limit

U = Compound was analyzed for, but not detected

^bNot sampled

6.4 Waste Management

A total of three waste management samples were collected from three frac tanks at the Salmon Site. The frac tanks were used to contain water generated from well purging, development, and decontamination activities during the 2002 field effort. Two frac tanks (FT4417L and FT4808L) located at surface ground zero were used to contain purge water generated from operational testing and sampling activities associated with Well HM-3. Both tanks had elevated concentrations of chromium (0.12 and 0.13 milligrams per liter for FT4417L and FT4808L, respectively); however, frac tank FT4808L had several VOC concentrations above normal. It was noted during sampling that frac tank FT4808L had been recently painted, and the paint is assumed to be the source of the elevated VOC readings. The results of the analysis were sent to the Mississippi Department of Environmental Quality with a request that the water contained in the frac tanks be disposed of on site. Approval was received on April 17, 2002, with the stipulation that the water discharged from the tanks not be allowed to enter the creeks or any body of water on site. The two tanks were drained to the surface between April 17 and 18, 2002.

The frac tank (FADW 4734L) located at the laydown yard was used to contain water from purging, and sampling activities from all wells other than HM-3. Decontamination water generated from cleaning augers and equipment associated with the installation of the four new wells was also containerized in frac tank FADW 4734L. Water from this tank was sampled on April 17, 2002, with a request for a 7-day turnaround time for the samples.

Results were returned from the laboratory, validated, and forwarded to the State of Mississippi with a request that discharge be allowed to the surface. The Mississippi Department of Environmental Quality concurred and gave approval. The water was discharged and the tank demobilized from the site on May 30, 2002.

7.0 Site Restoration Activities

Restoration activities at the Salmon Site consisted of the removal of construction debris from the Source Area 2 drainage ditch and road maintenance. Approximately 10 cubic yards of wire mesh and other construction debris were removed from the Source Area 2 drainage ditch, located about 300 ft west of SA2-3-L. The debris was removed from the outer bank of the 6-ft deep drainage ditch and placed into a roll-off container for off-site disposal. The bank of the drainage ditch was sloped (2H:1V) prior to placing erosion protection material. The erosion protection material consisted of a high-density, polyethylene geogrid placed directly on the ground surface orientated perpendicular to the channel flow. Approximately 1 ft of 8- to 10-inch diameter limestone riprap material was placed on top of the geogrid to prevent erosion of the outer bank.

Recent heavy rainstorms had eroded and rutted the access road from surface ground zero to the laydown yard. Approximately 50 cubic yards of road base material was placed and regraded to repair the rutted road. The drainage ditch located on the north side of the road was lined with limestone riprap to channel the water from the road and prevent subsequent erosion.

8.0 Long-Term Stewardship

The Long-Term Stewardship Plan for the Salmon Site is included as Appendix E. The plan addresses site controls, land use, and monitoring requirements. As a part of this plan, a Long-Term Hydrological Monitoring Program is established to define the frequency of sampling, the analytical parameters, and maintenance and replacement of the existing groundwater monitoring network.

9.0 References

DOE/NV, see U.S. Department of Energy, Nevada Operations Office.

U.S. Environmental Protection Agency, 816-F-02-013, July 02, "Current Drinking Water Standards."

U.S. Department of Energy, Nevada Operations Office. 1999. *Salmon Site Remedial Investigation Report (Lamar County, Mississippi)*, Rev. 1, DOE/NV--494-REV. 1. Las Vegas, NV.

U.S. Department of Energy, Nevada Operations Office. 2000. *Salmon Site Restoration Plan*, DOE/NV--640-REV. 1. Las Vegas, NV.

Appendix A

Water Well Plugging Decommissioning, Mississippi Department of Environmental Quality

(18 Pages)

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources

COUNTY WELL LOCATED <u>Lamar</u>	
WELL NUMBER <u>HT-5</u>	CODED
DATE WELL PLUGGED <u>3-7-02</u>	

PERMIT NUMBER
NAME OF DRILLING FIRM <u>Con Ex Drill</u>
<u>Arnold Fincher Sr</u>

P.O. Box 10631
Jackson, Mississippi 39289
Water Well Plugging
Decommissioning

NAME & MAILING ADDRESS OF LANDOWNER <u>U.S. Dept of Energy</u> <u>Las Vegas, N.V.</u>

NAME OF WELL CONTRACTOR WHO DRILLED THE WELL <u>Unknown</u>
--

WELL LOCATION	SEC <u>14</u>	TOWNSHIP <u>2N</u>	RANGE <u>16W</u>
---------------	------------------	-----------------------	---------------------

NAME OF LANDOWNER WHEN WELL WAS DRILLED <u>U.S. Dept of Energy</u>

DISTANCE	DIRECTION	NEAREST TOWN
<u>15 miles</u>	<u>NW</u>	<u>Purvis, MS</u>

WELL DATA		
Well Depth <u>679</u>	Casing Diameter (in.) <u>8 5/8</u>	Casing Length (ft.) <u>530</u>
Type of Casing <u>Steel</u>	Hole Depth <u>684</u>	Depth to Static Water Level <u>142</u>

OTHER LANDMARK <u>Salmon Site</u>

WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc. <u>Monitoring well</u>
--

DATE WELL COMPLETED <u>Unknown</u>

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED: (AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE, MATERIAL USED IN PLUGGING, ETC.) <u>Pump pulled from well. Trimmer Pipe</u> <u>ran to bottom and Cemented with</u> <u>Cement Gel Blend from bottom of well</u> <u>to Top of Ground within 14 batches</u> <u>all casing & screen left in hole</u>

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS	
<u>Arnold Fincher Sr</u> SIGNATURE	<u>3-25-02</u> DATE

180520

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources

P.O. Box 10631
Jackson, Mississippi 39289
Water Well Plugging
Decommissioning

COUNTY WELL LOCATED <u>Lamar</u>	
WELL NUMBER <u>SAL-9-2A</u>	CODED
DATE WELL PLUGGED <u>3-7-02</u>	

PERMIT NUMBER <u>MS-GW-15063</u>
NAME OF DRILLING FIRM <u>Can E Drill</u>
<u>Arnold Fincher Sr</u>

NAME & MAILING ADDRESS OF LANDOWNER <u>U.S. Dept of Energy</u> <u>Las Vegas, N.V</u>
--

NAME OF WELL CONTRACTOR WHO DRILLED THE WELL <u>Unknown Regal Drilling</u>

WELL LOCATION	SEC <u>11</u>	TOWNSHIP <u>2N</u>	RANGE <u>16W</u>
DISTANCE <u>15 Miles West</u>	DIRECTION	NEAREST TOWN <u>Purvis, MS</u>	

NAME OF LANDOWNER WHEN WELL WAS DRILLED <u>U.S. Dept of Energy</u>

OTHER LANDMARK <u>Salmon S. te</u>
WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Farm Pond, etc. <u>Monitoring well</u>

WELL DATA		
Well Depth <u>722</u>	Casing Diameter (in.) <u>2"</u>	Casing Length (ft.) <u>563</u>
Type of Casing <u>Steel</u>	Hole Depth <u>722</u>	Depth to Static Water Level <u>Unknown</u>

DATE WELL COMPLETED <u>Unknown</u>

N. 536 419.58
E. 270 928.34

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED: (AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE, MATERIAL USED IN PLUGGING, ETC.) <u>all Equipment Pulled from well</u> <u>Trimmer Pipe run to bottom of well</u> <u>and Cemented with Cement Gel</u> <u>mixture from Bottom to Top with</u> <u>19 Batches. all casing and screen</u> <u>left in hole</u>

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.

Arnold Fincher Sr
SIGNATURE

3-25-02
DATE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources

P.O. Box 10631
Jackson, Mississippi 39289
Water Well Plugging
Decommissioning

COUNTY WELL LOCATED <u>Lamar</u>		PERMIT NUMBER	
WELL NUMBER <u>HT-2C</u>	CODED	NAME OF DRILLING FIRM <u>CONEX Drill</u>	
DATE WELL PLUGGED <u>3-5-02</u>		NAME OF WELL CONTRACTOR WHO DRILLED THE WELL <u>Arnold Fincher Sr</u>	
NAME & MAILING ADDRESS OF LANDOWNER <u>U.S Dept of Energy</u> <u>Las Vegas, N.V</u>		NAME OF LANDOWNER WHEN WELL WAS DRILLED <u>U.S Dept of Energy</u>	
WELL LOCATION SEC <u>14</u> TOWNSHIP <u>2N</u> RANGE <u>16W</u>		WELL DATA	
DISTANCE <u>15 Miles West of Purvis</u>	DIRECTION <u>NEARBY TOWN</u>	Well Depth <u>366</u>	Casing Diameter (in.) <u>6 5/8</u>
OTHER LANDMARK <u>Salmon Site</u>	WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc. <u>Monitoring well</u>	Type of Casing <u>Steel</u>	Casing Length (ft.) <u>344</u>
		Hole Depth <u>366</u>	Depth to Static Water Level <u>159</u>
		DATE WELL COMPLETED <u>1979</u>	

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED:
(AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE,
MATERIAL USED IN PLUGGING, ETC.)

Trimmer Pipe ran to bottom of well
Hole filled from Bottom to Top
of well with 8 batches of cement
Cell mixture all casing and
Screen left in Hole

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.

Arnold Fincher Sr 3-25-02
SIGNATURE DATE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources

P.O. Box 10631
Jackson, Mississippi 39289
Water Well Plugging
Decommissioning

COUNTY WELL LOCATED <i>Lamar</i>	
WELL NUMBER <i>SAI-10-26</i>	CODED
DATE WELL PLUGGED <i>3-8-02</i>	

PERMIT NUMBER <i>MS-GW-15062</i>
NAME OF DRILLING FIRM <i>Center Drill</i>

NAME & MAILING ADDRESS OF LANDOWNER <i>U.S. Dept of Energy Las Vegas, N.V.</i>			
WELL LOCATION	SEC <i>13</i>	TOWNSHIP <i>2N</i>	RANGE <i>16W</i>
DISTANCE <i>15 miles west</i>	DIRECTION	NEAREST TOWN <i>Purvis, MS</i>	
OTHER LANDMARK <i>Salmon Site</i>			
WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc. <i>Monitoring Well</i>			

NAME OF WELL CONTRACTOR WHO DRILLED THE WELL <i>UNKNOWN Baylik Hall</i>		
NAME OF LANDOWNER WHEN WELL WAS DRILLED <i>U.S. Dept of Energy</i>		
WELL DATA		
Well Depth <i>844</i>	Casing Diameter (in.) <i>7</i>	Casing Length (ft.) <i>810</i>
Type of Casing <i>Fiberglass</i>	Hole Depth <i>844</i>	Depth to Static Water Level <i>757</i>
DATE WELL COMPLETED <i>UNKNOWN</i>		

*NS36460.84
E 270, 857.30*

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED: (AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE, MATERIAL USED IN PLUGGING, ETC.)
<i>Pump and Pack: Pulled from</i>
<i>Hole, Trimmer Pipe ran to bottom</i>
<i>Hole filled from bottom to top of</i>
<i>Ground with 22 batches of cement</i>
<i>Grout mixture, all casing and screen</i>
<i>left in hole</i>

(CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.)	
<i>Arnell Sanchez Sr</i>	<i>3-23-02</i>
SIGNATURE	DATE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources

P.O. Box 10631
Jackson, Mississippi 39289
Water Well Plugging
Decommissioning

COUNTY WELL LOCATED <u>Lamar</u>	
WELL NUMBER <u>AT-4</u>	CODED
DATE WELL PLUGGED <u>3-06-02</u>	

PERMIT NUMBER
NAME OF DRILLING FIRM <u>CONEX Drill</u>
<u>Arnold Fincher Sr</u>

NAME & MAILING ADDRESS OF LANDOWNER <u>U.S. Dept of Energy</u> <u>Las Vegas, N.V.</u>

NAME OF WELL CONTRACTOR WHO DRAINED THE WELL <u>Unknown</u>
--

WELL LOCATION	SEC <u>14</u>	TOWNSHIP <u>2N</u>	RANGE <u>16W</u>
---------------	------------------	-----------------------	---------------------

NAME OF LANDOWNER WHEN WELL WAS DRILLED <u>U.S. Dept of Energy</u>

DISTANCE <u>15 miles West of Purvis</u>	DIRECTION	NEAREST TOWN
--	-----------	--------------

WELL DATA

OTHER LANDMARK <u>Salmon Site</u>

Well Depth <u>475'</u>	Casing Diameter (in.) <u>8 5/8"</u>	Casing Length (ft.) <u>358'</u>
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WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc. <u>Monitoring Well</u>
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Type of Casing <u>Steel</u>	Hole Depth <u>475'</u>	Depth to Static Water Level <u>161'</u>
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DATE WELL COMPLETED <u>1979</u>

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED: (AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE, MATERIAL USED IN PLUGGING, ETC.) <u>Trimmie Pipe ran to bottom and</u> <u>Cemented from Bottom to Top with</u> <u>13 Batches of cement Gel mixture all</u> <u>Casing and Screen left in hole</u>

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.	
<u>Arnold Fincher Sr</u>	<u>3-25-02</u>
SIGNATURE	DATE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources

P.O. Box 10631
Jackson, Mississippi 39289
Water Well Plugging
Decommissioning

COUNTY WELL LOCATED <u>Lamar</u>	
WELL NUMBER <u>5143-11-28</u>	CODED
<u>3-4-02</u>	
DATE WELL PLUGGED <u>3-4-02</u>	

PERMIT NUMBER <u>MS-GW-15042</u>
NAME OF DRILLING FIRM <u>Con EA Drill</u>
<u>Arnold Fincher Sr</u>

NAME & MAILING ADDRESS OF LANDOWNER <u>U.S Dept of Energy</u> <u>Las Vegas, N.V.</u>
--

NAME OF WELL CONTRACTOR WHO DRILLED THE WELL <u>Unknown Baylik</u> <u>Drilling</u>
--

WELL LOCATION	SEC <u>14</u>	TOWNSHIP <u>2N</u>	RANGE <u>16W</u>
DISTANCE <u>15 Miles West of Purvis</u>	DIRECTION <u></u>		
NEAREST TOWN <u></u>			

NAME OF LANDOWNER WHEN WELL WAS DRILLED <u>U.S Dept of Energy</u>
--

OTHER LANDMARK <u>Salmon Site</u>
WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc. <u>Monitoring Well</u>

WELL DATA		
Well Depth <u>710</u>	Casing Diameter (In.) <u>7</u>	Casing Length (Ft.) <u>483</u>
Type of Casing <u>Fiberglass</u>	Hole Depth <u>710</u>	Open to Static Water Level
DATE WELL COMPLETED <u>1474</u> 1997		

N. 535, 721.33
E 267, 481.77

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED: (AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE, MATERIAL USED IN PLUGGING, ETC.) <u>Trimmed Pipe ran to bottom of hole</u> <u>Well Cemented from bottom to Top</u> <u>with 12 Batches of Cement Gel Mixture</u> <u>all Casing and screen left in hole</u>
--

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS	
<u>Arnold Fincher Sr</u> SIGNATURE	<u>3-25-02</u> DATE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources

P.O. Box 10631
Jackson, Mississippi 39289
Water Well Plugging
Decommissioning

COUNTY WELL LOCATED <u>Lamar</u>		PERMIT NUMBER	
WELL NUMBER <u>OW-2</u>	CODED	NAME OF DRILLING FIRM <u>ConEX Drill</u>	
DATE WELL PLUGGED <u>3-2-02</u>		NAME OF LANDOWNER <u>Arnold Fincher Sr.</u>	
NAME & MAILING ADDRESS OF LANDOWNER <u>U.S. Dept of Energy</u> <u>Las Vegas, N.V.</u>		NAME OF WELL CONTRACTOR WHO DRILLED THE WELL <u>UNKNOWN GRINDER</u> <u>DRILLING</u>	
WELL LOCATION SEC <u>14</u> TOWNSHIP <u>2N</u> RANGE <u>16W</u>		NAME OF LANDOWNER WHEN WELL WAS DRILLED <u>U.S. Dept of Energy</u>	
DISTANCE <u>15 miles West of Paris</u>	DIRECTION <u>West</u>	WELL DATA	
OTHER LANDMARK <u>Salmon Site</u>	NEAREST TOWN	Well Depth <u>210</u>	Casing Diameter (in.) <u>2</u>
WELL PURPOSE: Home Irrigation, Municipal, Industrial, Fish Pond, etc. <u>Monitoring well</u>		Typical Casing <u>PVC</u>	Depth to Static Water Level <u>UNKNOWN</u>
		Hole Depth <u>210</u>	DATE WELL COMPLETED <u>1-7-1981</u>

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED.
(AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE.
MATERIAL USED IN PLUGGING, ETC.)

Trimming Pipe ran to bottom of well
Well Cemented from bottom to top
of well with 2 batches of Cement
and mixture. all casing & screen left
in hole

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS

Arnold Fincher Sr. 3-25-02
SIGNATURE DATE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources

P.O. Box 10631
Jackson, Mississippi 39289
Water Well Plugging
Decommissioning

COUNTY WELL LOCATED LAMAR		PERMIT NUMBER MS-CW-1505-9	
WELL NUMBER SA3-8-1	CODED	NAME OF DRILLING FIRM Con E Drill	
DATE WELL PLUGGED 3-1-02		Name of Driller Arnold Fincher Sr	
NAME & MAILING ADDRESS OF LANDOWNER U.S. Dept of Energy Las Vegas, N.V.		NAME OF WELL CONTRACTOR WHO DRILLED THE WELL unknown Beglik Drilling	
WELL LOCATION SEC TOWNSHIP RANGE 14 2N 16W		NAME OF LANDOWNER WHEN WELL WAS DRILLED US Dept of Energy	
DISTANCE DIRECTION NEAREST TOWN 15 miles West of Paris		WELL DATA	
OTHER LANDMARK Salmon site		Well Depth 385	Casing Diameter (In.) 7
WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc. Monitoring well		Type of Casing Fiberglass	Casing Length (Ft.) 240
N. 535, 730, 67 E. 269, 5-5, 23		Mile Depth 385	Depth to Static Water Level unknown
		DATE WELL COMPLETED 1979 1996	

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED:
(AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE,
MATERIAL USED IN PLUGGING, ETC.)

Trimmed Pipe ran to bottom of well. Well cemented from bottom to top with 10 batches of cement Gel mixture. all casing and screen left in hole

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.

Arnold Fincher Sr **3-25-02**

SIGNATURE DATE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources

P.O. Box 10631
Jackson, Mississippi 39289
Water Well Plugging
Decommissioning

COUNTY WELL LOCATED <u>LSMA</u>	
WELL NUMBER <u>SA2-5L</u>	CODED
DATE WELL PLUGGED <u>2-28-02</u>	

PERMIT NUMBER <u>MS-GW 15058</u>
NAME OF DRILLING FIRM <u>CON EX DILL</u>
<u>Arnold Fincher Sr</u>

NAME & MAILING ADDRESS OF LANDOWNER <u>U.S. Dept of Energy</u> <u>Las Vegas, N.V</u>
--

NAME OF WELL CONTRACTOR WHO DRILLED THE WELL <u>unknown Baylik</u> <u>DR H.A.S</u>
--

WELL LOCATION	SEC	TOWNSHIP	RANGE
	<u>12</u>	<u>2N</u>	<u>16W</u>

NAME OF LANDOWNER WHEN WELL WAS DRILLED <u>U.S. Dept of Energy</u>

DISTANCE	DIRECTION	NEAREST TOWN
<u>15 miles</u>	<u>West</u>	<u>of Purvis</u>

WELL DATA

OTHER LANDMARK <u>Salmon Site</u>

Well Depth <u>238</u>	Casing Diameter (In.) <u>4</u>	Casing Length (Ft.) <u>142</u>
Type of Casing <u>PVC</u>	Hole Depth <u>238</u>	Depth to Static Water Level <u>unknown</u>

WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc. <u>Monitoring well</u>
--

DATE WELL COMPLETED <u>1974 1996</u>

N. 538418.1
E. 200,143.1

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED:
(AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE.
MATERIAL USED IN PLUGGING, ETC.)

Trimme Pipe ran to bottom of well
well cemented from bottom to top
of well with 4 Batches of Cement Gel
Mixture. all casing + screen left
in Hole

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS

Arnold Fincher Sr
SIGNATURE

3-25-02
DATE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources

P.O. Box 10631
Jackson, Mississippi 39289
Water Well Plugging
Decommissioning

COUNTY WELL LOCATED <u>Lamar</u>		PERMIT NUMBER <u>MS-CW-15056</u>	
WELL NUMBER <u>SA2-3-L</u>	CODED	NAME OF DRILLING FIRM <u>ConEx Drill</u>	
DATE WELL PLUGGED <u>2-28-02</u>		Name of Driller <u>Arnold Fincher Sr</u>	
NAME & MAILING ADDRESS OF LANDOWNER <u>U.S. Dept of Energy</u> <u>Las Vegas, N. V</u>		NAME OF WELL CONTRACTOR WHO DRILLED THE WELL <u>Unknown</u>	
		NAME OF LANDOWNER WHEN WELL WAS DRILLED <u>U.S. Dept of Energy</u>	
WELL LOCATION SEC TOWNSHIP RANGE <u>12 2N 16W</u>		WELL DATA	
DISTANCE DIRECTION NEAREST TOWN <u>15 miles west of Purvis</u>		Well Depth <u>299</u>	Casing Diameter (in.) <u>4</u>
OTHER LANDMARK <u>Salmon's, Jr</u>		Type of Casing <u>PVC</u>	Casing Length (ft.) <u>227</u>
WELL PURPOSE: Home, Injection, Municipal, Industrial, Fish Pond, etc. <u>Monitoring well</u>		Hole Depth <u>299</u>	Depth to Static Water Level <u>Unknown</u>
<u>N. 539, 627.97</u> <u>E. 271, 175.02</u>		DATE WELL COMPLETED <u>1979 1796</u>	

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED:
(AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE,
MATERIAL USED IN PLUGGING, ETC.)

Trimmie Pipe ran to bottom of well
Well Cemented bottom to top with
4 Batches of Cement Gel Mixture;
all casing and screen left in
hole

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.

Arnold Fincher Sr 2-25-02
SIGNATURE DATE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources

P.O. Box 10631
Jackson, Mississippi 39289
Water Well Plugging
Decommissioning

COUNTY WELL LOCATED <u>Lamar</u>		PERMIT NUMBER -	
WELL NUMBER <u>SA5-1-M</u>	CODED	NAME OF DRILLING FIRM <u>ONEA Drill</u>	
DATE WELL PLUGGED <u>2-25-02</u>		<u>Arnold Fincher Sr</u>	
NAME & MAILING ADDRESS OF LANDOWNER <u>U.S. Dept of Energy</u> <u>Las Vegas, N. V</u>		NAME OF WELL CONTRACTOR WHO DRILLED THE WELL <u>UNKNOWN</u>	
WELL LOCATION SEC <u>14</u> TOWNSHIP <u>2N</u> RANGE <u>16W</u>		NAME OF LANDOWNER WHEN WELL WAS DRILLED <u>U.S. Dept of Energy</u>	
DISTANCE DIRECTION NEAREST TOWN <u>15 miles West of Turris</u>		WELL DATA	
OT-ER LANDMARK <u>Salmon site</u>	WELL DEPTH <u>35</u>	Casing Diameter (in) <u>5"</u>	Casing Length (ft) <u>15</u>
WELL PURPOSE: Home-irrigation, Municipal, Industrial, Farm Pond, etc. <u>Monitoring well</u>	Type of Casing <u>PVC</u>	Hole Depth <u>35</u>	Depth to Static Water Level <u>10</u>
DATE WELL COMPLETED <u>10-23-95</u>			

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED:
(AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE,
MATERIAL USED IN PLUGGING, ETC.)

The well cement with 5 1/2 Bags
of Hole Plug all casing and
screen left. Top plugged with
Cement

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.

Arnold Fincher Sr 3-25-02
SIGNATURE DATE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources

P.O. Box 18631
Jackson, Mississippi 39289
Water Well Plugging
Decommissioning

COUNTY WELL LOCATED <u>Lamar</u>	
WELL NUMBER <u>SA4-5-L</u>	CODED
DATE WELL PLUGGED <u>3-25-02</u>	

PERMIT NUMBER
NAME OF DRILLING FIRM <u>Con Ex Drill</u>
<u>Arnold Fincher Sr</u>

NAME & MAILING ADDRESS OF LANDOWNER <u>U.S. Dept of Energy</u> <u>Las Vegas, N.V.</u>

NAME OF WELL CONTRACTOR WHO DRILLED THE WELL <u>Con Ex Drill</u> <u>Arnold Fincher Sr</u>

NAME OF LANDOWNER WITH WHOM WELL WAS DRILLED <u>U.S. Dept of Energy</u>
--

WELL LOCATION	SEC	TOWNSHIP	RANGE
	<u>14</u>	<u>2N</u>	<u>16W</u>

WELL DATA

DISTANCE	DIRECTION	NEAREST TOWN
<u>16 miles West of Purvis</u>		

Well Depth	Casing Diameter (in.)	Casing Length (ft.)
<u>175</u>	<u>5</u>	<u>150</u>

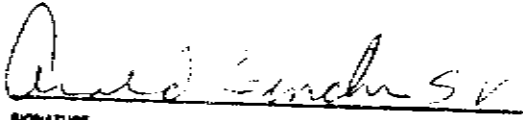
OTHER LANDMARK <u>Salmon Site</u>

Type of Casing	Well Depth	Depth to Static Water Level
<u>PVC</u>	<u>175</u>	<u>110</u>

WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc. <u>Monitoring Well</u>
--

DATE WELL COMPLETED <u>3-26-02</u>

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED. (AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE, MATERIAL USED IN PLUGGING, ETC.) <u>Trimmed Line run to bottom</u> <u>of well. Well filled from bottom</u> <u>to top with 150 lbs Cement Gel</u> <u>mixture. All casing and screen</u> <u>left in hole</u>

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.	
 SIGNATURE	<u>3-25-02</u> DATE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources

P.O. Box 10631
Jackson, Mississippi 39289
Water Well Plugging
Decommissioning

COUNTY WELL LOCATED Lamar		PERMIT NUMBER	
WELL NUMBER SA4-1M	CODED	NAME OF DRILLING FIRM Am Ex Drill	
DATE WELL PLUGGED 2-28-02		Arnold Finkler Sr	
NAME & MAILING ADDRESS OF LANDOWNER		NAME OF WELL CONTRACTOR WHO DRILLED THE WELL UNKNOWN	
		SNGEEY CONSULTING	
		NAME OF LANDOWNER WHEN WELL WAS DRILLED U.S. Dept of Energy	
WELL LOCATION SEC TOWNSHIP RANGE 11 2N 16W		WELL DATA	
DISTANCE 15 miles West of Purvis	DIRECTION	NEAREST TOWN	Well Depth 50
OTHER LANDMARK Salmon Site			Casing Diameter (in) 5"
WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc. Non-Drinking well			Casing Length (ft) 35
			Type of Casing PVC
			Hole Depth 50
			Depth to Static Water Level 10
			DATE WELL COMPLETED 10-24-95

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED:
(AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE.
MATERIAL USED IN PLUGGING, ETC.)

Trimming Pipe ran to bottom of well and well cemented Bottom to top with 4 Batches of Cement Gel mixture. all casing and screen left. Top plugged with Cement

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS

Arnold Finkler Sr **3-25-02**

SIGNATURE DATE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources

P.O. Box 10631
Jackson, Mississippi 39289
Water Well Plugging
Decommissioning

COUNTY WELL LOCATED <u>hamar</u>		PERMIT NUMBER	
WELL NUMBER <u>SA3-TM</u>	CODED	NAME OF DRILLING FIRM <u>Coner Drill</u>	
DATE WELL PLUGGED <u>2-26-02</u>		<u>Arnold Fincher S.</u>	
NAME & MAILING ADDRESS OF LANDOWNER <u>U.S. Dept of Energy</u> <u>Las Vegas, N.V.</u>		NAME OF WELL CONTRACTOR WHO DRILLED THE WELL <u>UNKNOWN</u>	
WELL LOCATION SEC <u>14</u> TOWNSHIP <u>2N</u> RANGE <u>16W</u>		NAME OF LANDOWNER WHEN WELL WAS DRILLED <u>U.S. Dept of Energy</u>	
DISTANCE <u>15 miles west of Pervis</u> DIRECTION <u>Salmon site</u> NEAREST TOWN		WELL DATA	
OTHER LANDMARK <u>Monitoring well</u>		Well Depth <u>40</u>	Casing Diameter (in.) <u>5"</u>
WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc. <u>Monitoring well</u>		Type of Casing <u>PVC</u>	Casing Length (ft.) <u>36</u>
		Hole Depth <u>40</u>	Depth to Static Water Level <u>51</u>
		DATE WELL COMPLETED <u>10-26-95</u>	

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED:
(AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE,
MATERIAL USED IN PLUGGING, ETC.)

Casing pulled from hole, hole
filled bottom to top with
Cement Gel Mixture. 6 Bags.
Top plugged with Cement

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.

Arnold Fincher S. 3-25-02
SIGNATURE DATE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources

P.O. Box 10631
Jackson, Mississippi 39289
Water Well Plugging
Decommissioning

COUNTY WELL LOCATED Lamar		PERMIT NUMBER	
WELL NUMBER 543-S-H	CODED	NAME OF DRILLING FIRM Con Ex Drill	
DATE WELL PLUGGED 2-26-02		Arnold Fincher Sr	
NAME & MAILING ADDRESS OF LANDOWNER U.S. Dept of Energy Las Vegas, N. V		NAME OF WELL CONTRACTOR WHO DRILLED THE WELL unknown	
WELL LOCATION SEC TOWNSHIP RANGE 14 2N 16W		NAME OF LANDOWNER WHEN WELL WAS DRILLED U.S. Dept of Energy	
DISTANCE DIRECTION NEAREST TOWN 15 miles west of Barvis		WELL DATA	
OTHER LANDMARK Salmon S. Le		Well Depth 30	Casing Diameter (in.) 5
WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc. Monitoring well		Type of Casing PVC	Casing Length (ft.) 20
		Hole Depth 30	Depth to Static Water Level 5
		DATE WELL COMPLETED 10-26-95	

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED:
(AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE,
MATERIAL USED IN PLUGGING, ETC.)

**all casing pulled from hole, hole
filled bottom to top with
3 Bags of Cement seal mixture
top plugged with cement**

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.

Arnold Fincher Sr **3-25-02**
SIGNATURE DATE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources

P.O. Box 10631
Jackson, Mississippi 39289
Water Well Plugging
Decommissioning

COUNTY WELL LOCATED <u>Lamar</u>		PERMIT NUMBER	
WELL NUMBER <u>SA3-3-M</u>	CODED	NAME OF DRILLING FIRM <u>Con Ex Drill</u>	
DATE WELL PLUGGED <u>2-26-02</u>		NAME OF WELL CONTRACTOR WHO DRILLED THE WELL <u>UNKNOWN</u>	
NAME & MAILING ADDRESS OF LANDOWNER <u>U.S. Dept of Energy</u> <u>Las Vegas N.V.</u>		NAME OF LANDOWNER WHEN WELL WAS DRILLED <u>U.S. Dept of Energy</u>	
WELL LOCATION	SEC <u>14</u>	TOWNSHIP <u>2N</u>	RANGE <u>16W</u>
DISTANCE <u>15 miles west of Pervis</u>	DIRECTION	NEAREST TOWN	
OTHER LANDMARK <u>Salmon site</u>			
WELL PURPOSE: Mining, Irrigation, Municipal, Industrial, Fish Pond, etc. <u>Monitoring well</u>			
Well Depth <u>50</u>	Casing Diameter (in.) <u>5 1/2</u>	Casing Length (ft.) <u>28</u>	
Type of Casing <u>PVC</u>	Hole Depth <u>50</u>	Depth to Static Water Level <u>10</u>	
DATE WELL COMPLETED <u>11-95</u>			

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED:
(AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE,
MATERIAL USED IN PLUGGING, ETC.)

all casing and screen pulled
from well hole filled from
bottom to top with 15 bags of
 cement cell mixture, top plugged
with cement

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.

Arnold Finch Sr
SIGNATURE

3-25-02
DATE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources

P.O. Box 10631
Jackson, Mississippi 39289
Water Well Plugging
Decommissioning

COUNTY WELL LOCATED <u>Lamar</u>		PERMIT NUMBER		P.O. Box 10631 Jackson, Mississippi 39289 Water Well Plugging Decommissioning	
WELL NUMBER <u>SAS-2M</u>	CODED	NAME OF DRILLING FIRM <u>Con Ex Drill</u>			
DATE WELL PLUGGED <u>2-20-02</u>		NAME OF WELL CONTRACTOR WHO DRILLED THE WELL <u>Arnold Fincher Sr</u>			
NAME & MAILING ADDRESS OF LANDOWNER <u>U.S Dept of Energy</u> <u>Las Vegas, N.V.</u>				NAME OF LANDOWNER WHEN WELL WAS DRILLED <u>U.S Dept of Energy</u>	
WELL LOCATION SEC TOWNSHIP RANGE <u>14</u> <u>2N</u> <u>16W</u>				WELL DATA	
DISTANCE DIRECTION NEAREST TOWN <u>15 miles west of Purvis</u>				Well Depth <u>35</u>	Casing Diameter (in.) <u>5"</u>
OTHER LANDMARK <u>Salmon Site</u>				Type of Casing <u>PVC</u>	Casing Length (ft.) <u>15</u>
WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fire Pond, etc. <u>Monitoring well</u>				Hole Depth <u>35</u>	Depth to Static Water Level <u>10</u>
				DATE WELL COMPLETED <u>10-23-95</u>	

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED: (AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE, MATERIAL USED IN PLUGGING, ETC.)	
<u>Hole cemented with 5 1/2 Bags of</u> <u>Hole Plug all casing and screen</u> <u>left in hole top plugged with</u> <u>Cement</u>	

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.	
<u>Arnold Fincher Sr</u> SIGNATURE	<u>3-25-02</u> DATE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Office of Land and Water Resources

P.O. Box 10631
Jackson, Mississippi 39289
Water Well Plugging
Decommissioning

COUNTY WELL LOCATED <u>Lamar</u>		PERMIT NUMBER	
WELL NUMBER <u>SA5-3M</u>	CODED	NAME OF DRILLING FIRM <u>Con Ex Drill</u>	
DATE WELL PLUGGED <u>2-26-02</u>		NAME OF LANDOWNER <u>Arnold Finley Sr</u>	
NAME & MAILING ADDRESS OF LANDOWNER <u>U.S Dept of Energy</u> <u>Las Vegas, NV</u>		NAME OF WELL CONTRACTOR WHO DRILLED THE WELL <u>Unknown</u>	
WELL LOCATION SEC <u>14</u> TOWNSHIP <u>2N</u> RANGE <u>16W</u>		NAME OF LANDOWNER WHEN WELL WAS DRILLED <u>U.S Dept of Energy</u>	
DISTANCE DIRECTION NEAREST TOWN <u>15 miles West of Purvis</u>		WELL DATA	
OTHER LANDMARK <u>Salmon Site</u>		Well Depth <u>40</u>	Casing Diameter (In.) <u>5"</u>
WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc. <u>Monitoring Well</u>		Casing Length (FL) <u>28</u>	Depth to Static Water Level <u>10</u>
		Type of Casing <u>PVC</u>	Hole Depth <u>40</u>
		DATE WELL COMPLETED <u>10-24-95</u>	

DESCRIBE HOW THE WELL OR HOLE WAS PLUGGED:
(AMOUNT OF CASING AND/OR SCREEN THAT WAS REMOVED, OR LEFT IN HOLE,
MATERIAL USED IN PLUGGING, ETC.)

Hole Filled with 5 Bags of
Hole Plug all casing and screen
left in hole. Top of hole
filled with cement

I CERTIFY THAT THE WELL WAS PLUGGED OR ABANDONED IN ACCORDANCE WITH THE STATE OF MISSISSIPPI REGULATIONS.

Arnold Finley Sr 3-25-02
SIGNATURE DATE

Appendix B

Analytical Results for Operable Unit 1

(21 Pages)

**ANALYTICAL RESULTS
OPERABLE UNIT 1: SHALLOW AQUIFER
SPRING 2002**

WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	DETECTION LIMIT	QUALIFIER	MCL (UG/L)
METALS ANALYSIS										
SA1-1-H	13-Mar-2002	WATER	EPA6010	ARSENIC	11.0	UG/L	10.0	2.1		50
SA1-1-H	13-Mar-2002	WATER	EPA6010	BARIUM	310	UG/L	100	8.40E-05		2,000
SA1-1-H	13-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
SA1-1-H	13-Mar-2002	WATER	EPA6010	CHROMIUM	10	UG/L	10	5.90E-04	U	100
SA1-1-H	13-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3	1.10E-03	UJ	15
SA1-1-H	13-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5	1.80E-03	U	50
SA1-1-H	13-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	10	6.70E-04	U	
SA1-1-H	13-Mar-2002	WATER	EPA7470	MERCURY	0.028	MG/L	0.2	4.60E-06	U	2
VOLATILE ORGANIC COMPOUNDS										
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
SA1-1-H	13-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
SA1-1-H	13-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
SA1-1-H	13-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	

**ANALYTICAL RESULTS
OPERABLE UNIT 1: SHALLOW AQUIFER
SPRING 2002**

WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	DETECTION LIMIT	QUALIFIER	MCL (UG/L)
SA1-1-H	13-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
SA1-1-H	13-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
SA1-1-H	13-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	18	UG/L	5.00	1.2		70
SA1-1-H	13-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
SA1-1-H	13-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	1.7	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	M-P-XYLENE	5	UG/L	5.00	2.7	U	10,000
SA1-1-H	13-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	5	UG/L	5.00	1.4	U	5
SA1-1-H	13-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
SA1-1-H	13-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
SA1-1-H	13-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
SA1-1-H	13-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
SA1-1-H	13-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	4	UG/L	5.00	1.4	J	100
SA1-1-H	13-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	9.8	UG/L	5.00	1.2		5
SA1-1-H	13-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
SA1-1-H	13-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TRITIUM										
SA1-1-H	13-Mar-2002	WATER	EPA906.0	H-3	25100	pCi/L	400.00			20,000 pCi/L
METALS ANALYSIS										
SA1-2-H	13-Mar-2002	WATER	EPA6010	ARSENIC	7.2	UG/L	10.0	2.1	B	50
SA1-2-H	13-Mar-2002	WATER	EPA6010	BARIUM	39	UG/L	100	8.40E-05	B	2,000
SA1-2-H	13-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5.0e-03	1.80E-04	UJ	5
SA1-2-H	13-Mar-2002	WATER	EPA6010	CHROMIUM	10	UG/L	0.01	5.90E-04	U	100
SA1-2-H	13-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3.0e-03	1.10E-03	UJ	15
SA1-2-H	13-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5.0e-03	1.80E-03	U	50

**ANALYTICAL RESULTS
OPERABLE UNIT 1: SHALLOW AQUIFER
SPRING 2002**

WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	USE LIMIT	QUALIFIER	MCL (UG/L)
SA1-2-H	13-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	0.01	6.70E-04	U	
SA1-2-H	13-Mar-2002	WATER	EPA7470	MERCURY	0.024	MG/L	2.0E-04	4.60E-06	U	2
VOLATILE ORGANIC COMPOUNDS										
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
SA1-2-H	13-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
SA1-2-H	13-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
SA1-2-H	13-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
SA1-2-H	13-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
SA1-2-H	13-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	48	UG/L	5.00	1.2		70

**ANALYTICAL RESULTS
OPERABLE UNIT 1: SHALLOW AQUIFER
SPRING 2002**

WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	LIMIT	REMARKS	QUALIFIER	MCL (UG/L)
SA1-2-H	13-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
SA1-2-H	13-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	1.7	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
SA1-2-H	13-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	5	UG/L	5.00	1.4	U	5
SA1-2-H	13-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
SA1-2-H	13-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
SA1-2-H	13-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
SA1-2-H	13-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
SA1-2-H	13-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	3.8	UG/L	5.00	1.4	J	100
SA1-2-H	13-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	4.3	UG/L	5.00	1.2	J	5
SA1-2-H	13-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
SA1-2-H	13-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	3.9	UG/L	10.00	1.5	J	2
TOTALS										
SA1-2-H	13-Mar-2002	WATER	EPA906.0	H-3	2430	pCi/L	400.00			20,000 pCi/L
METALS ANALYSIS										
SA1-3-H	13-Mar-2002	WATER	EPA6010	ARSENIC	12.0	UG/L	10.0	2.1		50
SA1-3-H	13-Mar-2002	WATER	EPA6010	BARIUM	61	UG/L	100	8.40E-05	B	2,000
SA1-3-H	13-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5.0E-03	1.80E-04	UJ	5
SA1-3-H	13-Mar-2002	WATER	EPA6010	CHROMIUM	0.68	UG/L	0.01	5.90E-04	B	100
SA1-3-H	13-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3.0E-03	1.10E-03	UJ	15
SA1-3-H	13-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5.0E-03	1.80E-03	U	50
SA1-3-H	13-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	0.01	6.70E-04	U	
SA1-3-H	13-Mar-2002	WATER	EPA7470	MERCURY	0.024	UG/L	2.0E-04	4.60E-06	U	2
VOLATILE ORGANIC COMPOUNDS										
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5

**ANALYTICAL RESULTS
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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	LIMIT	UNIT	QUALIFIER	MCL (UG/L)
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
SA1-3-H	13-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
SA1-3-H	13-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
SA1-3-H	13-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
SA1-3-H	13-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
SA1-3-H	13-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	13	UG/L	5.00	1.2		70
SA1-3-H	13-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
SA1-3-H	13-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	1.7	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	

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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	LIMIT	LIMIT	QUALIFIER	MCL (UG/L)
SA1-3-H	13-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
SA1-3-H	13-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	5	UG/L	5.00	1.4	U	5
SA1-3-H	13-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
SA1-3-H	13-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
SA1-3-H	13-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
SA1-3-H	13-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
SA1-3-H	13-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	6.5	UG/L	5.00	1.4		100
SA1-3-H	13-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	5
SA1-3-H	13-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
SA1-3-H	13-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TITANIUM										
SA1-3-H	13-Mar-2002	WATER	EPA906.0	H-3	420	pCi/L	400.00		U	20,000 pCi/L
METALS ANALYSIS										
SA1-4-H	14-Mar-2002	WATER	EPA6010	ARSENIC	10.0	UG/L	10.0	2.1	U	50
SA1-4-H	14-Mar-2002	WATER	EPA6010	BARIUM	390	UG/L	100	8.40E-05		2,000
SA1-4-H	14-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5.0E-03	1.80E-04	UJ	5
SA1-4-H	14-Mar-2002	WATER	EPA6010	CHROMIUM	10	UG/L	0.01	5.90E-04	U	100
SA1-4-H	14-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3.0E-03	1.10E-03	UJ	15
SA1-4-H	14-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5.0E-03	1.80E-03	U	50
SA1-4-H	14-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	0.01	6.70E-04	U	
SA1-4-H	14-Mar-2002	WATER	EPA7470	MERCURY	0.012	UG/L	0.021	4.60E-06	UJ	2
VOLATILE ORGANIC COMPOUNDS										
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	

**ANALYTICAL RESULTS
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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNIT	LIMIT	QUALIFIER	MCL (UG/L)
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	U	0.2
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	U	600
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	U	5
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	U	5
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	U	75
SA1-4-H	14-Mar-2002	WATER	EPA8260	1-CHLOROHXANE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	R	
SA1-4-H	14-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	U	5
SA1-4-H	14-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	U	5
SA1-4-H	14-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	U	100
SA1-4-H	14-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5	UG/L	5.00	U	70
SA1-4-H	14-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	U	700
SA1-4-H	14-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	U	10,000
SA1-4-H	14-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	6.7	UG/L	5.00	U	5
SA1-4-H	14-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	U	

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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	DETECTION LIMIT	QUALIFIER	MCL (UG/L)
SA1-4-H	14-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
SA1-4-H	14-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
SA1-4-H	14-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
SA1-4-H	14-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
SA1-4-H	14-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
SA1-4-H	14-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	5
SA1-4-H	14-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
SA1-4-H	14-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TRITANIUM										
SA1-4-H	14-Mar-2002	WATER	EPA906.0	H-3	80	pCi/L	390.00		U	20,000 pCi/L
METALS ANALYSIS										
SA1-5-H	14-Mar-2002	WATER	EPA6010	ARSENIC	3.0	UG/L	10.0	2.1	B	50
SA1-5-H	14-Mar-2002	WATER	EPA6010	BARIUM	28	UG/L	100	8.40E-05	B	2,000
SA1-5-H	14-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
SA1-5-H	14-Mar-2002	WATER	EPA6010	CHROMIUM	10	UG/L	10	5.90E-04	U	100
SA1-5-H	14-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3	1.10E-03	UJ	15
SA1-5-H	14-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5	1.80E-03	U	50
SA1-5-H	14-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	10	6.70E-04	U	
SA1-5-H	14-Mar-2002	WATER	EPA7470	MERCURY	0.01	UG/L	0.21	4.60E-06	UJ	2
VOLATILE ORGANIC COMPOUNDS										
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	

**ANALYTICAL RESULTS
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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	DETECTION LIMIT	QUALIFIER	MCL (UG/L)
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
SA1-5-H	14-Mar-2002	WATER	EPA8260	1-CHLOROHXANE	5	UG/L	5.00	1.4	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
SA1-5-H	14-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
SA1-5-H	14-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
SA1-5-H	14-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
SA1-5-H	14-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	11	UG/L	5.00	1.2		70
SA1-5-H	14-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
SA1-5-H	14-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	1.7	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
SA1-5-H	14-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	12	UG/L	5.00	1.4	U	5
SA1-5-H	14-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
SA1-5-H	14-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
SA1-5-H	14-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
SA1-5-H	14-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000

**ANALYTICAL RESULTS
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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	DETECTION LIMIT	QUALIFIER	MCL (UG/L)
SA1-5-H	14-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4		100
SA1-5-H	14-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	1.6	UG/L	5.00	1.2	J	5
SA1-5-H	14-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
SA1-5-H	14-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TITANIUM										
SA1-5-H	14-Mar-2002	WATER	EPA906.0	H-3	830	pCi/L	390.00			20,000 pCi/L
METALS ANALYSIS										
SA1-6-H	14-Mar-2002	WATER	EPA6010	ARSENIC	10.0	UG/L	10.0	2.1	U	50
SA1-6-H	14-Mar-2002	WATER	EPA6010	BARIUM	19	UG/L	100	8.40E-05	B	2,000
SA1-6-H	14-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
SA1-6-H	14-Mar-2002	WATER	EPA6010	CHROMIUM	10	UG/L	10	5.90E-04	U	100
SA1-6-H	14-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3	1.10E-03	UJ	15
SA1-6-H	14-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5	1.80E-03	U	50
SA1-6-H	14-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	10	6.70E-04	U	
SA1-6-H	14-Mar-2002	WATER	EPA7470	MERCURY	0.01	UG/L	0.2	4.60E-06	UJ	2
VOLATILE ORGANIC COMPOUNDS										
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
SA1-6-H	14-Mar-2002	WATER	EPA8260	1-CHLOROHXANE	5	UG/L	5.00	1.4	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	

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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	USE OF DATA	QUALIFIER	MCL (UG/L)
SA1-6-H	14-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
SA1-6-H	14-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
SA1-6-H	14-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
SA1-6-H	14-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
SA1-6-H	14-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.2	U	70
SA1-6-H	14-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
SA1-6-H	14-Mar-2002	WATER	EPA8260	HEXACHLOROBTADIENE	5	UG/L	5.00	1.7	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
SA1-6-H	14-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	12	UG/L	5.00	1.4	U	5
SA1-6-H	14-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
SA1-6-H	14-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
SA1-6-H	14-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
SA1-6-H	14-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
SA1-6-H	14-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
SA1-6-H	14-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	5
SA1-6-H	14-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
SA1-6-H	14-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2

**ANALYTICAL RESULTS
OPERABLE UNIT 1: SHALLOW AQUIFER
SPRING 2002**

WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	DETECTION LIMIT	QUALIFIER	MCL (UG/L)
SA1-6-H	14-Mar-2002	WATER	EPA906.0	TITANIUM	-100	PC/L	390.00		U	20,000 p
METALS ANALYSIS										
SA1-7-H	14-Mar-2002	WATER	EPA6010	ARSENIC	20.0	UG/L	10.0	2.1		50
SA1-7-H	14-Mar-2002	WATER	EPA6010	BARIUM	390	UG/L	100	8.40E-05		2,000
SA1-7-H	14-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
SA1-7-H	14-Mar-2002	WATER	EPA6010	CHROMIUM	1.2	UG/L	10	5.90E-04	B	100
SA1-7-H	14-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3	1.10E-03	UJ	15
SA1-7-H	14-Mar-2002	WATER	EPA6010	SELENIUM	2.2	UG/L	5	1.80E-03	U	50
SA1-7-H	14-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	10	6.70E-04	U	
SA1-7-H	14-Mar-2002	WATER	EPA7470	MERCURY	0.011	MG/L	0.2	4.60E-06	UJ	2
VOLATILE ORGANIC COMPOUNDS										
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
SA1-7-H	14-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
SA1-7-H	14-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
SA1-7-H	14-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	

ANALYTICAL RESULTS
OPERABLE UNIT 1: SHALLOW AQUIFER
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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	LOD	LOD	QUALIFIER	MCL (UG/L)
SA1-7-H	14-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
SA1-7-H	14-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
SA1-7-H	14-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.2	U	70
SA1-7-H	14-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
SA1-7-H	14-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	1.7	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
SA1-7-H	14-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	12	UG/L	5.00	1.4	U	5
SA1-7-H	14-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
SA1-7-H	14-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
SA1-7-H	14-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
SA1-7-H	14-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
SA1-7-H	14-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
SA1-7-H	14-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	5
SA1-7-H	14-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
SA1-7-H	14-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TOTALS										
SA1-7-H	14-Mar-2002	WATER	EPA906.0	H-3	-150	pCi/L	390.00		U	20,000 pCi/L
METALS ANALYSIS										
SA1-12-H	22-Mar-2002	WATER	EPA6010	ARSENIC	10.0	UG/L	10.0	2.1	U	50
SA1-12-H	22-Mar-2002	WATER	EPA6010	BARIUM	17	UG/L	100	8.40E-05	B	2,000
SA1-12-H	22-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
SA1-12-H	22-Mar-2002	WATER	EPA6010	CHROMIUM	10	UG/L	10	5.90E-04	U	100

**ANALYTICAL RESULTS
OPERABLE UNIT 1: SHALLOW AQUIFER
SPRING 2002**

WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	DETECTION LIMIT	QUALIFIER	MCL (UG/L)
SA1-12-H	22-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3	1.10E-03	UJ	15
SA1-12-H	22-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5	1.80E-03	U	50
SA1-12-H	22-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	10	6.70E-04	UJ	
SA1-12-H	22-Mar-2002	WATER	EPA7470	MERCURY	0.012	UG/L	0.2	4.60E-06	U	2
VOLATILE ORGANIC COMPOUNDS										
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
SA1-12-H	22-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
SA1-12-H	22-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
SA1-12-H	22-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
SA1-12-H	22-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
SA1-12-H	22-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	

**ANALYTICAL RESULTS
OPERABLE UNIT 1: SHALLOW AQUIFER
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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNIT	CONCENTRATION	LIMIT	QUALIFIER	MCL (UG/L)
SA1-12-H	22-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.2	U	70
SA1-12-H	22-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	UJ	
SA1-12-H	22-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
SA1-12-H	22-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	1.7	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
SA1-12-H	22-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	5	UG/L	5.00	1.4	U	5
SA1-12-H	22-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
SA1-12-H	22-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
SA1-12-H	22-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
SA1-12-H	22-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
SA1-12-H	22-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
SA1-12-H	22-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	5
SA1-12-H	22-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
SA1-12-H	22-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TITANIUM										
SA1-12-H	22-Mar-2002	WATER	EPA906.0	H-3	-40	PC/L	380.00		U	20,000 PC/L
METALS ANALYSIS										
HMH-5R	21-Mar-2002	WATER	EPA6010	ARSENIC	10.0	UG/L	10.0	2.1	UJ	50
HMH-5R	21-Mar-2002	WATER	EPA6010	BARIUM	510	UG/L	100	8.40E-05	UJ	2,000
HMH-5R	21-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
HMH-5R	21-Mar-2002	WATER	EPA6010	CHROMIUM	10	UG/L	10	5.90E-04	UJ	100
HMH-5R	21-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3	1.10E-03	UJ	15
HMH-5R	21-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5	1.80E-03	U	50
HMH-5R	21-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	10	6.70E-04	U	
HMH-5R	21-Mar-2002	WATER	EPA7470	MERCURY	0.2	MG/L	0.2	4.60E-06	UJ	2
VOLATILE ORGANIC COMPOUNDS										
HMH-5R	21-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200

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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD DETECTION LIMIT	QUALIFIER	MCL (UG/L)
HMH-5R	21-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
HMH-5R	21-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
HMH-5R	21-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
HMH-5R	21-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
HMH-5R	21-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
HMH-5R	21-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
HMH-5R	21-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
HMH-5R	21-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
HMH-5R	21-Mar-2002	WATER	EPA8260	1-CHLOROHXANE	5	UG/L	5.00	1.4	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	ACETONE	14	UG/L	20.00	8	J	
HMH-5R	21-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
HMH-5R	21-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
HMH-5R	21-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
HMH-5R	21-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	120	UG/L	5.00	1.2		70
HMH-5R	21-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	UJ	
HMH-5R	21-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700

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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNIT	LOD	MDL	QUALIFIER	MCL (UG/L)
HMH-5R	21-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	1.7	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
HMH-5R	21-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	5	UG/L	5.00	1.4	U	5
HMH-5R	21-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
HMH-5R	21-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
HMH-5R	21-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
HMH-5R	21-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
HMH-5R	21-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	7.9	UG/L	5.00	1.4	U	100
HMH-5R	21-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	230	UG/L	5.00	1.2	J	5
HMH-5R	21-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
HMH-5R	21-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
INORGANIC ANALYSIS										
HMH-5R	21-Mar-2002	WATER	EPA906.0	H-3	8700	pCi/L	380.00			20,000 pCi/L
METALS ANALYSIS										
HMH-16R	21-Mar-2002	WATER	EPA6010	ARSENIC	10.0	UG/L	10.0	2.1	UJ	50
HMH-16R	21-Mar-2002	WATER	EPA6010	BARIUM	20	UG/L	100	8.40E-05	B	2,000
HMH-16R	21-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
HMH-16R	21-Mar-2002	WATER	EPA6010	CHROMIUM	10	UG/L	10	5.90E-04	UJ	100
HMH-16R	21-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3	1.10E-03	UJ	15
HMH-16R	21-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5	1.80E-03	U	50
HMH-16R	21-Mar-2002	WATER	EPA6010	SILVER	0.73	UG/L	10	6.70E-04	B	
HMH-16R	21-Mar-2002	WATER	EPA7470	MERCURY	0.2	UG/L	0.2	4.60E-06	UJ	2
VOLATILE ORGANIC COMPOUNDS										
HMH-16R	21-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
HMH-16R	21-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
HMH-16R	21-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
HMH-16R	21-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	

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HMH-16R	21-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
HMH-16R	21-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
HMH-16R	21-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
HMH-16R	21-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
HMH-16R	21-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
HMH-16R	21-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
HMH-16R	21-Mar-2002	WATER	EPA8260	1-CHLOROHXANE	5	UG/L	5.00	1.4	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	6	UG/L	5.00	1.5	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
HMH-16R	21-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
HMH-16R	21-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
HMH-16R	21-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
HMH-16R	21-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.2	U	70
HMH-16R	21-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	UJ	
HMH-16R	21-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
HMH-16R	21-Mar-2002	WATER	EPA8260	HEXACHLOROBTADIENE	5	UG/L	5.00	1.7	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
HMH-16R	21-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	5	UG/L	5.00	1.4	U	5
HMH-16R	21-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	

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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD DETECTION LIMIT	QUALIFIER	MCL (UG/L)
HMH-16R	21-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
HMH-16R	21-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
HMH-16R	21-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
HMH-16R	21-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
HMH-16R	21-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
HMH-16R	21-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	5
HMH-16R	21-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
HMH-16R	21-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TRITIUM										
HMH-16R	21-Mar-2002	WATER	EPA906.0	H-3	-50	pCi/L	380.00		U	20,000 pCi/L
METALS ANALYSIS										
HM-S	11-Mar-2002	WATER	EPA6010	ARSENIC	10.0	UG/L	10.0	2.1	U	50
HM-S	11-Mar-2002	WATER	EPA6010	BARIUM	37	UG/L	100	8.40E-05	B	2,000
HM-S	11-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
HM-S	11-Mar-2002	WATER	EPA6010	CHROMIUM	10	UG/L	10	5.90E-04	U	100
HM-S	11-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3	1.10E-03	UJ	15
HM-S	11-Mar-2002	WATER	EPA6010	SELENIUM	2.3	UG/L	5	1.80E-03	U	50
HM-S	11-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	10	6.70E-04	U	
HM-S	11-Mar-2002	WATER	EPA7470	MERCURY	0.032	MG/L	0.2	4.60E-06	U	2
VOLATILE ORGANIC COMPOUNDS										
HM-S	11-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
HM-S	11-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
HM-S	11-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
HM-S	11-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
HM-S	11-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
HM-S	11-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
HM-S	11-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
HM-S	11-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
HM-S	11-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
HM-S	11-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
HM-S	11-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
HM-S	11-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
HM-S	11-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
HM-S	11-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
HM-S	11-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
HM-S	11-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5

**ANALYTICAL RESULTS
OPERABLE UNIT 1: SHALLOW AQUIFER
SPRING 2002**

WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD DETECTION LIMIT	QUALIFIER	MCL (UG/L)
HM-S	11-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
HM-S	11-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
HM-S	11-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
HM-S	11-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
HM-S	11-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	
HM-S	11-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
HM-S	11-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
HM-S	11-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
HM-S	11-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
HM-S	11-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
HM-S	11-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
HM-S	11-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	U	
HM-S	11-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
HM-S	11-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
HM-S	11-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
HM-S	11-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
HM-S	11-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
HM-S	11-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
HM-S	11-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
HM-S	11-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	UJ	5
HM-S	11-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
HM-S	11-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
HM-S	11-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
HM-S	11-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
HM-S	11-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	4.6	UG/L	5.00	1.2	J	70
HM-S	11-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
HM-S	11-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
HM-S	11-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
HM-S	11-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
HM-S	11-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
HM-S	11-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	1.7	U	
HM-S	11-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
HM-S	11-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
HM-S	11-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
HM-S	11-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
HM-S	11-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	5	UG/L	5.00	1.4	U	5
HM-S	11-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
HM-S	11-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
HM-S	11-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
HM-S	11-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
HM-S	11-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
HM-S	11-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
HM-S	11-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
HM-S	11-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	

**ANALYTICAL RESULTS
OPERABLE UNIT 1: SHALLOW AQUIFER
SPRING 2002**

WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	DETECTION LIMIT	QUALIFIER	MCL (UG/L)
HM-S	11-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
HM-S	11-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
HM-S	11-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
HM-S	11-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
HM-S	11-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	2.7	UG/L	5.00	1.2	J	5
HM-S	11-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
HM-S	11-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
HM-S	11-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
HM-S	11-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TRITIUM										
HM-S	11-Mar-2002	WATER	EPA906.0	H-3	1750	pCi/L	400.00			20,000 pCi/L

Appendix C

Analytical Results for Operable Unit 2

(30 Pages)

ANALYTICAL RESULTS
OPERABLE UNIT 2: Local Aquifers 1, 2a 2b and 3
SPRING 2002

WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD DETECTION LIMIT	QUALIFIER	MCL (UG/L)
METALS ANALYSIS										
E-7	21-Mar-2002	WATER	EPA6010	ARSENIC	10.0	UG/L	10.0	2.10E-03	UJ	50
E-7	21-Mar-2002	WATER	EPA6010	BARIUM	140.0	UG/L	10.0	8.40E-05		2,000
E-7	21-Mar-2002	WATER	EPA6010	CADMIUM	5.0	UG/L	5.0	1.80E-04	UJ	5
E-7	21-Mar-2002	WATER	EPA6010	CHROMIUM	1.3	UG/L	10.0	5.90E-04	UJ	100
E-7	21-Mar-2002	WATER	EPA6010	LEAD	3.0	UG/L	3.0	1.10E-03	UJ	15
E-7	21-Mar-2002	WATER	EPA6010	SELENIUM	1.9	UG/L	5.0	1.80E-03	B	50
E-7	21-Mar-2002	WATER	EPA6010	SILVER	10.0	UG/L	10.0	6.70E-04	U	
E-7	21-Mar-2002	WATER	EPA7470	MERCURY	0.2	UG/L	0.2	4.60E-06	UJ	2
VOLATILE ORGANIC COMPOUNDS										
E-7	21-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5.0	UG/L	5.00	1.1	U	
E-7	21-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5.0	UG/L	5.00	1.2	U	200
E-7	21-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5.0	UG/L	5.00	1.1	U	
E-7	21-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5.0	UG/L	5.00	1.2	U	
E-7	21-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5.0	UG/L	5.00	1.5	U	
E-7	21-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5.0	UG/L	5.00	1.6	U	
E-7	21-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5.0	UG/L	5.00	1.4	U	
E-7	21-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5.0	UG/L	5.00	1.5	U	
E-7	21-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5.0	UG/L	5.00	1.3	U	
E-7	21-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5.0	UG/L	5.00	1.5	U	70
E-7	21-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5.0	UG/L	5.00	1.2	U	
E-7	21-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10.0	UG/L	10.00	1.4	U	0.2
E-7	21-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5.0	UG/L	5.00	0.89	U	
E-7	21-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5.0	UG/L	5.00	1.3	U	600
E-7	21-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5.0	UG/L	5.00	1.3	U	5
E-7	21-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5.0	UG/L	5.00	0.88	U	5
E-7	21-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5.0	UG/L	5.00	1.1	U	
E-7	21-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5.0	UG/L	5.00	1.2	U	
E-7	21-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5.0	UG/L	5.00	1	U	
E-7	21-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5.0	UG/L	5.00	1.1	U	75
E-7	21-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5.0	UG/L	5.00	1.4	U	
E-7	21-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5.0	UG/L	5.00	1.5	U	
E-7	21-Mar-2002	WATER	EPA8260	2-BUTANONE	20.0	UG/L	20.00	5.5	U	
E-7	21-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5.0	UG/L	5.00	0.95	U	
E-7	21-Mar-2002	WATER	EPA8260	2-HEXANONE	20.0	UG/L	20.00	5.8	U	
E-7	21-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5.0	UG/L	5.00	1.1	U	
E-7	21-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20.0	UG/L	20.00	5.3	U	
E-7	21-Mar-2002	WATER	EPA8260	ACETONE	20.0	UG/L	20.00	8	R	

ANALYTICAL RESULTS
OPERABLE UNIT 2: Local Aquifers 1, 2a 2b and 3
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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	DETECTION LIMIT	QUALIFIER	MCL (UG/L)
E-7	21-Mar-2002	WATER	EPA8260	BENZENE	5.0	UG/L	5.00	0.89	U	5
E-7	21-Mar-2002	WATER	EPA8260	BROMOBENZENE	5.0	UG/L	5.00	1.1	U	
E-7	21-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5.0	UG/L	5.00	1	U	
E-7	21-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5.0	UG/L	5.00	0.55	U	
E-7	21-Mar-2002	WATER	EPA8260	BROMOFORM	5.0	UG/L	5.00	1.1	U	
E-7	21-Mar-2002	WATER	EPA8260	BROMOMETHANE	10.0	UG/L	10.00	2.2	U	
E-7	21-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5.0	UG/L	5.00	1.5	U	
E-7	21-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5.0	UG/L	5.00	1.4	U	5
E-7	21-Mar-2002	WATER	EPA8260	CHLORO BENZENE	5.0	UG/L	5.00	1.3	U	100
E-7	21-Mar-2002	WATER	EPA8260	CHLOROETHANE	10.0	UG/L	10.00	1.2	U	
E-7	21-Mar-2002	WATER	EPA8260	CHLOROFORM	5.0	UG/L	5.00	1.1	U	
E-7	21-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10.0	UG/L	10.00	1.1	U	
E-7	21-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5.0	UG/L	5.00	1.2	U	70
E-7	21-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5.0	UG/L	5.00	0.99	U	
E-7	21-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5.0	UG/L	5.00	0.73	U	
E-7	21-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5.0	UG/L	5.00	1.7	U	
E-7	21-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10.0	UG/L	10.00	1.3	U	
E-7	21-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5.0	UG/L	5.00	1.3	U	700
E-7	21-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5.0	UG/L	5.00	1.7	U	
E-7	21-Mar-2002	WATER	EPA8260	IODOMETHANE	5.0	UG/L	5.00	1.9	U	
E-7	21-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5.0	UG/L	5.00	1.1	U	
E-7	21-Mar-2002	WATER	EPA8260	M+P-XYLENE	5.0	UG/L	5.00	2.7	U	10,000
E-7	21-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5.0	UG/L	5.00	1.3	U	
E-7	21-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	5.0	UG/L	5.00	1.4	U	5
E-7	21-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5.0	UG/L	5.00	1.3	U	
E-7	21-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5.0	UG/L	5.00	1.2	U	
E-7	21-Mar-2002	WATER	EPA8260	NAPHTHALENE	5.0	UG/L	5.00	1.3	U	
E-7	21-Mar-2002	WATER	EPA8260	O-XYLENE	5.0	UG/L	5.00	1.4	U	10,000
E-7	21-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5.0	UG/L	5.00	1.2	U	
E-7	21-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5.0	UG/L	5.00	1.1	U	
E-7	21-Mar-2002	WATER	EPA8260	STYRENE	5.0	UG/L	5.00	1.3	U	100
E-7	21-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5.0	UG/L	5.00	1.3	U	
E-7	21-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5.0	UG/L	5.00	1.5	U	5
E-7	21-Mar-2002	WATER	EPA8260	TOLUENE	5.0	UG/L	5.00	1.7	U	1,000
E-7	21-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5.0	UG/L	5.00	1.4	U	100
E-7	21-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5.0	UG/L	5.00	1	U	
E-7	21-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5.0	UG/L	5.00	1.2	U	5
E-7	21-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5.0	UG/L	5.00	1.3	U	

ANALYTICAL RESULTS
OPERABLE UNIT 2: Local Aquifers 1, 2a 2b and 3
SPRING 2002

WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD DETECTION LIMIT	QUALIFIER	MCL (UG/L)
E-7	21-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5.0	UG/L	5.00	1.6	U	
E-7	21-Mar-2002	WATER	EPA8260	VINYL ACETATE	20.0	UG/L	20.00	1.2	U	
E-7	21-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10.0	UG/L	10.00	1.5	U	2
TRITIUM										
E-7	21-Mar-2002	WATER	EPA906.0	H-3	-130.0	pCi/L	380.00		U	20,000 pCi/L
METALS ANALYSIS										
HM-1	15-Mar-2002	WATER	EPA6010	ARSENIC	10.0	UG/L	10.0	2.10E-03	U	50
HM-1	15-Mar-2002	WATER	EPA6010	BARIUM	49.0	UG/L	100.0	8.40E-05	B	2,000
HM-1	15-Mar-2002	WATER	EPA6010	CADMIUM	5.0	UG/L	5.0	1.80E-04	UJ	5
HM-1	15-Mar-2002	WATER	EPA6010	CHROMIUM	5.9	UG/L	10.0	5.90E-04	B	100
HM-1	15-Mar-2002	WATER	EPA6010	LEAD	3.0	UG/L	3.0	1.10E-03	UJ	15
HM-1	15-Mar-2002	WATER	EPA6010	SELENIUM	5.0	UG/L	5.0	1.80E-03	U	50
HM-1	15-Mar-2002	WATER	EPA6010	SILVER	10.0	UG/L	10.0	6.70E-04	U	
HM-1	15-Mar-2002	WATER	EPA7470	MERCURY	0.2	UG/L	0.2	4.60E-06	UJ	2
VOLATILE ORGANIC COMPOUNDS										
HM-1	15-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5.0	UG/L	5.00	1.1	U	
HM-1	15-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5.0	UG/L	5.00	1.2	U	200
HM-1	15-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5.0	UG/L	5.00	1.1	U	
HM-1	15-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5.0	UG/L	5.00	1.2	U	5
HM-1	15-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5.0	UG/L	5.00	1.5	U	
HM-1	15-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5.0	UG/L	5.00	1.6	U	7
HM-1	15-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5.0	UG/L	5.00	1.4	U	
HM-1	15-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5.0	UG/L	5.00	1.5	U	
HM-1	15-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5.0	UG/L	5.00	1.3	U	
HM-1	15-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5.0	UG/L	5.00	1.5	U	70
HM-1	15-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5.0	UG/L	5.00	1.2	U	
HM-1	15-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10.0	UG/L	10.00	1.4	U	0.2
HM-1	15-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5.0	UG/L	5.00	0.89	U	
HM-1	15-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5.0	UG/L	5.00	1.3	U	600
HM-1	15-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5.0	UG/L	5.00	1.3	U	5
HM-1	15-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5.0	UG/L	5.00	0.88	U	5
HM-1	15-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5.0	UG/L	5.00	1.1	U	
HM-1	15-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5.0	UG/L	5.00	1.2	U	
HM-1	15-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5.0	UG/L	5.00	1	U	
HM-1	15-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5.0	UG/L	5.00	1.1	U	75
HM-1	15-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5.0	UG/L	5.00	1.4	U	
HM-1	15-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5.0	UG/L	5.00	1.5	U	
HM-1	15-Mar-2002	WATER	EPA8260	2-BUTANONE	20.0	UG/L	20.00	5.5	U	

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HM-1	15-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5.0	UG/L	5.00	0.95	U	
HM-1	15-Mar-2002	WATER	EPA8260	2-HEXANONE	20.0	UG/L	20.00	5.8	U	
HM-1	15-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5.0	UG/L	5.00	1.1	U	
HM-1	15-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20.0	UG/L	20.00	5.3	U	
HM-1	15-Mar-2002	WATER	EPA8260	ACETONE	20.0	UG/L	20.00	8	R	
HM-1	15-Mar-2002	WATER	EPA8260	BENZENE	5.0	UG/L	5.00	0.89	U	5
HM-1	15-Mar-2002	WATER	EPA8260	BROMOBENZENE	5.0	UG/L	5.00	1.1	U	
HM-1	15-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5.0	UG/L	5.00	1	U	
HM-1	15-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5.0	UG/L	5.00	0.55	U	
HM-1	15-Mar-2002	WATER	EPA8260	BROMOFORM	5.0	UG/L	5.00	1.1	U	
HM-1	15-Mar-2002	WATER	EPA8260	BROMOMETHANE	10.0	UG/L	10.00	2.2	U	
HM-1	15-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5.0	UG/L	5.00	1.5	U	
HM-1	15-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5.0	UG/L	5.00	1.4	U	5
HM-1	15-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5.0	UG/L	5.00	1.3	U	100
HM-1	15-Mar-2002	WATER	EPA8260	CHLOROETHANE	10.0	UG/L	10.00	1.2	U	
HM-1	15-Mar-2002	WATER	EPA8260	CHLOROFORM	5.0	UG/L	5.00	1.1	U	
HM-1	15-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10.0	UG/L	10.00	1.1	U	
HM-1	15-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5.0	UG/L	5.00	1.2	U	70
HM-1	15-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5.0	UG/L	5.00	0.99	U	
HM-1	15-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5.0	UG/L	5.00	0.73	U	
HM-1	15-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5.0	UG/L	5.00	1.7	U	
HM-1	15-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10.0	UG/L	10.00	1.3	U	
HM-1	15-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5.0	UG/L	5.00	1.3	U	700
HM-1	15-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5.0	UG/L	5.00	1.7	U	
HM-1	15-Mar-2002	WATER	EPA8260	IODOMETHANE	5.0	UG/L	5.00	1.9	U	
HM-1	15-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5.0	UG/L	5.00	1.1	U	
HM-1	15-Mar-2002	WATER	EPA8260	M+P-XYLENE	5.0	UG/L	5.00	2.7	U	10,000
HM-1	15-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5.0	UG/L	5.00	1.3	U	
HM-1	15-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	7.2	UG/L	5.00	1.4	U	5
HM-1	15-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5.0	UG/L	5.00	1.3	U	
HM-1	15-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5.0	UG/L	5.00	1.2	U	
HM-1	15-Mar-2002	WATER	EPA8260	NAPHTHALENE	5.0	UG/L	5.00	1.3	U	
HM-1	15-Mar-2002	WATER	EPA8260	O-XYLENE	5.0	UG/L	5.00	1.4	U	10,000
HM-1	15-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5.0	UG/L	5.00	1.2	U	
HM-1	15-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5.0	UG/L	5.00	1.1	U	
HM-1	15-Mar-2002	WATER	EPA8260	STYRENE	5.0	UG/L	5.00	1.3	U	100
HM-1	15-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5.0	UG/L	5.00	1.3	U	
HM-1	15-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5.0	UG/L	5.00	1.5	U	5

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HM-1	15-Mar-2002	WATER	EPA8260	TOLUENE	5.0	UG/L	5.00	1.7	U	1,000
HM-1	15-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5.0	UG/L	5.00	1.4	U	100
HM-1	15-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5.0	UG/L	5.00	1	U	
HM-1	15-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5.0	UG/L	5.00	1.2	U	5
HM-1	15-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5.0	UG/L	5.00	1.3	U	
HM-1	15-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5.0	UG/L	5.00	1.6	U	
HM-1	15-Mar-2002	WATER	EPA8260	VINYL ACETATE	20.0	UG/L	20.00	1.2	U	
HM-1	15-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10.0	UG/L	10.00	1.5	U	2
TRITIUM										
HM-1	15-Mar-2002	WATER	EPA906.0	H-3	-80	pCi/L	390.00		U	20,000 pCi/L
METALS ANALYSIS										
HM-2A	15-Mar-2002	WATER	EPA6010	ARSENIC	10.0	UG/L	10.0	2.1	U	50
HM-2A	15-Mar-2002	WATER	EPA6010	BARIUM	19.0	UG/L	100.0	8.40E-05	B	2,000
HM-2A	15-Mar-2002	WATER	EPA6010	CADMIUM	5.0	UG/L	5.0	1.80E-04	UJ	5
HM-2A	15-Mar-2002	WATER	EPA6010	CHROMIUM	10.0	UG/L	10.0	5.90E-04	U	100
HM-2A	15-Mar-2002	WATER	EPA6010	LEAD	3.0	UG/L	3.0	1.10E-03	UJ	15
HM-2A	15-Mar-2002	WATER	EPA6010	SELENIUM	5.0	UG/L	5.0	1.80E-03	U	50
HM-2A	15-Mar-2002	WATER	EPA6010	SILVER	10.0	UG/L	10.0	6.70E-04	U	
HM-2A	15-Mar-2002	WATER	EPA7470	MERCURY	0.2	MG/L	0.2	4.60E-06	UJ	2
VOLATILE ORGANIC COMPOUNDS										
HM-2A	15-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
HM-2A	15-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
HM-2A	15-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
HM-2A	15-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
HM-2A	15-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
HM-2A	15-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
HM-2A	15-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
HM-2A	15-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
HM-2A	15-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
HM-2A	15-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
HM-2A	15-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
HM-2A	15-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
HM-2A	15-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
HM-2A	15-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
HM-2A	15-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
HM-2A	15-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
HM-2A	15-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
HM-2A	15-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	

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HM-2A	15-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
HM-2A	15-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
HM-2A	15-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	
HM-2A	15-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
HM-2A	15-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
HM-2A	15-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
HM-2A	15-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
HM-2A	15-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
HM-2A	15-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
HM-2A	15-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
HM-2A	15-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
HM-2A	15-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
HM-2A	15-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
HM-2A	15-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
HM-2A	15-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
HM-2A	15-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
HM-2A	15-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
HM-2A	15-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
HM-2A	15-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
HM-2A	15-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
HM-2A	15-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
HM-2A	15-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
HM-2A	15-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.2	U	70
HM-2A	15-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
HM-2A	15-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
HM-2A	15-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
HM-2A	15-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
HM-2A	15-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
HM-2A	15-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	1.7	U	
HM-2A	15-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
HM-2A	15-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
HM-2A	15-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
HM-2A	15-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
HM-2A	15-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	7.5	UG/L	5.00	1.4	U	5
HM-2A	15-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
HM-2A	15-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
HM-2A	15-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
HM-2A	15-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000

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HM-2A	15-Mar-2002	WATER	EPA8260	P-ISOPROPYL TOLUENE	5	UG/L	5.00	1.2	U	
HM-2A	15-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
HM-2A	15-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
HM-2A	15-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
HM-2A	15-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
HM-2A	15-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
HM-2A	15-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
HM-2A	15-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
HM-2A	15-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	5
HM-2A	15-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
HM-2A	15-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
HM-2A	15-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
HM-2A	15-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TRITIUM										
HM-2A	15-Mar-2002	WATER	EPA906.0	H-3	20	pCi/L	390.00		U	20,000 pCi/L
METALS ANALYSIS										
HM-2B	15-Mar-2002	WATER	EPA6010	ARSENIC	10.0	UG/L	10.0	2.1	U	50
HM-2B	15-Mar-2002	WATER	EPA6010	BARIUM	62	UG/L	100.0	8.40E-05	B	2,000
HM-2B	15-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5.0	1.80E-04	UJ	5
HM-2B	15-Mar-2002	WATER	EPA6010	CHROMIUM	7.8	UG/L	10.0	5.90E-04	B	100
HM-2B	15-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3.0	1.10E-03	UJ	15
HM-2B	15-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5.0	1.80E-03	U	50
HM-2B	15-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	10.0	6.70E-04	U	
HM-2B	15-Mar-2002	WATER	EPA7470	MERCURY	0.2	UG/L	0.2	4.60E-06	UJ	2
VOLATILE ORGANIC COMPOUNDS										
HM-2B	15-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
HM-2B	15-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
HM-2B	15-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
HM-2B	15-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
HM-2B	15-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
HM-2B	15-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
HM-2B	15-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
HM-2B	15-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
HM-2B	15-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
HM-2B	15-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
HM-2B	15-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
HM-2B	15-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
HM-2B	15-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	

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HM-2B	15-Mar-2002	WATER	EPA8260	1,2-DICHLORO BENZENE	5	UG/L	5.00	1.3	U	600
HM-2B	15-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
HM-2B	15-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
HM-2B	15-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
HM-2B	15-Mar-2002	WATER	EPA8260	1,3-DICHLORO BENZENE	5	UG/L	5.00	1.2	U	
HM-2B	15-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
HM-2B	15-Mar-2002	WATER	EPA8260	1,4-DICHLORO BENZENE	5	UG/L	5.00	1.1	U	75
HM-2B	15-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	
HM-2B	15-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
HM-2B	15-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
HM-2B	15-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
HM-2B	15-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
HM-2B	15-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
HM-2B	15-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
HM-2B	15-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
HM-2B	15-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
HM-2B	15-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
HM-2B	15-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
HM-2B	15-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
HM-2B	15-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
HM-2B	15-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
HM-2B	15-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
HM-2B	15-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
HM-2B	15-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
HM-2B	15-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
HM-2B	15-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
HM-2B	15-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
HM-2B	15-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.2	U	70
HM-2B	15-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
HM-2B	15-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
HM-2B	15-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
HM-2B	15-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
HM-2B	15-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
HM-2B	15-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	1.7	U	
HM-2B	15-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
HM-2B	15-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
HM-2B	15-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
HM-2B	15-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	

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HM-2B	15-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	8.9	UG/L	5.00	1.4	U	5
HM-2B	15-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
HM-2B	15-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
HM-2B	15-Mar-2002	WATER	EPA8260	NAPHTHALENE	3.3	UG/L	5.00	1.3	J	
HM-2B	15-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
HM-2B	15-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
HM-2B	15-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
HM-2B	15-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
HM-2B	15-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
HM-2B	15-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
HM-2B	15-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
HM-2B	15-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
HM-2B	15-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
HM-2B	15-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	5
HM-2B	15-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
HM-2B	15-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
HM-2B	15-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
HM-2B	15-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TRITIUM										
HM-2B	15-Mar-2002	WATER	EPA906.0	H-3	-170	pCi/L	390.00		U	20,000 pCi/L
METALS ANALYSIS										
HM-3	19-Mar-2002	WATER	EPA6010	ARSENIC	10.0	UG/L	10.0	2.1	U	50
HM-3	19-Mar-2002	WATER	EPA6010	BARIUM	280	UG/L	100	8.40E-05		2,000
HM-3	19-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
HM-3	19-Mar-2002	WATER	EPA6010	CHROMIUM	130	UG/L	10	5.90E-04		100
HM-3	19-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3	1.10E-03	UJ	15
HM-3	19-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5	1.80E-03	U	50
HM-3	19-Mar-2002	WATER	EPA6010	SILVER	1.1	UG/L	10	6.70E-04	B	
HM-3	19-Mar-2002	WATER	EPA7470	MERCURY	0.2	UG/L	0.2	4.60E-06	UJ	2
VOLATILE ORGANIC COMPOUNDS										
HM-3	19-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
HM-3	19-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
HM-3	19-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
HM-3	19-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
HM-3	19-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
HM-3	19-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
HM-3	19-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
HM-3	19-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	

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HM-3	19-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
HM-3	19-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
HM-3	19-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
HM-3	19-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
HM-3	19-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
HM-3	19-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
HM-3	19-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
HM-3	19-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
HM-3	19-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
HM-3	19-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
HM-3	19-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
HM-3	19-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
HM-3	19-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	
HM-3	19-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
HM-3	19-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
HM-3	19-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
HM-3	19-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
HM-3	19-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
HM-3	19-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
HM-3	19-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
HM-3	19-Mar-2002	WATER	EPA8260	BENZENE	1	UG/L	5.00	0.89	J	5
HM-3	19-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
HM-3	19-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
HM-3	19-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
HM-3	19-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
HM-3	19-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
HM-3	19-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
HM-3	19-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
HM-3	19-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
HM-3	19-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
HM-3	19-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
HM-3	19-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
HM-3	19-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.2	U	70
HM-3	19-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
HM-3	19-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
HM-3	19-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
HM-3	19-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
HM-3	19-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700

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HM-3	19-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	1.7	U	
HM-3	19-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
HM-3	19-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
HM-3	19-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
HM-3	19-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
HM-3	19-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	5	UG/L	5.00	1.4	U	5
HM-3	19-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
HM-3	19-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
HM-3	19-Mar-2002	WATER	EPA8260	NAPHTHALENE	6	UG/L	5.00	1.3		
HM-3	19-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
HM-3	19-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
HM-3	19-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
HM-3	19-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
HM-3	19-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
HM-3	19-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
HM-3	19-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
HM-3	19-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
HM-3	19-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
HM-3	19-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	8
HM-3	19-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
HM-3	19-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
HM-3	19-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
HM-3	19-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TRITIUM										
HM-3	19-Mar-2002	WATER	EPA906.0	H-3	-50	pCi/L	380.00		U	20,000 pCi/L
METALS ANALYSIS										
SA1-11-3	16-Mar-2002	WATER	EPA6010	ARSENIC	10.0	UG/L	10.0	2.1	U	50
SA1-11-3	16-Mar-2002	WATER	EPA6010	BARIUM	91	UG/L	100	8.40E-05	B	2,000
SA1-11-3	16-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
SA1-11-3	16-Mar-2002	WATER	EPA6010	CHROMIUM	10	UG/L	10	5.80E-04	U	100
SA1-11-3	16-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3	1.10E-03	UJ	15
SA1-11-3	16-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5	1.80E-03	U	50
SA1-11-3	16-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	10	6.70E-04	UJ	
SA1-11-3	16-Mar-2002	WATER	EPA7470	MERCURY	0.017	UG/L	0.2	4.60E-06	U	2
VOLATILE ORGANIC COMPOUNDS										
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	

ANALYTICAL RESULTS
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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD DETECTION LIMIT	QUALIFIER	MCL (UG/L)
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
SA1-11-3	16-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
SA1-11-3	16-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
SA1-11-3	16-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
SA1-11-3	16-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
SA1-11-3	16-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.2	U	70

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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD DETECTION LIMIT	QUALIFIER	MCL (UG/L)
SA1-11-3	16-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	ETHYLBENZENE	1.3	UG/L	5.00	1.3	J	700
SA1-11-3	16-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	1.7	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
SA1-11-3	16-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	5	UG/L	5.00	1.4	U	5
SA1-11-3	16-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
SA1-11-3	16-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
SA1-11-3	16-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
SA1-11-3	16-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
SA1-11-3	16-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
SA1-11-3	16-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	5
SA1-11-3	16-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
SA1-11-3	16-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TRITIUM										
SA1-11-3	16-Mar-2002	WATER	EPA906.0	H-3	-140	pCi/L	380.00		U	20,000 pCi/L
METALS ANALYSIS										
SA3-11-3	18-Mar-2002	WATER	EPA6010	ARSENIC	10.0	UG/L	10.0	2.1	U	50
SA3-11-3	18-Mar-2002	WATER	EPA6010	BARIUM	39	UG/L	100	8.40E-05	B	2,000
SA3-11-3	18-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
SA3-11-3	18-Mar-2002	WATER	EPA6010	CHROMIUM	10	UG/L	10	5.90E-04	U	100
SA3-11-3	18-Mar-2002	WATER	EPA6010	LEAD	6	UG/L	6	2.20E-03	UJ	15
SA3-11-3	18-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5	1.80E-03	U	50
SA3-11-3	18-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	10	6.70E-04	UJ	

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SA3-11-3	18-Mar-2002	WATER	EPA7470	MERCURY	0.014	MG/L	0.2	4.80E-06	U	2
VOLATILE ORGANIC COMPOUNDS										
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
SA3-11-3	18-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
SA3-11-3	18-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
SA3-11-3	18-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5

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SA3-11-3	18-Mar-2002	WATER	EPA8260	CHLOROETHANE	5	UG/L	5.00	1.3	U	100
SA3-11-3	18-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.2	U	70
SA3-11-3	18-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
SA3-11-3	18-Mar-2002	WATER	EPA8260	HEXACHLOROBTADIENE	5	UG/L	5.00	1.7	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
SA3-11-3	18-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	5	UG/L	5.00	1.4	U	5
SA3-11-3	18-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
SA3-11-3	18-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.2	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
SA3-11-3	18-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
SA3-11-3	18-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
SA3-11-3	18-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
SA3-11-3	18-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	5
SA3-11-3	18-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
SA3-11-3	18-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TRITIUM										
SA3-11-3	18-Mar-2002	WATER	EPA906.0	H-3	-90	pCi/L	380.00		U	20,000 pCi/L
METALS ANALYSIS										
SA1-8-L	16-Mar-2002	WATER	EPA6010	ARSENIC	4.6	UG/L	10.0	2.1	B	50
SA1-8-L	16-Mar-2002	WATER	EPA6010	BARIUM	170	UG/L	100	8.40E-05		2,000

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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD DETECTION LIMIT	QUALIFIER	MCL (UG/L)
SA1-8-L	16-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
SA1-8-L	16-Mar-2002	WATER	EPA6010	CHROMIUM	10	UG/L	10	5.90E-04	U	100
SA1-8-L	16-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3	1.10E-03	UJ	15
SA1-8-L	16-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5	1.80E-03	U	50
SA1-8-L	16-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	10	6.70E-04	UJ	
SA1-8-L	16-Mar-2002	WATER	EPA7470	MERCURY	0.013	UG/L	0.2	4.60E-06	U	2
VOLATILE ORGANIC COMPOUNDS										
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
SA1-8-L	16-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
SA1-8-L	16-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
SA1-8-L	16-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	

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SA1-8-L	16-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
SA1-8-L	16-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
SA1-8-L	16-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.2	U	70
SA1-8-L	16-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
SA1-8-L	16-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	1.7	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
SA1-8-L	16-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	5	UG/L	5.00	1.4	U	5
SA1-8-L	16-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
SA1-8-L	16-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
SA1-8-L	16-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
SA1-8-L	16-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
SA1-8-L	16-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
SA1-8-L	16-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	5
SA1-8-L	16-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
SA1-8-L	16-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2

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TRITIUM										
SA1-8-L	16-Mar-2002	WATER	EPA906.0	H-3	-40	pCi/L	380.00		U	20,000 pCi/L
METALS ANALYSIS										
HM-L	15-Mar-2002	WATER	EPA6010	ARSENIC	10.0	UG/L	10.0	2.1	U	50
HM-L	15-Mar-2002	WATER	EPA6010	BARIUM	210	UG/L	100	8.40E-05		2,000
HM-L	15-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
HM-L	15-Mar-2002	WATER	EPA6010	CHROMIUM	11	UG/L	10	5.90E-04		100
HM-L	15-Mar-2002	WATER	EPA6010	LEAD	4.6	UG/L	3	1.10E-03	UJ	15
HM-L	15-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5	1.80E-03	U	50
HM-L	15-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	10	6.70E-04	U	
HM-L	15-Mar-2002	WATER	EPA7470	MERCURY	0.0002	UG/L	0.2	4.60E-06	UJ	2
VOLATILE ORGANIC COMPOUNDS										
HM-L	15-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
HM-L	15-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
HM-L	15-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
HM-L	15-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
HM-L	15-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
HM-L	15-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
HM-L	15-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
HM-L	15-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
HM-L	15-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
HM-L	15-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
HM-L	15-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
HM-L	15-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
HM-L	15-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
HM-L	15-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
HM-L	15-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
HM-L	15-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
HM-L	15-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
HM-L	15-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
HM-L	15-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
HM-L	15-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
HM-L	15-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	
HM-L	15-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
HM-L	15-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
HM-L	15-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
HM-L	15-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
HM-L	15-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	

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HM-L	15-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
HM-L	15-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
HM-L	15-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
HM-L	15-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
HM-L	15-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
HM-L	15-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
HM-L	15-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
HM-L	15-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
HM-L	15-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
HM-L	15-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
HM-L	15-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
HM-L	15-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
HM-L	15-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
HM-L	15-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
HM-L	15-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	1.5	UG/L	5.00	1.2	J	70
HM-L	15-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
HM-L	15-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
HM-L	15-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
HM-L	15-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
HM-L	15-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
HM-L	15-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	1.7	U	
HM-L	15-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
HM-L	15-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
HM-L	15-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
HM-L	15-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
HM-L	15-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	7	UG/L	5.00	1.4	U	5
HM-L	15-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
HM-L	15-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
HM-L	15-Mar-2002	WATER	EPA8260	NAPHTHALENE	2.6	UG/L	5.00	1.3	J	
HM-L	15-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
HM-L	15-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
HM-L	15-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
HM-L	15-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
HM-L	15-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
HM-L	15-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
HM-L	15-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
HM-L	15-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
HM-L	15-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	

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HM-L	15-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	5
HM-L	15-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
HM-L	15-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
HM-L	15-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
HM-L	15-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TRITIUM										
HM-L	15-Mar-2002	WATER	EPA906.0	H-3	80	pCi/L	390.00		U	20,000 pCi/L
METALS ANALYSIS										
HM-L2	16-Mar-2002	WATER	EPA6010	ARSENIC	10.0	UG/L	10.0	2.1	U	50
HM-L2	16-Mar-2002	WATER	EPA6010	BARIUM	120	UG/L	100	8.40E-05		2,000
HM-L2	16-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
HM-L2	16-Mar-2002	WATER	EPA6010	CHROMIUM	10	UG/L	10	5.90E-04	U	100
HM-L2	16-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3	1.10E-03	UJ	15
HM-L2	16-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5	1.80E-03	U	50
HM-L2	16-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	10	6.70E-04	UJ	
HM-L2	16-Mar-2002	WATER	EPA7470	MERCURY	0.015	UG/L	0.2	4.60E-06	U	2
VOLATILE ORGANIC COMPOUNDS										
HM-L2	16-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
HM-L2	16-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
HM-L2	16-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
HM-L2	16-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
HM-L2	16-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
HM-L2	16-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
HM-L2	16-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
HM-L2	16-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
HM-L2	16-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
HM-L2	16-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
HM-L2	16-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
HM-L2	16-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
HM-L2	16-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
HM-L2	16-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
HM-L2	16-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
HM-L2	16-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
HM-L2	16-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
HM-L2	16-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
HM-L2	16-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
HM-L2	16-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
HM-L2	16-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	

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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD DETECTION LIMIT	QUALIFIER	MCL (UG/L)
HM-L2	16-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
HM-L2	16-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
HM-L2	16-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
HM-L2	16-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
HM-L2	16-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
HM-L2	16-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
HM-L2	16-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
HM-L2	16-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
HM-L2	16-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
HM-L2	16-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
HM-L2	16-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
HM-L2	16-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
HM-L2	16-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
HM-L2	16-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
HM-L2	16-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
HM-L2	16-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
HM-L2	16-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
HM-L2	16-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
HM-L2	16-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
HM-L2	16-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.2	U	70
HM-L2	16-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
HM-L2	16-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
HM-L2	16-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
HM-L2	16-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
HM-L2	16-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
HM-L2	16-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	1.7	U	
HM-L2	16-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
HM-L2	16-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
HM-L2	16-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
HM-L2	16-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
HM-L2	16-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	5	UG/L	5.00	1.4	U	5
HM-L2	16-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
HM-L2	16-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
HM-L2	16-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
HM-L2	16-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
HM-L2	16-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
HM-L2	16-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
HM-L2	16-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100

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HM-L2	16-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
HM-L2	16-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.6	U	5
HM-L2	16-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
HM-L2	16-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
HM-L2	16-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
HM-L2	16-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	5
HM-L2	16-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
HM-L2	16-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
HM-L2	16-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
HM-L2	16-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TRITIUM										
HM-L2	16-Mar-2002	WATER	EPA906.0	H-3	40	pCi/L	380.00		U	20,000 pCi/L
METALS ANALYSIS										
SA2-1-L	16-Mar-2002	WATER	EPA6010	ARSENIC	12.0	UG/L	10.0	2.1		50
SA2-1-L	16-Mar-2002	WATER	EPA6010	BARIUM	40	UG/L	100	8.40E-05	B	2,000
SA2-1-L	16-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
SA2-1-L	16-Mar-2002	WATER	EPA6010	CHROMIUM	10	UG/L	10	5.90E-04	U	100
SA2-1-L	16-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3	1.10E-03	UJ	15
SA2-1-L	16-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5	1.80E-03	U	50
SA2-1-L	16-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	0.01	6.70E-04	UJ	
SA2-1-L	16-Mar-2002	WATER	EPA7470	MERCURY	0.015	UG/L	0.2	4.60E-06	U	2
VOLATILE ORGANIC COMPOUNDS										
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5

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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD DETECTION LIMIT	QUALIFIER	MCL (UG/L)
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
SA2-1-L	16-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
SA2-1-L	16-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
SA2-1-L	16-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
SA2-1-L	16-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
SA2-1-L	16-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.2	U	70
SA2-1-L	16-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
SA2-1-L	16-Mar-2002	WATER	EPA8260	HEXACHLOROBTADIENE	5	UG/L	5.00	1.7	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
SA2-1-L	16-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	5	UG/L	5.00	1.4	U	5
SA2-1-L	16-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	

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SA2-1-L	16-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
SA2-1-L	16-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
SA2-1-L	16-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
SA2-1-L	16-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
SA2-1-L	16-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
SA2-1-L	16-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	5
SA2-1-L	16-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
SA2-1-L	16-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TRITIUM										
SA2-1-L	16-Mar-2002	WATER	EPA906.0	H-3	-180	pCi/L	380.00		U	20,000 pCi/L
METALS ANALYSIS										
SA2-2-L	23-Mar-2002	WATER	EPA6010	ARSENIC	14.0	UG/L	10.0	2.1	UJ	50
SA2-2-L	23-Mar-2002	WATER	EPA6010	BARIUM	25	UG/L	100	8.40E-05	B	2,000
SA2-2-L	23-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
SA2-2-L	23-Mar-2002	WATER	EPA6010	CHROMIUM	31	UG/L	10	5.90E-04		100
SA2-2-L	23-Mar-2002	WATER	EPA6010	LEAD	2	UG/L	3	1.10E-03	UJ	15
SA2-2-L	23-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5	1.80E-03	U	50
SA2-2-L	23-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	10	6.70E-04	U	
SA2-2-L	23-Mar-2002	WATER	EPA7470	MERCURY	0.04	UG/L	0.2	4.60E-06	U	2
VOLATILE ORGANIC COMPOUNDS										
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	

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SA2-2-L	23-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
SA2-2-L	23-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	UJ	
SA2-2-L	23-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	ACETONE	16	UG/L	20.00	8	J	
SA2-2-L	23-Mar-2002	WATER	EPA8260	BENZENE	3.5	UG/L	5.00	0.89	J	5
SA2-2-L	23-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
SA2-2-L	23-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
SA2-2-L	23-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.2	U	70
SA2-2-L	23-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
SA2-2-L	23-Mar-2002	WATER	EPA8260	HEXACHLOROBTADIENE	5	UG/L	5.00	1.7	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	

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SA2-2-L	23-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
SA2-2-L	23-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	6.3	UG/L	5.00	1.4	U	5
SA2-2-L	23-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
SA2-2-L	23-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
SA2-2-L	23-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
SA2-2-L	23-Mar-2002	WATER	EPA8260	TOLUENE	4.4	UG/L	5.00	1.7	J	1,000
SA2-2-L	23-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
SA2-2-L	23-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	5
SA2-2-L	23-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	UJ	
SA2-2-L	23-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
SA2-2-L	23-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TRITIUM										
SA2-2-L	23-Mar-2002	WATER	EPA906.0	H-3	90	pCi/L	380.00		U	20,000 pCi/L
METALS ANALYSIS										
SA2-4-L	16-Mar-2002	WATER	EPA6010	ARSENIC	6.8	UG/L	10.0	2.1	B	50
SA2-4-L	16-Mar-2002	WATER	EPA6010	BARIUM	52	UG/L	100	8.40E-05	B	2,000
SA2-4-L	16-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
SA2-4-L	16-Mar-2002	WATER	EPA6010	CHROMIUM	10	UG/L	10	5.90E-04	U	100
SA2-4-L	16-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3	1.10E-03	UJ	15
SA2-4-L	16-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5	1.80E-03	U	50
SA2-4-L	16-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	10	6.70E-04	UJ	
SA2-4-L	16-Mar-2002	WATER	EPA7470	MERCURY	0.017	MG/L	0.2	4.60E-06	U	2
VOLATILE ORGANIC COMPOUNDS										
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7

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SA2-4-L	16-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
SA2-4-L	16-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
SA2-4-L	16-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
SA2-4-L	16-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
SA2-4-L	16-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
SA2-4-L	16-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.2	U	70
SA2-4-L	16-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	

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SA2-4-L	16-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
SA2-4-L	16-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	1.7	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
SA2-4-L	16-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	5	UG/L	5.00	1.4	U	5
SA2-4-L	16-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
SA2-4-L	16-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
SA2-4-L	16-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
SA2-4-L	16-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
SA2-4-L	16-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
SA2-4-L	16-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	5
SA2-4-L	16-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
SA2-4-L	16-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TRITIUM										
SA2-4-L	16-Mar-2002	WATER	EPA906.0	H-3	-80	pCi/L	380.00		U	20,000 pCi/L
METALS ANALYSIS										
SA4-5-L	17-Apr-2002	WATER	EPA6010	ARSENIC	5.9	UG/L	10.0	1.5	B	50
SA4-5-L	17-Apr-2002	WATER	EPA6010	BARIUM	260	UG/L	100	0.00009		2,000
SA4-5-L	17-Apr-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	0.00017	UJ	5
SA4-5-L	17-Apr-2002	WATER	EPA6010	CHROMIUM	16	UG/L	10	0.00052		100
SA4-5-L	17-Apr-2002	WATER	EPA6010	LEAD	24	UG/L	3	0.0011		15
SA4-5-L	17-Apr-2002	WATER	EPA6010	SELENIUM	3.7	UG/L	5	0.0028	B	50
SA4-5-L	17-Apr-2002	WATER	EPA6010	SILVER	0.87	UG/L	10	0.00068	B	
SA4-5-L	17-Apr-2002	WATER	EPA7470	MERCURY	0.2	UG/L	0.2	0.000015	UJ	2
VOLATILE ORGANIC COMPOUNDS										
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5	1.1	U	

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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD DETECTION LIMIT	QUALIFIER	MCL (UG/L)
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5	1.2	U	200
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5	1.1	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5	1.2	U	5
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5	1.5	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5	1.6	U	7
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5	1.4	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5	1.5	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5	1.3	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5	1.5	U	70
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5	1.2	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10	1.4	U	0.2
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5	0.89	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5	1.3	U	600
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5	1.3	U	5
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5	0.88	U	5
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5	1.1	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5	1.2	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5	1	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5	1.1	U	75
SA4-5-L	17-Apr-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5	1.4	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5	1.5	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20	5.5	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5	0.95	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20	5.8	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5	1.1	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20	5.3	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	ACETONE	20	UG/L	20	8	R	
SA4-5-L	17-Apr-2002	WATER	EPA8260	BENZENE	5	UG/L	5	0.89	U	5
SA4-5-L	17-Apr-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5	1.1	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5	1	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5	0.55	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5	1.1	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10	2.2	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5	1.5	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5	1.4	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5	1.3	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10	1.2	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5	1.1	U	

ANALYTICAL RESULTS
OPERABLE UNIT 2: Local Aquifers 1, 2a 2b and 3
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WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD DETECTION LIMIT	QUALIFIER	MCL (UG/L)
SA4-5-L	17-Apr-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10	1.1	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5	UG/L	5	1.2	U	70
SA4-5-L	17-Apr-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5	0.99	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5	0.73	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5	1.7	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10	1.3	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5	1.3	U	700
SA4-5-L	17-Apr-2002	WATER	EPA8260	HEXACHLOROBTADIENE	5	UG/L	5	1.7	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5	1.9	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5	1.1	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5	2.7	U	10,000
SA4-5-L	17-Apr-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5	1.3	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	METHYLENE CHLORIDE	5	UG/L	5	1.4	U	5
SA4-5-L	17-Apr-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5	1.3	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5	1.2	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5	1.3	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5	1.4	U	10,000
SA4-5-L	17-Apr-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5	1.2	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5	1.1	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	STYRENE	5	UG/L	5	1.3	U	100
SA4-5-L	17-Apr-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5	1.3	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5	1.5	U	5
SA4-5-L	17-Apr-2002	WATER	EPA8260	TOLUENE	24	UG/L	5	1.7		1,000
SA4-5-L	17-Apr-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5	1.4	U	100
SA4-5-L	17-Apr-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5	1	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5	1.2	U	5
SA4-5-L	17-Apr-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5	1.3	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5	1.6	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20	1.2	U	
SA4-5-L	17-Apr-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10	1.5	U	2
TRITIUM										
SA4-5-L	17-Apr-2002	WATER	EPA906.0	H-3	-60	pCi/L	390		U	20,000 pCi/L

Appendix D

Analytical Results for Operable Unit 3

(4 Pages)

**ANALYTICAL RESULTS
OPERABLE UNIT 3: AQUIFER 4
SPRING 2002**

WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD DETECTION LIMIT	QUALIFIER	MCL (UG/L)
METALS ANALYSIS										
SA5-4-4	23-Mar-2002	WATER	EPA8010	ARSENIC	10.0	UG/L	10.0	2.1	UJ	50
SA5-4-4	23-Mar-2002	WATER	EPA8010	BARIUM	23	UG/L	100	8.40E-05	B	2,000
SA5-4-4	23-Mar-2002	WATER	EPA8010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
SA5-4-4	23-Mar-2002	WATER	EPA8010	CHROMIUM	10	UG/L	10	5.90E-04	UJ	100
SA5-4-4	23-Mar-2002	WATER	EPA8010	LEAD	3	UG/L	3	1.10E-03	UJ	15
SA5-4-4	23-Mar-2002	WATER	EPA8010	SELENIUM	5	UG/L	5	1.80E-03	U	50
SA5-4-4	23-Mar-2002	WATER	EPA8010	SILVER	10	UG/L	10	6.70E-04	U	
SA5-4-4	23-Mar-2002	WATER	EPA7470	MERCURY	0.029	MG/L	0.2	4.60E-06	U	2
VOLATILE ORGANIC COMPOUNDS										
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
SA5-4-4	23-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	UJ	
SA5-4-4	23-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
SA5-4-4	23-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
SA5-4-4	23-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	

**ANALYTICAL RESULTS
OPERABLE UNIT 3: AQUIFER 4
SPRING 2002**

WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	DETECTION LIMIT	QUALIFIER	MCL (UG/L)
SA5-4-4	23-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
SA5-4-4	23-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
SA5-4-4	23-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.2	U	70
SA5-4-4	23-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
SA5-4-4	23-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	1.7	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	M-P-XYLENE	5	UG/L	5.00	2.7	U	10,000
SA5-4-4	23-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	5.7	UG/L	5.00	1.4	U	5
SA5-4-4	23-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
SA5-4-4	23-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
SA5-4-4	23-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
SA5-4-4	23-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
SA5-4-4	23-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
SA5-4-4	23-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	5
SA5-4-4	23-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	UJ	
SA5-4-4	23-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
SA5-4-4	23-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TRITIUM										
SA5-4-4	23-Mar-2002	WATER	EPA906.0	H-3	-80	pCi/L	380.00		U	20,000 pCi/L
METALS ANALYSIS										
SA5-5-4	22-Mar-2002	WATER	EPA6010	ARSENIC	10.0	UG/L	10.0	2.1	U	50
SA5-5-4	22-Mar-2002	WATER	EPA6010	BARIUM	21	UG/L	100	8.40E-05	B	2,000
SA5-5-4	22-Mar-2002	WATER	EPA6010	CADMIUM	5	UG/L	5	1.80E-04	UJ	5
SA5-5-4	22-Mar-2002	WATER	EPA6010	CHROMIUM	10	UG/L	10	5.90E-04	U	100
SA5-5-4	22-Mar-2002	WATER	EPA6010	LEAD	3	UG/L	3	1.10E-03	UJ	15
SA5-5-4	22-Mar-2002	WATER	EPA6010	SELENIUM	5	UG/L	5	1.80E-03	U	50
SA5-5-4	22-Mar-2002	WATER	EPA6010	SILVER	10	UG/L	10	6.70E-04	UJ	

**ANALYTICAL RESULTS
OPERABLE UNIT 3: AQUIFER 4
SPRING 2002**

WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	METHOD DETECTION LIMIT	QUALIFIER	MCL (UG/L)
SA5-5-4	22-Mar-2002	WATER	EPA7470	MERCURY	0.013	UG/L	0.2	4.60E-06	U	2
VOLATILE ORGANIC COMPOUNDS										
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,1,1,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,1,1-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	200
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,1,2,2-TETRACHLOROETHANE	5	UG/L	5.00	1.1	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,1,2-TRICHLOROETHANE	5	UG/L	5.00	1.2	U	5
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHANE	5	UG/L	5.00	1.5	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,1-DICHLOROETHENE	5	UG/L	5.00	1.6	U	7
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,1-DICHLOROPROPENE	5	UG/L	5.00	1.4	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,2,3-TRICHLOROPROPANE	5	UG/L	5.00	1.3	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,2,4-TRICHLOROBENZENE	5	UG/L	5.00	1.5	U	70
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,2,4-TRIMETHYLBENZENE	5	UG/L	5.00	1.2	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,2-DIBROMO-3-CHLOROPROPANE	10	UG/L	10.00	1.4	U	0.2
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,2-DIBROMOETHANE	5	UG/L	5.00	0.89	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,2-DICHLOROBENZENE	5	UG/L	5.00	1.3	U	600
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,2-DICHLOROETHANE	5	UG/L	5.00	1.3	U	5
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,2-DICHLOROPROPANE	5	UG/L	5.00	0.88	U	5
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,3,5-TRIMETHYLBENZENE	5	UG/L	5.00	1.1	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,3-DICHLOROBENZENE	5	UG/L	5.00	1.2	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,3-DICHLOROPROPANE	5	UG/L	5.00	1	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	1,4-DICHLOROBENZENE	5	UG/L	5.00	1.1	U	75
SA5-5-4	22-Mar-2002	WATER	EPA8260	1-CHLOROHEXANE	5	UG/L	5.00	1.4	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	2,2-DICHLOROPROPANE	5	UG/L	5.00	1.5	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	2-BUTANONE	20	UG/L	20.00	5.5	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	2-CHLOROTOLUENE	5	UG/L	5.00	0.95	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	2-HEXANONE	20	UG/L	20.00	5.8	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	4-CHLOROTOLUENE	5	UG/L	5.00	1.1	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	4-METHYL-2-PENTANONE	20	UG/L	20.00	5.3	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	ACETONE	20	UG/L	20.00	8	R	
SA5-5-4	22-Mar-2002	WATER	EPA8260	BENZENE	5	UG/L	5.00	0.89	U	5
SA5-5-4	22-Mar-2002	WATER	EPA8260	BROMOBENZENE	5	UG/L	5.00	1.1	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	BROMOCHLOROMETHANE	5	UG/L	5.00	1	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	BROMODICHLOROMETHANE	5	UG/L	5.00	0.55	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	BROMOFORM	5	UG/L	5.00	1.1	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	BROMOMETHANE	10	UG/L	10.00	2.2	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	CARBON DISULFIDE	5	UG/L	5.00	1.5	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	CARBON TETRACHLORIDE	5	UG/L	5.00	1.4	U	5
SA5-5-4	22-Mar-2002	WATER	EPA8260	CHLOROBENZENE	5	UG/L	5.00	1.3	U	100
SA5-5-4	22-Mar-2002	WATER	EPA8260	CHLOROETHANE	10	UG/L	10.00	1.2	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	CHLOROFORM	5	UG/L	5.00	1.1	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	CHLOROMETHANE	10	UG/L	10.00	1.1	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	CIS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.2	U	70
SA5-5-4	22-Mar-2002	WATER	EPA8260	CIS-1,3-DICHLOROPROPENE	5	UG/L	5.00	0.99	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	DIBROMOCHLOROMETHANE	5	UG/L	5.00	0.73	U	

**ANALYTICAL RESULTS
OPERABLE UNIT 3: AQUIFER 4
SPRING 2002**

WELL	SAMPLE DATE	SAMPLE MATRIX	ANALYTICAL METHOD	PARAMETER	RESULT	UNITS	REPORTING LIMIT	DETECTION LIMIT	QUALIFIER	MCL (UG/L)
SA5-5-4	22-Mar-2002	WATER	EPA8260	DIBROMOMETHANE	5	UG/L	5.00	1.7	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	DICHLORODIFLUOROMETHANE	10	UG/L	10.00	1.3	UJ	
SA5-5-4	22-Mar-2002	WATER	EPA8260	ETHYLBENZENE	5	UG/L	5.00	1.3	U	700
SA5-5-4	22-Mar-2002	WATER	EPA8260	HEXACHLOROBUTADIENE	5	UG/L	5.00	1.7	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	IODOMETHANE	5	UG/L	5.00	1.9	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	ISOPROPYLBENZENE	5	UG/L	5.00	1.1	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	M+P-XYLENE	5	UG/L	5.00	2.7	U	10,000
SA5-5-4	22-Mar-2002	WATER	EPA8260	METHYL TERTIARY BUTYL ETHER	5	UG/L	5.00	1.3	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	METHYLENE CHLORIDE	5	UG/L	5.00	1.4	U	5
SA5-5-4	22-Mar-2002	WATER	EPA8260	N-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	N-PROPYLBENZENE	5	UG/L	5.00	1.2	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	NAPHTHALENE	5	UG/L	5.00	1.3	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	O-XYLENE	5	UG/L	5.00	1.4	U	10,000
SA5-5-4	22-Mar-2002	WATER	EPA8260	P-ISOPROPYLTOLUENE	5	UG/L	5.00	1.2	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	SEC-BUTYLBENZENE	5	UG/L	5.00	1.1	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	STYRENE	5	UG/L	5.00	1.3	U	100
SA5-5-4	22-Mar-2002	WATER	EPA8260	TERT-BUTYLBENZENE	5	UG/L	5.00	1.3	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	TETRACHLOROETHENE	5	UG/L	5.00	1.5	U	5
SA5-5-4	22-Mar-2002	WATER	EPA8260	TOLUENE	5	UG/L	5.00	1.7	U	1,000
SA5-5-4	22-Mar-2002	WATER	EPA8260	TRANS-1,2-DICHLOROETHENE	5	UG/L	5.00	1.4	U	100
SA5-5-4	22-Mar-2002	WATER	EPA8260	TRANS-1,3-DICHLOROPROPENE	5	UG/L	5.00	1	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	TRICHLOROETHENE	5	UG/L	5.00	1.2	U	5
SA5-5-4	22-Mar-2002	WATER	EPA8260	TRICHLOROFLUOROMETHANE	5	UG/L	5.00	1.3	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	TRICHLOROTRIFLUOROETHANE	5	UG/L	5.00	1.6	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	VINYL ACETATE	20	UG/L	20.00	1.2	U	
SA5-5-4	22-Mar-2002	WATER	EPA8260	VINYL CHLORIDE	10	UG/L	10.00	1.5	U	2
TRITIUM										
SA5-5-4	22-Mar-2002	WATER	EPA906.0	H-3	-110	pCi/L	380.00		U	20,000 pCi/L

Appendix E

Salmon Site Long-Term Stewardship Plan

Nevada
Environmental
Restoration
Project

DOE/NV-916



Salmon Site Long-Term Stewardship Plan

Revision No.: 1

August 2005

Approved for public release; further dissemination unlimited.

Environmental Restoration
Division



U.S. Department of Energy
National Nuclear Security Administration
Nevada Site Office

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SALMON SITE LONG-TERM STEWARDSHIP PLAN

U.S. Department of Energy
National Nuclear Security Administration
Nevada Site Office
Las Vegas, Nevada

Revision No.: 1

August 2005

Approved for public release; further dissemination unlimited.

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List of Acronyms and Abbreviations

AEC	U.S. Atomic Energy Commission
bgs	Below ground surface
CERCLA	<i>Comprehensive Environmental Response, Compensation and Liabilities Act</i>
CFR	<i>Code of Federal Regulations</i>
COC	Contaminant of concern
CR	Completion Report
DOE	U.S. Department of Energy
EMIS	Environmental Management Information System
EPA	U.S. Environmental Protection Agency
ft	Feet
FY	Fiscal year
HMCAA	Half Moon Creek Alluvial Aquifer
LTHMP	Long-Term Hydrological Monitoring Program
LTS	Long-Term Stewardship
MCL	Maximum contaminant level
MDEQ	Mississippi Department of Environmental Quality
MSDOH	Mississippi Department of Health
MSFC	Mississippi State Forestry Commission
NEPA	<i>National Environmental Policy Act</i>
NNSA/NSO	U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office
OLM	U.S. Department of Energy, Office of Legacy Management
OU	Operational units
pCi/L	Picocuries per liter
PL	Public Law
RCG	Radioactive Cleanup Guidance
RCRA	<i>Resource Conservation and Recovery Act</i>

List of Acronyms and Abbreviations (Continued)

REEC	Reynolds Electrical & Engineering Co., Inc.
RI/FS	Remedial Investigation/Feasibility Study
SA	Source Area
SDWA	<i>Safe Drinking Water Act</i>
SGZ	Surface Ground Zero
TCE	Trichloroethene
VEP	Voluntary Evaluation Program
µg/L	Micrograms per liter

Definitions

Administrative Record File: A compendium of documents that form the basis for the selection of a response action. The establishment of an Administrative Record is required under CERCLA.

Corrective Action Level: A contaminant concentration level above which some type of specified response action would be taken. These levels are usually specified regulatory limits or determined through a risk assessment procedure.

CERCLA: *Comprehensive Environmental Response, Compensation and Liability Act.* Commonly known as the “Superfund,” the key purpose of the act is to establish a mechanism of response for the cleanup of hazardous waste that may result in long-term environmental damage.

Federal Facilities Agreement and Consent Order (FFACO): A legally binding agreement which establishes a procedural framework and schedule for developing, implementing, and monitoring appropriate response actions.

Implementation Steward: Agency responsible for stewardship activities.

Institutional Control: Non-engineering measures (primarily legal controls) which serve to limit activities in order to prevent or reduce exposure to hazardous substances.

Oversight Steward: Agencies or organizations which ensure that the goals of the stewardship program are met.

Principal Steward: Agency with legal responsibility to implement stewardship activities and to provide funding for such activities.

Protective Level: A contaminant concentration level which is deemed protective of human health and the environment. These levels are usually specified regulatory limits or determined through a risk assessment procedure.

Stakeholder: Any individual, organization or other entity that has an interest in the activities at the Salmon Site.

Stewardship: The physical controls, institutions, information, and other mechanisms needed to ensure protection of people and the environment at sites where the DOE has completed, or plans to complete remediation (DOE Long-Term Stewardship Study).

Executive Summary

The Salmon Site Long-Term Stewardship Plan describes the need and the basic elements of a stewardship program; its application to the U.S. Department of Energy, National Nuclear Security Administration Salmon Site; and the roles and responsibilities relevant to the long-term care and institutional control of the Salmon Site. Implementation of a long-term stewardship plan is necessary due to the presence of residual contamination that will remain in the subsurface of the Salmon Site. This plan addresses the long-term care and control of both the surface and subsurface areas.

1.0 Introduction

The Salmon Site, formerly known as the Tatum Dome Test Site, is located in south central Mississippi, in Lamar County, approximately 20 miles southwest of Hattiesburg, Mississippi (Figure 1-1).

The Salmon Site was the location of two nuclear and two non-nuclear gas tests conducted deep underground in a salt dome. These were conducted between 1964 and 1970 as part of the U.S. Atomic Energy Commission's (AEC) Vela Uniform Program (DOE/NV, 1992). The Salmon Site is currently managed by the U.S. Department of Energy (DOE), National Nuclear Security Administration Nevada Site Office (NNSA/NSO).

This Salmon Site Long-Term Stewardship (LTS) Plan identifies the basic elements of an LTS program, as well as the roles and responsibilities of the stewards. Stewardship is defined as "acceptance of the responsibility and implementation of activities necessary to maintain long-term protection of human health and the environment from hazards posed by residual radioactive and chemically hazardous materials" (ORSC, 1998). Stewardship of the Salmon Site includes concerns related to radioactive and chemical hazardous materials. Current DOE policy is that a site ready for long-term stewardship will be transferred to the DOE Office of Legacy Management (OLM). After the transition, the OLM will produce a Long-Term Maintenance and Surveillance Plan which will be consistent with the commitments made in this plan. The OLM plan will go through the same review and approval as this LTS plan.

This plan presents a discussion of those locations of the Salmon Site that require stewardship activities due to the presence of residual chemical and radioactive constituents.

1.1 Physical Description

The Salmon Site encompasses approximately 1,470 acres of land owned by the United States Government. The land includes portions of sections 11, 12, 13, and 14, Township 2 North, Range 16 West, St. Stephens Prime Meridian (Figure 1-2). The site is located in the piney woods area of the Gulf Coastal Plain. Narrow, flat-topped ridges and intervening valleys typically trend south-southeast toward the Gulf of Mexico. The maximum relief on the site is approximately 100 feet (ft) with elevations ranging from 240 to approximately 350 ft above sea level. Frequent

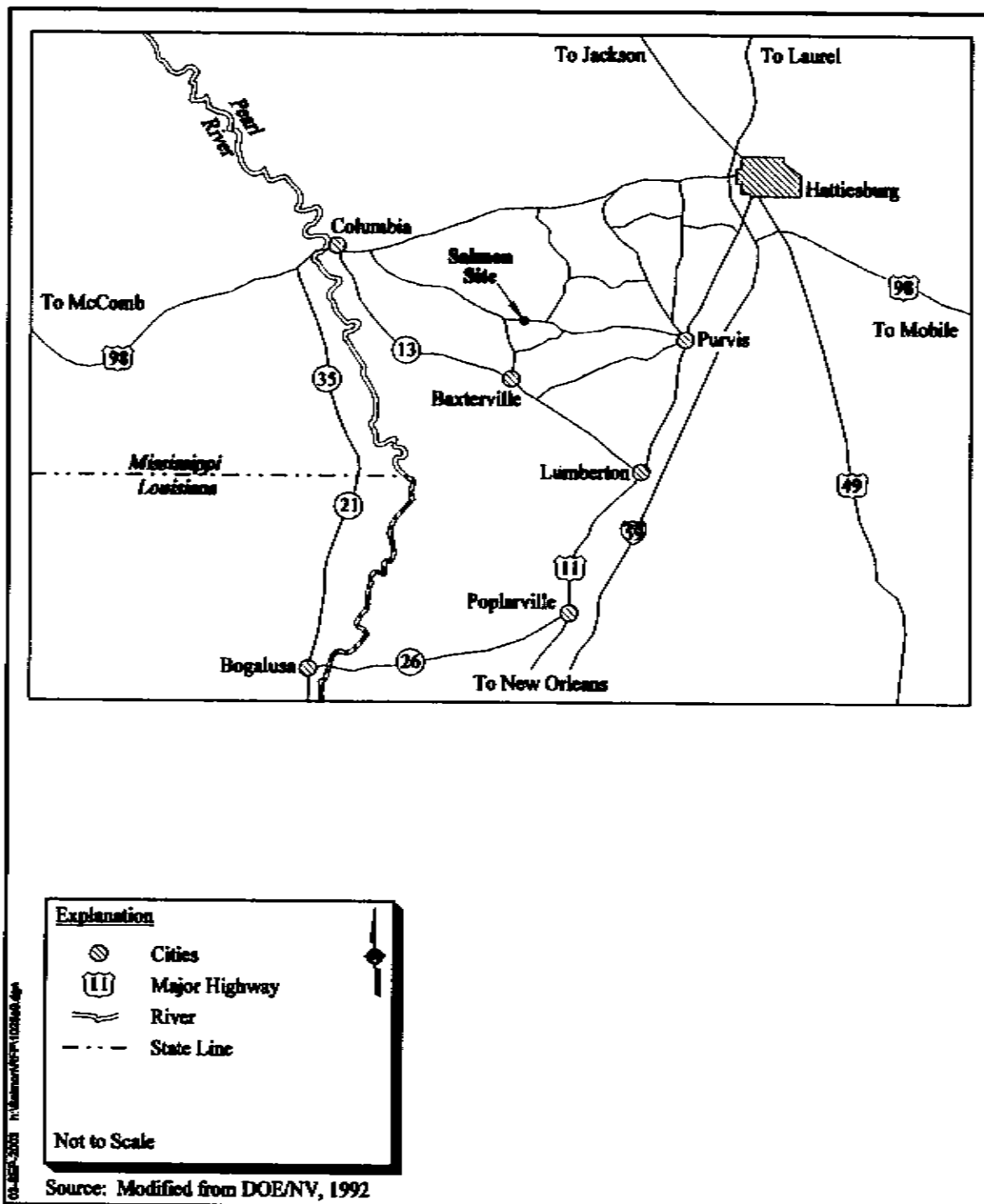


Figure 1-1
Salmon Site Location Map

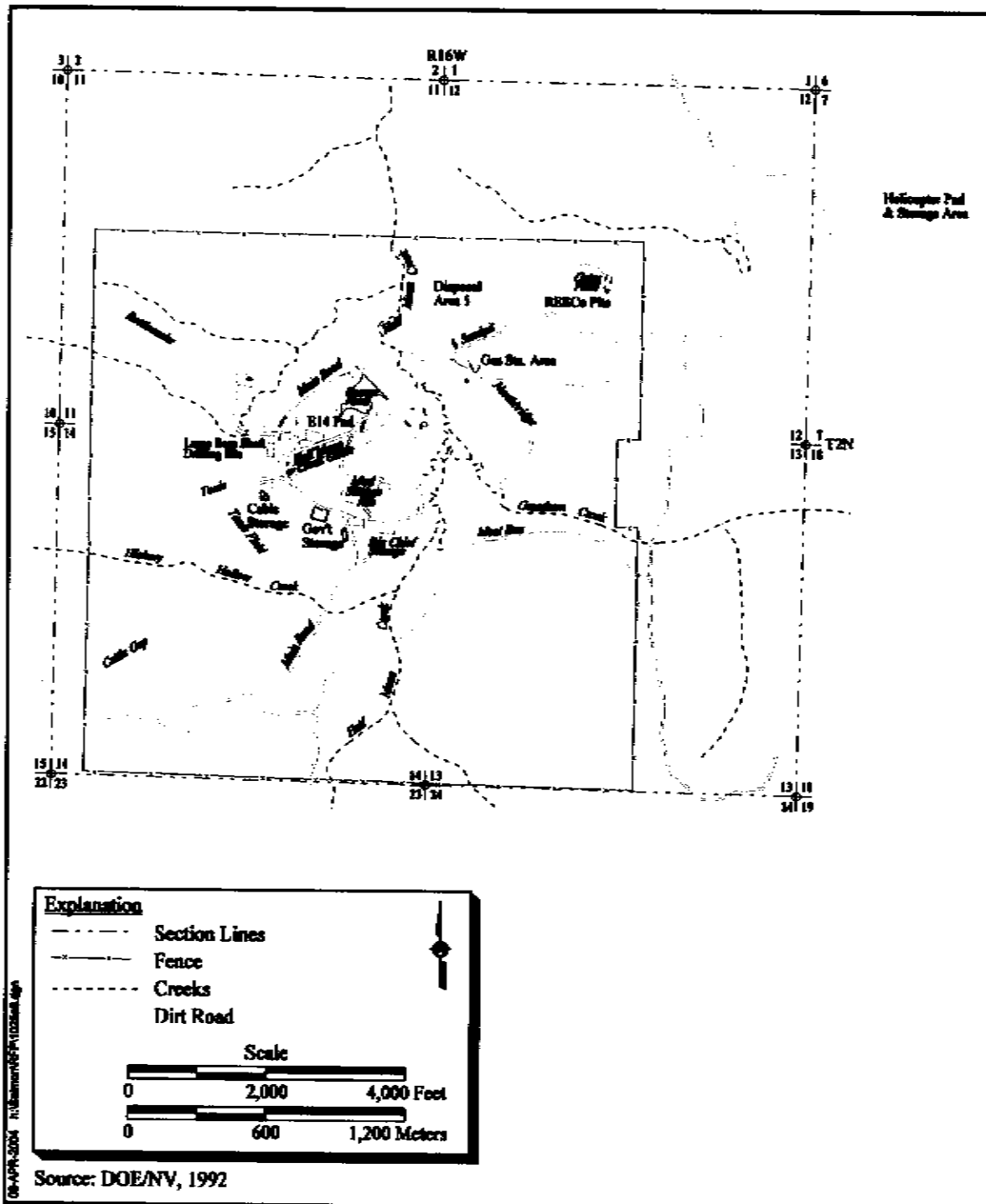


Figure 1-2
Salmon Site Map

perennial and intermittent streams dissect the terrain. Swamps and lowland areas are common. Two major creeks flow across the sites, Grantham from the east and Half Moon from the south.

1.1.1 Site Access

The Salmon Site is partially fenced and is land-locked by privately owned parcels. Although the site is inactive (except for annual sampling) and posted, local hunters often use the site for access to hunting leases adjacent to the Salmon Site.

The site is accessible from Interstate 59 at exit 51. Take State Route 589 west to U.S. Highway 11, then south on U.S. Highway 11 to Shelby Speights Road. Turn right and proceed through the town of Purvis. Cross the railroad tracks and continue to the Purvis-Baxterville Road. Turn left at the large brick church on the corner of Shelby Speights Road and Purvis-Baxterville Road. Travel approximately 6.5 miles on the Purvis-Baxterville Road to Beech Road and turn right. Travel approximately 3.5 miles north along Beech Road to Levi Bryant Road and turn left. Travel approximately 0.25 miles along Levi Bryant Road. An improved gravel access road to the site is on the left. The Salmon Site gate is about 0.5 mile down this road. In general, the roads are passable in all weather; however, following heavy rains, travel can be difficult and downed trees may be encountered.

1.2 Site History

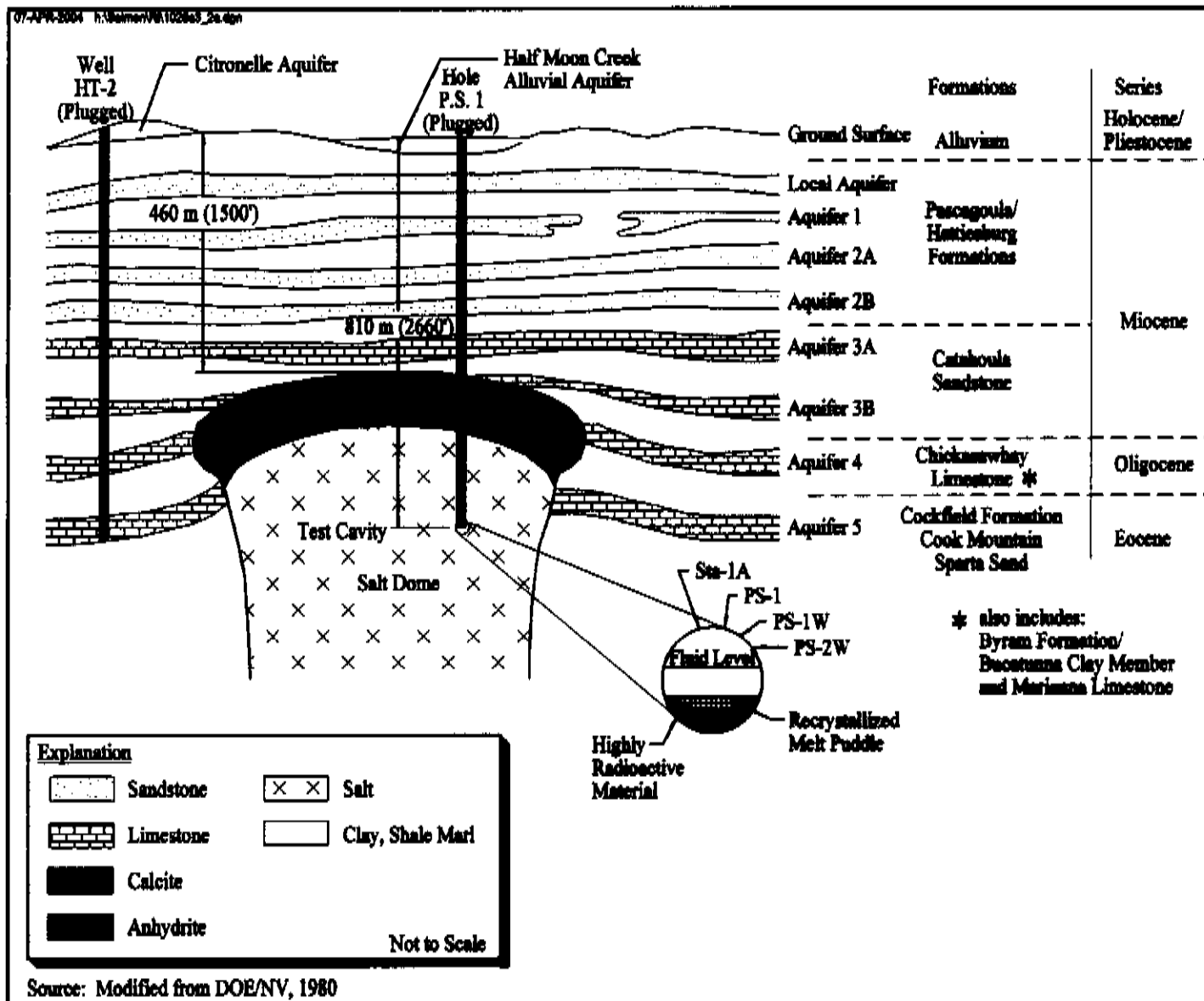
The following sections present a history of the Salmon Site beginning with test operations and concluding with the initial remediation of the site.

1.2.1 Operational

The Salmon Site was operational from 1964 through 1970. The site overlies the Tatum Salt Dome, a simple, nearly cylindrical salt stock. The salt was host to four tests. The 5.3-kiloton yield Salmon nuclear test, occurred on October 22, 1964 (DOE/NV, 2000). The device was emplaced 2,710 ft below ground surface (bgs) in the Tatum Salt Dome (DOE/NV, 1980) (Figure 1-3).

The Sterling test was conducted December 3, 1966, and consisted of a 380-ton yield nuclear device (DOE/NV, 2000) suspended in the cavity created by the Salmon test.

Figure 1-3
Salmon Site Geologic Cross-Section Showing Tatum Salt Dome,
the Test Cavity, and the Aquifers



The next use of the Salmon Site was the Miracle Play Project (part of the Vela Uniform Program), which consisted of two nonnuclear tests, Diode Tube and Humid Water. These nonnuclear tests were detonated on February 2, 1969 and April 19, 1970, respectively. Both tests had yields of approximately 315 tons created by a mixture of methane and oxygen.

None of the tests resulted in releases of radionuclides from the salt dome; however, during reentry drilling and other site activities, solid and liquid materials containing radioactivity were generated, resulting in elevated constituents in groundwater and surface soils at the site. Most of the contaminated soil and water was disposed of either in the cavity left by the tests or in an on-site injection well (DOE/NV, 1999). Other radioactive materials were transported to the Nevada Test Site for disposal. Nonradioactive materials were disposed of in pits at the site. The pits were subsequently backfilled with clean soil and graded. Table 1-1 presents a time line of activities at the Salmon Site.

1.2.2 Remediation; Remedial Actions

Beginning in 1992, the DOE began a phased remediation program of the Salmon Site, loosely based on a *Comprehensive Environmental Response, Compensation, and Liabilities Act* (CERCLA)-model. The results of the several phases are detailed in various individual reports. The investigations culminated in the issuance of *Salmon Site Remedial Investigation Report* (DOE/NV, 1999). Operationally, and for the purposes of the remedial investigation, the Salmon Site was separated into six geographical and operational areas. These areas are designated Source Areas (SA) 1 through 6; their uses and descriptions are summarized in Table 1-2 and locations are shown in Figure 1-4.

The operational history, potential contaminants of concern (COCs), and discussion of each of the source areas are given in the Work Plan (DOE/NV, 1992) and the Work Plan Addendum (DOE/NV, 1995). The results of the various investigations are given in the *Salmon Site Remedial Investigation Report* (DOE/NV, 1999).

1.3 Final Site Conditions

The following sections present the current (as of June 2003) condition of the Salmon Site. Included is information relative to the on-site and surrounding-site status and the environmental restoration end-state. Section 1.3.1 discusses the current state of the site; Section 1.3.2 discusses the state of the surrounding areas adjacent to the site; and Section 1.3.3 discusses the environmental end state. The

Table 1-1
Significant Events at the Salmon Site
 (Page 1 of 2)

Date	Event
1961	Initiated the Vela Uniform (Exploratory) Drilling Program for Projects Dribble and Miracle Play
1964	Salmon Test (nuclear)/Project Dribble
1964	Began surface and groundwater sampling
1965	Began portable instrument surveys of radioactivity Began disposal of radioactive liquid waste into Aquifer 5 through Well HT-2
1966	Sterling Test (nuclear)/Project Dribble
1969	Diode Tube Gas Explosion/Project Miracle Play Initiated site disposal safety studies
1970	Humid Water Gas Explosion/Project Miracle Play
1971	Began site cleanup
1972	Site cleanup and decommissioned Returned Tatum Dome Site to private landowner Initiated Long-Term Hydrologic Monitoring Program
1974	The Tatum Dome Advisory Committee formed (this Committee is no longer in existence.)
1977	Water and soil samples collected, DOE completed special study of Tatum Dome
1979	DOE reevaluated Tatum Dome Site Aquifer monitoring wells drilled
1980	Six wells added to the Hydrologic Monitoring Program
1984	Began tritium concentration monitoring and infiltration studies
1988	DOE initiated preliminary assessment Preliminary assessment submitted to U.S. Environmental Protection Agency (EPA) Region IV
1989	Tatum Dome added to the Federal Agency Hazardous Waste Compliance Docket via <i>Federal Register</i>
1990	EPA installed/sampled additional monitoring wells DOE received Draft Administration Order from the Mississippi Department of Environmental Quality (MDEQ) Draft agreement in Principle (DOE-MDEQ) prepared DOE held public meetings DOE initiated preparation of Remedial Investigation/Feasibility Study (RI/FS) Work Plan (Draft RI/FS Work Plan submitted to MDEQ)
1992	Cultural Resources <i>National Environmental Policy Act</i> (NEPA) Survey Submission of Final RI/FS Work Plan Initiation of NEPA surveys: Threatened and Endangered Species and Wetlands and Flood Plains MDEQ approval of Final RI/FS Work Plan Gopher Tortoise Survey, initial surface geophysical survey
1993	Soil, water, sediment, biota, and vegetation sampling; geophysical survey; trench excavation; and cone penetrometer testing Miscellaneous construction activities (road maintenance/upgrading equipment and decontamination areas)
1994	DOE purchased Salmon Site from private landowner

Table 1-1
Significant Events at the Salmon Site
 (Page 2 of 2)

Date	Event
1995	Expanded geophysical survey, installed/sampled auger wells Submit RI/FS Work Plan Addendum to MDEQ
1996	Installed deep aquifer monitoring wells
1997	Groundwater sampling from monitoring well network
1998	Background soil and groundwater sampling Direct-push soil and groundwater sampling in Source Area 1
1999	Groundwater sampling from monitoring well network Submitted Final Remedial Investigation Report to MDEQ
2002	Installed potable water supply system for residences in the vicinity of the Salmon Site Submitted Final Restoration Plan to MDEQ Monitoring well rehabilitation, replacement, and abandonment, and site restoration activities
2004	Submit Completion Report to MDEQ, MSDOH

Remedial Investigation Report divides the site into three Operable Units (OU) based on the results in the investigation: OU-1 includes the surface and shallow aquifer, OU-2 includes the intermediate depth aquifers and the test cavity, and OU-3 includes the HT-2 injection well. Section 1.3.3 begins with a general description of the status of the site followed by a discussion of each OU.

1.3.1 Site Status

An oil and gas lease exists on the Salmon Site; however, drilling restrictions are in place to prevent disturbances of the test cavity and associated locations. No record of water wells or rights were indicated in the historical files. According to an U.S. Environmental Protection Agency (EPA) annual monitoring report for Calendar Year 2001 (EPA, 2001), the EPA monitored 44 wells in and around the Salmon Site. Gamma-ray spectral analysis results from the 2002 sampling indicated that no man-made gamma emitting radionuclides were detected in on-site or off-site samples. The on-site groundwater results indicated tritium levels below the EPA Drinking Water Standard (Title 40 *Code of Federal Regulations* [CFR] Part 141) of 20,000 picocuries per liter (pCi/L), with the exception of monitoring Well SA1-1-H (26,700 pCi/L). Groundwater and surface water samples collected off site during the calendar year 2001 effort indicated tritium results less than 9.8 pCi/L (EPA, 2001). As indicated in the *Salmon Site Restoration Plan* (NNSA/NV, 2002), the tritium levels have continued to decrease and the 2003 analysis results depicted that all tritium levels in on-site wells were below the drinking water standard.

Table 1-2
Source Area Descriptions at the Salmon Site

Source Area	Description	Individual Sites
1	Area Around Surface Ground Zero	Test Cavity Beaver Pond Station 1A Mud Pit Half Moon Creek Overflow Pond Postshot No. 1 Slush Pit and Mouse Hole Bleed-Down Plant Area East Substation E-14 Pad and Mud Pits E-6 Decontamination Pad Postshot No. 2 Mud Pit
2	Northern Disposal Area	REECO Disposal Pits Clean Burn Pits Gas Station
3	Southern Disposal Area	Mud Storage Pits/South Borrow Area Big Chief Drilling Storage Area Sites E-2 and E-7 Government Storage Area 1 (Drilling Storage Yard) Government Storage Area 2
4	Western Disposal Area	Reserve Mud Pits Debris Disposal Area West Substation CH Fuel Storage Area Cable Storage Area South Substation North Substation
5	Injection Well Area	HT-2 Well Area HT-2M Well Area
6	Helicopter Pad and Storage Area	Helicopter Pad and Storage Area

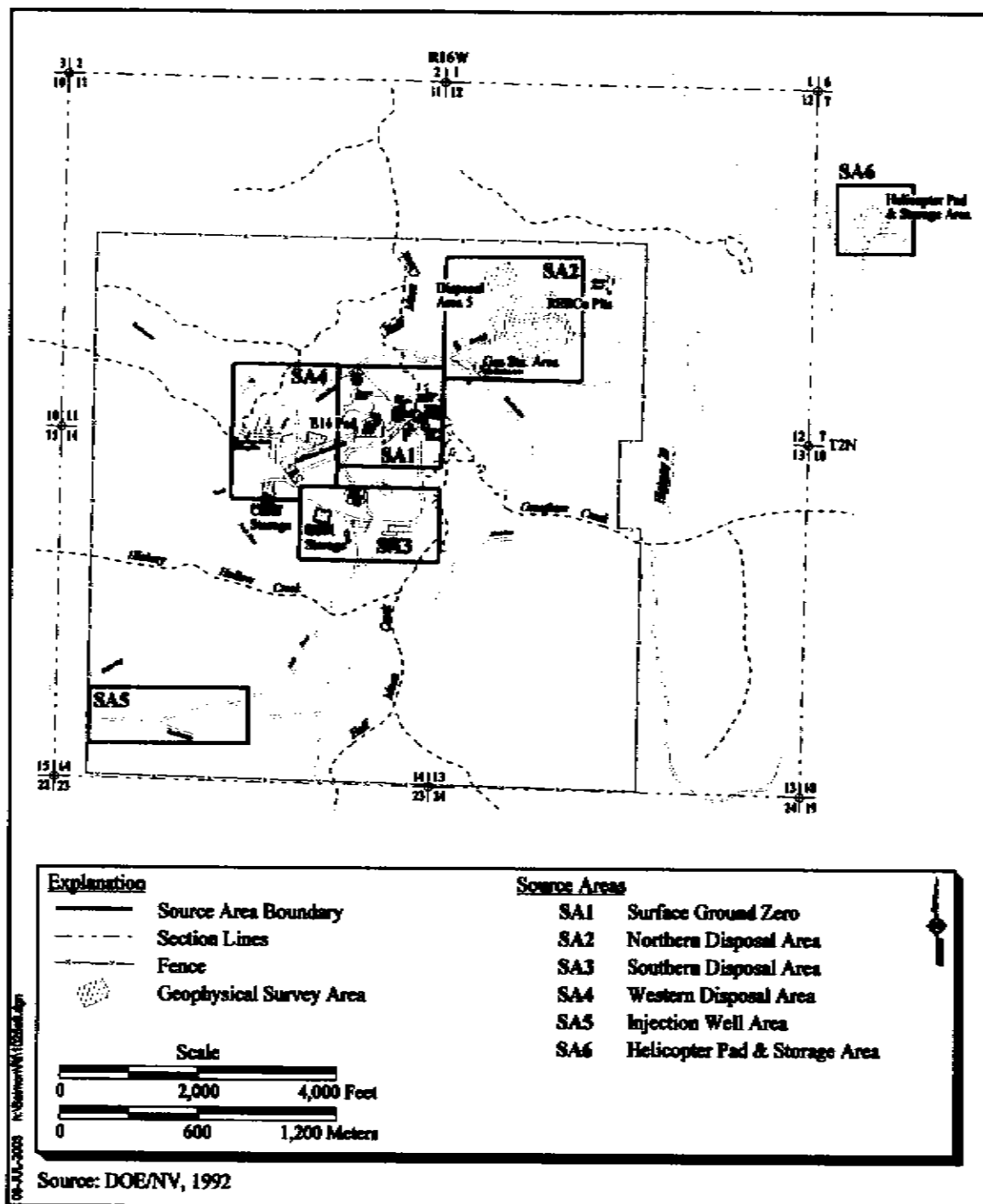


Figure 1-4
Salmon Site Source Areas

The plaque at the Salmon Site surface ground zero (SGZ) indicates historical information about the site as follows:

“UNITED STATES
DEPARTMENT OF DEFENSE
ADVANCE RESEARCH PROJECTS AGENCY
DR. E. RECTIN, DIRECTOR
PROJECTS DRIBBLE AND MIRACLE PLAY

Experiments in the Vela Uniform Program sponsored jointly by the Department of Defense and the Atomic Energy Commission were conducted below this spot at a depth of 2700 and 2715 feet in salt. A 5.3-kiloton nuclear device was detonated on October 22, 1964. Known as the Salmon Event which was the first of the Dribble Series to evaluate the decoupling principle and to study seismic wave propagation in the southeast United States. A 380-ton nuclear device was detonated on December 3, 1966. Known as the Sterling Event. Objective of this experiment was to determine the extent of decoupling of a cavity in salt and the accuracy of decoupling calculations.

The Miracle Play Series consisted of two gas explosions which were conducted in the cavity on February 3, 1969 and April 19, 1970. The objectives of these experiments were to determine the decoupling effective of the explosions in an open cavity and the reduction in decoupling caused by over driving a cavity.

No excavation, drilling, and/or removal of materials is permitted without U.S. Government permission to penetrate below Mean Sea Level on the 1470 acre tract situated within Sections 11, 12, 13, and 14, T2N, R16W, ST. Meridian, Mississippi.”

1.3.2 Surrounding Area Status

There are extensive oil and gas leases in the area surrounding the Salmon Site. In 2001, Remington Oil and Gas Company collected seismic data from the Salmon Site. This data was used to enhance oil and gas exploration activities of the area surrounding the Salmon Site. Subsurface restrictions (e.g., drilling and excavation activities) have been imposed within the Salmon Site boundaries; thereby, preventing oil and gas development. According to the Calendar Year 2001 EPA Annual Monitoring Report (EPA, 2001), the EPA monitored 20 wells and six surface water sampling

locations outside the boundaries of the site. Samples collected during the calendar year 2001 field effort indicated detectable levels of tritium consistent with typical background results for the area.

1.3.3 Environmental Restoration End State

As a result of past activities at the Salmon Site, soil and groundwater have been impacted. The first portion of this section summarizes the historical cleanup (prior to 1992), and the second part summarizes the current end state.

Historical Environmental Restoration

Samples were collected and analyzed to determine which areas exceeded the cleanup criteria. As a result of sampling and surveillance between 1970 and 1972, areas were identified that exceeded the cleanup criteria. All contaminated soil and water generated during the initial cleanup effort were injected into the test cavity or into the HT-2 disposal well. Contaminated equipment, some solids, and debris that could not be disposed on site were transported to the Nevada Test Site for disposal (DOE/NV, 1980). All drilled entry holes into the test cavity were plugged and abandoned, as were numerous exploratory and scientific boreholes.

The self-imposed cleanup criteria were relaxed by the AEC (predecessor Agency to the DOE) for two locations around SGZ because contamination in these areas was only slightly higher than the criteria allowed and the shallow groundwater made contaminated soil very difficult to remove (DOE/NV, 1980). These areas were backfilled and the radioactive material was covered with up to 12 ft of clean material.

Approximately 338,000 gallons of water containing a total of 38 curies of beta and gamma activity and 3,253 curies of tritium were injected into Aquifer 5 (through Well HT-2) between March and July 1965. Aquifer 5 had been used by the oil industry for the disposal of produced brines. Details of the injection process are given in *Tatum Dome Project, Lamar County, Mississippi* (DOE/NV, 1980). Hydrologic studies predicted that the radioactive waste injected into Aquifer 5 would travel about 570 ft from the point of injection in about 75 years. The 1980 studies also showed that the levels would decay to below the 1980 Radiological Cleanup Guidance (RCG) during this time frame. Further, if the entire radioactive slug were transferred to Aquifer 4, it would migrate only about 245 ft in 65 years before decaying to below the RCG (DOE/NV, 1980).

Although hydrological monitoring of the Salmon Site had been ongoing since 1972, the State of Mississippi raised concerns about the possible migration of radionuclides into aquifers overlying the dome. As a result of these concerns, DOE installed additional monitoring wells in the vicinity of SGZ. One well was installed in each of the following aquifers: the Half Moon Creek Alluvial Aquifer (HMCAA) (HM-S), the Local Aquifer (HM-L), Aquifer 1 (HM-1), Aquifers 2a and 2b (HM-2a and HM-2b, respectively), and Aquifer 3 (HM-3). These wells are the cornerstone of the Long-Term Hydrologic Monitoring Program (LTHMP) for the Salmon Site.

Environmental End State

In 1992, the DOE began a phased investigation, based loosely on a CERCLA-like model of the Salmon Site. This investigation culminated in the issuance of the Salmon Site Remedial Investigation Report (DOE/NV, 1999). Subsequent documents and reports have determined the current end state for the surface is no further action. The end state for the subsurface is continued monitoring as outlined in this plan. The sampling results from the Remedial Investigation/Feasibility Study (RI/FS) for the Salmon Site are summarized in the following text and in Table 1-3. Based on the results of this effort, the long-term groundwater sampling for specific COCs are outlined in Table 1-4.

Chemical and radiological constituents are present in both the shallow and deep subsurface. The HMCAA has been impacted by both tritium and volatile organic compounds (trichloroethene [TCE]) in the vicinity of surface ground zero; soil in and around SGZ has been impacted by volatile organic compounds, semivolatile organic compounds, and petroleum hydrocarbons that are in the abandoned mud pits. Sampling results indicate that these contaminants are not migrating from the identified mud pits.

Arsenic has been identified in the Local Aquifer in Source Area 2; however, no DOE activities have been identified that could have contributed to arsenic contamination. Therefore, it is assumed that the arsenic is naturally occurring.

Chromium has been consistently identified in Well HM-3 in Aquifer 3 at levels that exceed the maximum contaminant level (MCL).

There are three distinct aspects of the end state for environmental restoration activities at the Salmon Site. The first two are geologically based due to differences between the surface and subsurface

Table 1-3
Summary of Salmon Site Contamination and Distribution

	Contaminants of Concern	Media	Location	Operable Unit
Source Area 1	Volatile Organic Compounds	Groundwater	HMCAA	1
		Soil	Station 1A Mud Pit	1
	Semivolatile Organic Compounds	Soil	Station 1A Mud Pit	1
	Total Petroleum Hydrocarbons	Soil	Station 1A Mud Pit	1
	Metals	Groundwater	HMCAA, Local Aquifer, and Aquifer 3	1, 3
	Tritium	Groundwater	HMCAA and Local Aquifer	1, 2
	Fission Products		Test Cavity	2
Source Area 2	Volatile Organic Compounds	Soil	REECO Pits	1
	Semivolatile Organic Compounds			1
	Metals			1
	Total Petroleum Hydrocarbons			1
	Metals	Groundwater	Local Aquifer	2
Source Area 4	Metals	Groundwater	Local Aquifer	2
Source Area 5	Tritium, Beta and Gamma Emitters	Groundwater	Aquifer 5	3

Table 1-4
Long-Term Monitor Well Network
Sampling Analyte List by Well
(Page 1 of 2)

Well	Aquifer	Depth (ft)	VOC	Tritium	Gamma Spec	Metals*
Source Area 1						
SA1-1-H	HMCAA	30	X	X		
SA1-2-H	HMCAA	30	X	X		
SA1-3-H	HMCAA	30	X	X		
SA1-4-H	HMCAA	30	X	X		
SA1-5-H	HMCAA	30	X	X		
SA1-6-H	HMCAA	23	X	X		
SA1-7-H	HMCAA	30	X	X		
SA1-12-H	HMCAA	30	X	X		
HMH-5R	HMCAA	30	X	X		
HMH-16R	HMCAA	30	X	X		
HM-S	HMCAA	30	X	X		

Table 1-4
Long-Term Monitor Well Network
Sampling Analyte List by Well
(Page 2 of 2)

Well	Aquifer	Depth (ft)	VOC	Tritium	Gamma Spec	Metals*
SA1-8-L	Local	198		X		
HM-L	Local	204		X		
HM-1	Aquifer 1	415		X		
HM-2a	Aquifer 2a	537		X		
HM-2b	Aquifer 2b	700		X		
HM-3	3	875		X	X	X
SA1-11-3	3	934		X	X	
Source Area 2						
SA2-1-L	Local	349		X		
SA2-2-L	Local	340		X		
SA2-4-L	Local	250		X		
Source Area 3						
SA3-4-H	HMCAA	30	X	X		
E-7	Aquifer 3	934	X	X	X	
SA3-11-3	Aquifer 3	862		X	X	
Source Area 4						
HM-2L	Local	200		X		
SA4-5-L	Local	180		X		
Source Area 5						
SA5-4-4	Aquifer 4	2099		X	X	
SA5-5-4	Aquifer 4	2083		X	X	

* RCRA Metals (Ag, As, Ba, Cd, Cr, Hg, Se) + Be, Ni, Sb and Zn.

environmental restoration activities at the site. The third aspect addresses administrative issues involving interagency concurrence on completion of remedial actions and the long-term control of documents necessary to maintain useful knowledge of the site.

The end state for environmental restoration field activities at the Salmon Site surface has been reached. The *Salmon Site Completion Report and Long-Term Stewardship Plan* and the data presented herein demonstrate that the Salmon Site surface soils meet the clean-up criteria agreed to with the State Agencies; therefore, the end state for the Salmon Site surface has been reached. Final elements for the end state of surface environmental restoration activities include the establishment of inspections, maintenance criteria, and assignment of applicable surface control responsibilities.

Actions which have been completed for the surface end state include:

- Installation of a potable water system for the inhabitants in the proximity of the Salmon Site
- Continuation of monitoring for the shallow (OU- & -2) wells
- Removal or injection/burial of contaminated media
- Application of institutional controls
- Placement of the Surface Ground Zero monument
- Installation of the shallow monitoring wells

The end state for subsurface environmental restoration includes:

- Completion of the groundwater flow model and establishment of the contaminant boundary
- Continuation of monitoring for the deeper (OU-3) wells to demonstrate no leakage from the cavity and to monitor the current plumes
- Sampling per the frequency and analyte strategy outlined in Table 1-4
- Application of appropriate institutional controls (e.g., well head covers, land use restrictions)
- Assignment of applicable subsurface control responsibilities

These subsurface environmental restoration activities culminated in the ability to ensure that groundwater contamination is not inadvertently contacted and remains within expected boundaries, or is detected within sufficient time to allow for alteration of control plans to preclude possible harmful interactions.

Both the surface and subsurface environmental restoration end states are finalized by the administrative processes that include:

- Formal closure concurrence from applicable parties
- Documentation needed to maintain site control
 - Formal agreements
 - Land use restrictions
 - Withdrawals
 - Characterization information
 - Closure report

- Periodic monitoring reports
- Long-term stewardship plan
- Institution of formal record control processes
 - Secured storage at multiple locations
 - Modification control and notification
 - Distribution

Records must be maintained to ensure future generations have access to data that will enable a clear understanding of the Salmon Site residual contamination issues and the historical actions taken to ensure protection of human health and the environment.

The LTHMP will be continued at the Salmon Site through the collection of periodic groundwater samples. The LTHMP well network consists of 28 on-site monitoring wells (12 wells in the Alluvial, 7 in the Local, and 9 in the deeper aquifers). Groundwater monitoring of the Alluvial and Local aquifers shall be conducted annually until contaminants naturally attenuate below regulatory limits, and every five years after that time. The deeper aquifer wells will be sampled every five years. The LTHMP will be reevaluated by the DOE OLM every 25 years. The wells and the parameters to be sampled are outlined in Table 1-4.

During site decommissioning activities, Reynolds Electrical & Engineering Co., Inc. (REECo) used three disposal pits located in Source Area 2 (Figure 1-4) approximately 2,100 ft north of SGZ. These nonengineered disposal pits, located on the side of a gentle sloping hill, are subject to surface erosion due to water flowing over the surface of the pits during high rainfall months (MDOH, 2002). During periodic site inspection and monitoring activities, the REECo pits shall be inspected to ensure their integrity has not failed. Access to the Salmon Site is limited through deed restrictions, and signs will be posted to alert the public against intrusion.

Details of the investigation, characterization, and corrective action process used at the Salmon Site can be obtained from the *Remedial Investigation and Feasibility Study of the Tatum Dome Test Site* (DOE/NV, 1992). Other documents associated with the site are listed in Section 1.5.

1.3.3.1 Operable Unit 1 - Surface Soils and Shallow Aquifer

The Salmon Site was originally separated into six source areas based on the types of activities. During the remediation activities, these source areas were consolidated into three Operable Units based on environmental media, hydrostratigraphic position, and the same potential sources of contamination.

Surface Soils

The surface and shallow subsurface soils are contaminated in the vicinity of SGZ with volatile and semivolatile organic compounds and total petroleum hydrocarbons (Table 4-3; DOE/NV, 1992). The contamination is restricted to a drilling mud pit west of SGZ and extends from 5 to approximately 22 ft bgs.

Half Moon Creek Alluvial Aquifer

The HMCAA is laterally constrained by topography to the east and west, and extends from a few feet below ground surface to a depth of approximately 30 ft (Figure 1-3). The groundwater flow direction for this aquifer is northeasterly. The shallow groundwater in the vicinity of SGZ has been contaminated with tritium, volatiles, and metals (arsenic). The tritium plume initially identified in the 1978 subsurface study (DOE/NV, 1980) and included in the 1999 Remedial Investigation Report (DOE/NV, 1999) extends approximately 100 ft north-northeast from the SGZ. Modeled predictions indicate that the plume will disperse laterally east and west (Figures 5-3, 5-6, and 5-7 of the *Salmon Site Remedial Investigation Report* [DOE/NV, 1999]) and at the end of year six (approximately 2005), the model predicts that the tritium concentration will be less than three percent of the initial highest peak concentration in 1999 (88,200 pCi/L).

Trichloroethene was initially identified in an area immediately north of the SGZ monument. Groundwater modeling predicted that after five years the contaminant plume would spread northeasterly (Figures 5-5 and 5-11 of the *Salmon Site Remedial Investigation Report* [DOE/NV, 1999]). Through natural attenuation, the concentration was expected to be less than three percent of the initial concentration within the five-year period ending in approximately 2004. However, recent sampling of a newly installed well (HMH-5R) approximately 500 ft north of SGZ has also indicated the presence of TCE at concentrations of 250 micrograms per liter ($\mu\text{g/L}$ in 2002) and 300 $\mu\text{g/L}$ in 2003, suggesting a second TCE plume. Modeling has not yet been completed to

incorporate this new data. Vinyl chloride was detected above the MCL in Well SA1-2-H 4 (at 11 µg/L during 2003 groundwater sampling activities).

Arsenic was identified west of the SGZ monument (Well SA1-7-4). Predictive modeling of the arsenic plume indicates a general northeasterly dispersion with predicted concentrations of 13 percent of the original concentration by 2007 (Figures 5-4, 5-8, and 5-9 of the *Salmon Site Remedial Investigation Report* [DOE/NV, 1999]). This plume is not associated with DOE actions at the site.

The groundwater monitoring network currently includes 11 monitoring wells installed into the HMCAA for long-term monitoring of the area around surface ground zero. Each of these wells is completed into the HMCAA and is sampled on an annual basis for chemical and radiological contaminants.

1.3.3.2 Operable Unit 2 - Intermediate Aquifers and Test Cavity

Operable Unit 2 includes the Local Aquifer and Aquifers 1, 2a, 2b, and 3, and the test cavity (Figure 1-3). Identified contaminants are arsenic, gross alpha, and gross beta in the Local Aquifer; chromium in Aquifer 3; and fission products in the test cavity. Tritium has been identified in the Local Aquifer at levels far below the 20,000 pCi/L limit set by the *Safe Drinking Water Act* (SDWA).

The groundwater monitoring network for Operable Unit 2 includes 17 wells. These wells are distributed among the aquifers as follows: Local Aquifer - 6 wells, Aquifer 1 - 2 wells, Aquifer 2a and 2b - 5 wells, and Aquifer 3 - 3 wells. These wells are sampled on an annual basis for chemical and radiological contaminants.

1.3.3.3 Operable Unit 3 - Injection Well

Operable Unit 3 consists of the HT-2M injection well in the southwestern corner of the site. The groundwater monitoring network for Operable Unit 3 currently includes two wells. These two wells (one upgradient and one downgradient of the HT-2M injection well) are both completed into Aquifer 4. The purpose of the wells is to monitor potential leakage from Aquifer 5 where radioactive material was injected. This injected material did include 3,253 curies of tritium and 38 curies of beta and gamma activities. If leakage from Aquifer 5 were to occur, the best indicators would be tritium. The tritium level in both wells (SA5-4-4 and SA5-4-5) has been well below drinking water standards since these wells were rehabilitated in 2002.

1.3.4 Monitoring Well Network

There are 28 wells that comprise the groundwater monitoring network at Salmon Site. Table 1-5 summarizes the number of wells by Source Area and Operable Unit.

**Table 1-5
Salmon Site Groundwater Monitoring Wells**

Source Area	OU	Description	Number of Monitoring Wells
1	1	Shallow Groundwater	11
	2	Intermediate Aquifers	7
2	2	Local Aquifer	3
3	1	Shallow Aquifer	1
	2	Intermediate Aquifers	2
4	1	Local Aquifer	2
5	3	Deep	2

1.4 Stewardship Attributes

The three fundamental attributes of stewardship that are essential to the successful implementation of this plan are responsibility, long-term effectiveness, and adaptability (ORSC, 1998).

1.4.1 Responsibility

Under the concept of stewardship, both stewards and stakeholders are expected to accept responsibility for ensuring a safe and healthy environment for current and future generations. Stakeholders of the Salmon Site include the DOE OLM, NNSA/NSO, the Mississippi Department of Environmental Quality (MDEQ) and the Mississippi Department of Health (MSDOH). The future use of the Salmon Site as outlined in Public Law 104-201 (PL, 1997) is as a wildlife refuge area and working demonstration forest; therefore, it will have restricted access and incursions on the site by the general public will be minimal. The conveyance to the State of Mississippi may occur at some future time. DOE will work with the appropriate state agencies when the time comes. However, due to possible unauthorized entry onto the Salmon Site, strong site controls need to be implemented and maintained. These controls will provide initial warning of residual contamination at the site for the foreseeable future. Stewards for the Salmon Site and their respective responsibilities are further defined in Section 2.0.

1.4.2 Long-Term Effectiveness

This LTS plan is intended to describe necessary actions to ensure protection of human health and the environment now, and well into the future. The plan provides the framework for implementing inspection, monitoring, and maintenance activities at locations requiring institutional controls in the foreseeable future. The LTS plan employs controls (both physical and institutional), long-term monitoring, and contingency planning to address possible adverse events. The long-term monitoring program is further discussed in Section 2.4.

1.4.3 Adaptability

The Salmon Site LTS Plan is designed to provide flexibility for the program to adapt to changing physical conditions. This adaptability will provide effective, ongoing protection of human health and the environment. Changes in contaminant levels, environmental conditions, and demographics will necessitate periodic evaluation and refinement of the stewardship program.

The LTHMP will be continued at the Salmon Site. The LTHMP consists of 28 wells (12 wells in the alluvial aquifers, 7 in the Local, and 9 in the deeper aquifers). All Alluvial and Local aquifer wells will be sampled and analyzed for tritium, except for those in Source Area 2. In addition, wells in Source Area 1 will be sampled for volatile organic compounds. The deep aquifer wells will be sampled for tritium. Well HM-3 will be sampled annually for chromium. Sampling will be conducted annually for the alluvial and local aquifers until all parameters are below the 2003 regulatory limits. After that time, the wells will be sampled at five-year intervals for 20 years. The deeper aquifers will be sampled every five years. At the time of the submission of the annual report, DOE may request a change to the above program. Any changes must be negotiated with the current surface owner (if other than DOE), MSDOH, and MDEQ.

The subordinate activities implemented under the stewardship plan (i.e., long-term monitoring) will be reevaluated based on the performance of the in-place corrective actions and results from monitoring. Future frequency of monitoring will be determined based on the results of previous analysis, with MDEQ and MSDOH concurrence. Additional, unscheduled inspections may be made after severe weather events such as heavy rainfall and flash flooding. If inspection results indicate that maintenance and repair of the LTHMP well network, access roads, perimeter fence, or other site installations is required, DOE will be notified. After obtaining DOE concurrence, repair actions will

be initiated and completed within 90 days. All repair and maintenance activities will be documented and included in the periodic Post-Closure Monitoring Report submitted by the DOE to MDEQ and MSDOH. The stewardship document will be modified, as necessary, based on changes to the long-term monitoring plans, institutional controls, and/or other information provided by lead administrative agencies. Stewardship modifications will be implemented when revision to the monitoring activities are substantial (e.g., if the natural attenuation of hydrocarbon contamination leads to elimination of the need for institutional controls). Modifications such as changes in the frequency of specified monitoring activities should not initiate a modification in stewardship functions since the primary activity (i.e., groundwater monitoring of the LTHMP well network) would not be altered.

1.5 Regulatory Basis

In April 1990, MDEQ issued a draft Administrative Order to the DOE. This order stipulated that a Remedial Investigation Work Plan be prepared and executed to address issues at the Salmon Site. The terms of the agreement were never completed and signed. However, NNSA/NSO entered into a voluntary remedial action under the States Voluntary Evaluation Program.

The DOE prepared a tri-party agreement (including Agreements in Principle dated 1991, 1999, and 2000) between DOE, MDEQ, and MSDOH, defining the roles and responsibilities for the investigation, remediation, and reporting at the Salmon Site, and establishes funding protocols.

Five documents were prepared leading to the closure of the Salmon Site, per the requirements of the RI/FS (DOE/NV, 1992). These documents provide information relevant to the initial environmental restoration investigation of the site. The RI/FS includes:

- A brief history and description of the site
- The purpose and scope of the investigation
- Site information (i.e. physical setting, operational history, waste inventory, release inventory, previous investigation efforts)
- Objectives of the investigation (i.e., identifying a conceptual site model, contaminants of concern, preliminary action levels, data quality objectives)
- Field investigation plans

- Waste management (for waste generated during the investigation)
- Duration and availability of investigation records
- Project manager name and number
- Other information as appropriate

The second document is the Work Plan Addendum for the RI/FS (DOE/NV, 1995). The Addendum provides an update of some of the information in the RI/FS and a summary of the activities and results from the RI/FS, including data gaps and the need for further investigation.

The third document is the Remedial Investigation Report (DOE/NV, 1999). The Remedial Investigation Report provides information on the investigation methodology, nature and extent of contamination, contaminant fate and transport, and human health and ecological risk assessment results. The Remedial Investigation Report concluded that minimal risk is present to human health and ecological health at the Salmon Site.

The fourth document in the closure process is the *Salmon Site Restoration Plan* (NNSA/NV, 2002). The Restoration Plan includes a brief summary of the previous documents; development and evaluation of alternatives including objectives and screening criteria; and a recommended corrective action alternative. This plan concluded that no further action was required for the surface and that monitoring and institutional controls are all that is required for the subsurface at this time.

The final document is the Completion Report (CR) (the main document to this submission). The Completion Report provides a description of corrective action activities conducted at the site. These include monitoring well replacement, rehabilitation, and abandonment; site restoration activities; waste disposition from the site; and the post-closure monitoring plan. The references for work on the Salmon Site (Table 1-6) are discussed in the following paragraphs.

The above-referenced documents contain the bulk of historical information that needs to be retained in order for stewards of the Salmon Site to have a basis for further evaluation and analysis. These documents provide details about the site, its physical attributes, and details of investigations. They also permit the development of the foundation for remedial actions chosen to achieve closure. State concurrence has been received on all but the current document. Additional documents, sampling and analysis results, inspections, and other documents generated in support of, or as a result of

**Table 1-6
Salmon Site Documents**

Salmon Site		
Document	Submitted	Approved
<i>Remedial Investigation and Feasibility Study of the Tatum Dome Test Site</i>	1992	1992
<i>Work Plan Addendum for the Remedial Investigation and Feasibility Study of the Salmon Site (DOE/NV-411)</i>	1995	1995
<i>Salmon Site Remedial Investigation Report (DOE/NV-494-Rev.1)</i>	1999	2000
<i>Salmon Site Restoration Plan (DOE/NV-640-Rev.1)</i>	2002	2002
<i>Salmon Site Completion Report and Long-Term Stewardship Plan (the main document to this submission)</i>	2003	2004

implementation of this plan, will also be retained. The Office of Scientific and Technical Information and the NNSA/NSO Environmental Management Information System (EMIS) are both key elements in the management of information about the Salmon Site.

2.0 Elements of Stewardship

Six basic elements of an effective stewardship program are addressed in this plan (ORSC, 1998):

- Authority and funding
- Stewards
- Operations
- Physical controls
- Institutional controls
- Information systems

The authority and funding for stewardship must be established as a primary function of implementation. Then, stewards must be identified and roles and responsibilities defined. The methods used in the implementation of the program are identified below.

Table 2-1 presents the organizations and interrelationships with respect to the complex administration of the surface stewardship elements at the Salmon Site.

2.1 Authority and Funding

At federal facilities like the Salmon Site, the authority to ensure long-term implementation of programs to protect human health and the environment originates in the U.S. Congress and is delegated to an appropriate federal agency, in this case the DOE. As part of the *National Defense Authorization Act* for Fiscal Year 1997, Congress included language which allows DOE at some time in the future to convey the Salmon Site surface to the State of Mississippi for use as a demonstration forest and wildlife refuge (PL 104-201) (PL, 1997). DOE will work with the appropriate State Agencies at that time.

The DOE recognizes the significance of maintaining adequate funding levels for stewardship, and that funding is a main concern of the stakeholders. The DOE currently participates in the annual appropriations process in Congress and will continue to follow this process to ensure adequate funding. The DOE will provide future yearly funding estimates in the periodic site reports, which are usually published in late summer. This information will assist in promoting public knowledge of the site funding situation.

After the submission of this report, responsibility for the surface of the site may eventually be transferred to the State of Mississippi for use as a wildlife refuge and working demonstration forest. The subsurface of the site will be maintained by DOE OLM in perpetuity' due to the presence of deep underground contamination from nuclear tests. Access to the Salmon Site is currently restricted and posted as "Government Property." The site boundary is partially fenced, with two locked gates for authorized access, although numerous trails and several unimproved roads are used by trespassers. Accordingly, the DOE will be responsible for appropriation of funds from fiscal year (FY) 2005 onward (NNSA/NSO in FY 2003 and FY 2004, and the OLM thereafter). The costs for long-term monitoring and inspection of the site have been estimated for approximately 100 years. The estimate assumes that monitoring and inspection will be required for 100 years following the initial post-closure monitoring requirements in the Salmon Site Completion Report. Funding for state and local agencies, which may provide oversight or other services related to the long-term stewardship of the Salmon Site past the post-closure monitoring period, is included under the NNSA/NSO's Agreements in Principle/Grants. After the Agreements in Principle/Grants are terminated, the costs are assumed to be minimal and will be covered by the respective agencies.

2.2 Stewards

Stewards are individuals or groups responsible for carrying out various activities stipulated in the stewardship plan. Stewards are categorized into three groups: (1) principal stewards, (2) implementation stewards, and (3) oversight stewards (ORSC, 1998). The stewards' roles are defined as follows:

- **Principal** - Maintain legal responsibility for contaminated lands and facilities, including the financial obligation to ensure adequate funding for stewardship, and to take corrective action if the stewardship program becomes ineffective. For the Salmon Site, the Principal Steward is currently NNSA/NSO, and is expected to be the DOE OLM starting in FY 2005.
- **Implementation** - Responsible for stewardship activities, such as monitoring, maintenance, and record keeping. For the Salmon Site, there are a number of Implementation Stewards for different elements (as indicated in Table 2-1).
- **Oversight** - Ensure that the goals and requirements of the stewardship program are met. Oversight of the Salmon Site will be provided by different agencies during different periods in the future. Federal government oversight from DOE will continue for the duration of long-term stewardship. For the near-term, the local Oversight Steward is MDEQ and/or MSDOH. The MDEQ and/or MSDOH will determine if the performance of corrective actions at the Salmon Site are sufficient. MDEQ and/or MSDOH will also be the oversight

authorities for determining monitoring frequency and scope following the initial performance period.

Table 2-1 identifies the stewards for the Salmon Site surface and their respective functions.

**Table 2-1
Stewards for the Salmon Site Surface**

Steward	Category	Organization	Function
Principal	Federal Government	DOE (NNSA/NSO and OLM)	Legal responsibility, financial obligations
Implementation	Federal Government	DOE (NNSA/NSO and OLM)	Maintain public communication, document repository
		National Archives and Records Administration	Long-term archiving
		NNSA/NSO's or OLM's Contractor	Risk assessments/evaluations, monitoring, maintenance, security, signs, surveillance, and contingency/emergency response planning
	State Government	MDEQ-Office of Pollution Control, MSDOH	Approval of monitoring and emergency response plans and implementation
Oversight	Federal Government	DOE	Compliance with DOE Orders
	State Government	MDEQ-Office of Pollution Control, MSDOH	Compliance with use restrictions, resource use, wildlife regulations, and access agreements for department-withdrawn property
		MDEQ-Office of Pollution Control, MSDOH	Compliance with this document and the VEP
		MSDOH	Public health issues

2.3 Operations

Stewardship operations presented under this plan include activities required to ensure the integrity of the corrective actions at the Salmon Site for the protection of human health and the environment. The six elements of stewardship are identified below, along with a corresponding example of how the element is incorporated into operational activities for the Salmon Site:

- Monitoring: Continued implementation of the LTHMP.

Example: The LTHMP consists of the monitoring of 28 wells in the network. These include 12 wells monitoring the Alluvial Aquifers, 7 monitoring the Local Aquifer, and 9 in the deep aquifers. The shallow wells will be sampled annually for tritium and volatile organic compounds until the contaminants have naturally attenuated to below regulatory limits. The

deeper aquifer monitoring wells will be sampled every five years for tritium. Because the levels of arsenic have been determined to be naturally occurring, further analysis for arsenic will be discontinued. Thereafter, the wells will be sampled on the same schedule as the wells in the deeper aquifers.

- **Maintenance:** Routine upkeep of corrective action systems (e.g., LTHMP Well Network) to ensure long-term effectiveness.

Example: To ensure long-term effectiveness of the LTHMP corrective action, the groundwater sampling will be performed and evaluated every 5 years. The presumed life-cycle of a monitoring well is 25 years. However, wells will be replaced on an as-needed basis. Data will be reviewed every 5 years and compared with the predictive model, and the predictive model revised, as required (Section 2.4).

- **Surveillance:** Routine oversight of institutional systems to ensure that all activities occur as planned.

Example: Routine inspections and reporting will occur as specified in the Completion Report and this LTS Plan for the site. During predetermined review periods, institutional controls will be evaluated for effectiveness and the need to maintain such controls.

- **Enforcement:** Legal implementation of the constraints required to maintain the protection of human health and the environment.

Example: The MDEQ and/or MSDOH will ensure overall compliance with commitments agreed upon under the *Salmon Site Completion Report*. Annual environmental monitoring reports prepared by DOE will be submitted to MDEQ and/or MSDOH and to other stakeholders to demonstrate compliance with requirements. All modifications of the long-term stewardship program will be reviewed to ensure continued protection of human health and the environment.

- **Inspection and Reevaluation:** Periodic review (as approved by the MDEQ and/or MSDOH) of existing systems and activities to ensure their continued need and/or effectiveness.

Example: The annual environmental reports will contain an evaluation of trends in corrective action performance. These reports will be the basis for making recommendations regarding the frequency and extent of further inspections and monitoring based on previous data results. Inspections and sampling frequency may be increased or decreased based on these recommendations.

- **Public Participation:** Involvement of the public to ensure that citizens' concerns are addressed and relevant public information is provided.

Example: Annual environmental monitoring reports will be issued to the State to promote public awareness of the status of site conditions and modifications to long-term stewardship plans. The Public Reading Facilities will also receive current information and provide an avenue for the DOE to provide ongoing public awareness of the site. Public or small group meetings may be held on an as-needed basis, based upon the level of interest.

Following the post-closure monitoring requirements identified in the Completion Report, it is anticipated that annual monitoring, an annual environmental monitoring report, and annual site inspections at the Salmon Site surface will be mandated until all constituents attenuate below regulatory levels. Then the five-year intervals will be initiated for a period not to exceed 30 years total. The actual frequency, content, and duration of monitoring requirements will be based on available data and reports from the initial three years of Salmon Site surface post-closure monitoring and inspections, and will be established through negotiations between NNSA/NSO or DOE/OLM MDEQ and/or MSDOH. Maintenance of institutional controls at the Salmon Site is expected to be necessary every 10 years during the 100-year period.

Emergency Response: Emergency response plans for damage to components of the corrective action alternative are not anticipated due to the remote location and restricted access of the Salmon Site. The existing water supply system installed to provide potable water to residences in the proximity of the site will be the responsibility of the appropriate local water association, which will operate the system. This will also include routine operation and maintenance, and enforcement of newly constructed/inhabited residences to be installed onto the water system. The LTHMP monitoring well network will be inspected on an annual basis to determine if damage has occurred due to intrusions or severe geologic or meteorological events. Table 2-3 (in Section 2.3) at the end of this section, provides a discussion of potential damaging incidents. Surface institutional controls will be maintained in the SGZ area to prevent intrusive activities into the drilling mud and subsurface radioactive contamination in the cavity. All repair and maintenance activities will be documented and included in the annual Post-Closure Monitoring Report submitted by the DOE to MDEQ and/or MSDOH.

Enforcement activities are incorporated into stewardship of the Salmon Site by way of the mutually agreed-upon Completion Report. The MDEQ and/or MSDOH will be responsible for ensuring that applicable regulatory requirements are met and that appropriate response actions are initiated when necessary. Such decisions will be based upon professional judgment by DOE and/or its contractors, in coordination with MDEQ and/or MSDOH. Actions will be initiated if factors are observed that

indicate that corrective action performance is in jeopardy. Factors include, but are not limited to: unauthorized access, intrusive activities, groundwater monitoring well and pump efficiency based on expected pumping rates, fencing integrity, and warning sign legibility. Each of the factor's action levels will be based on whether or not the engineered or institutional control is deemed to be adequate to protect human health and the environment as originally intended under the approved closure.

As depicted in Table 2-2, implementation of stewardship operations results in several decision points at which monitoring elements may be revised. Table 2-2 summarizes these decision points and identifies the steward responsible for each. The DOE will have primary responsibility for all data interpretation activities, as well as decision-making responsibility regarding modification of sampling frequency based upon data results. The DOE will also be responsible for determining if action levels are exceeded, and implementing of specified contingency plans. Oversight stewards (i.e., DOE, EPA, MDEQ, and/or MSDOH) will be responsible for ensuring that the implemented actions meet Federal and State requirements. The MDEQ and MSDOH will be responsible for reviewing annual environmental monitoring reports and for providing public input into proposed changes to the long-term stewardship plans.

Participation in the periodic review process will encompass DOE, MDEQ, MSDOH, and stakeholders. The authority to conduct periodic reviews at federal agency-led sites is delegated to the lead agency. Therefore, the DOE has the primary responsibility to prepare the review documents. The applicable signatory agencies have the responsibility to review the report. While these agencies have the primary authority in conducting the reviews, other stewards will have an opportunity to participate in the review process. A determination of the ongoing protectiveness of the remedy will be made with input from all participants. Further risk assessments will be performed by DOE contractors when such evaluations are deemed necessary.

The monitoring plans may be periodically revised based upon data results obtained from ongoing monitoring efforts. It will be the responsibility of the DOE to revise these plans and provide drafts of proposed revisions to the oversight stewards prior to implementing any changes. If a change in the long-term monitoring activities necessitates a change in the stewardship plan, DOE OLM will make the appropriate revisions.

**Table 2-2
Decision Points and Responsible Stewards**

Action/Decision	Steward/Responsibility
Conduct long-term monitoring activities	(I) NNSA/NSO or OLM
Review yearly data results	(I) NNSA/NSO or OLM
Reduce/Increase sampling frequency	(I) NNSA/NSO or OLM
Determine if action levels have been exceeded	(I) NNSA/NSO or OLM
Implement contingency plans	(I) NNSA/NSO or OLM
Conduct periodic review	(I) NNSA/NSO or OLM (O) MDEQ
Determine if protective levels have been achieved	(I) NNSA/NSO or OLM (I) NNSA/NSO or OLM Contractors (O) MDEQ (O) EPA Region IV (O) DOE/HQ
Revise long-term monitoring/institutional control plans	(I) NNSA/NSO or OLM
Revise Long-term Stewardship Plan	(I) NNSA/NSO or OLM (I) NNSA/NSO or OLM Contractors (O) MDEQ, MSDOH (O) EPA Region IV (O) DOE/HQ

(I) Implementation Steward
(O) Oversight Steward

Table 2-3 provides an uncertainty matrix describing various potential events that could impede or reduce the long-term stewardship related environmental and human health safety features implemented at the Salmon Site.

The uncertainties identified in Table 2-3 directly affect the associated existing land use controls and long-term protective measures. This table is not meant to encompass all potential occurrences that might take place at the Salmon Site; however, the variety of events was specifically selected to provide a wide range of resulting contingency actions.

Table 2-3
Uncertainty Matrix
(Page 1 of 3)

Surface and Subsurface Uncertainties and Response Actions						
	Expected Condition	Potential Deviation (Risk Scenario)	Likelihood of Deviation	Impact of Deviation	Monitoring and Management Strategy	Contingency
1	Residual surface contamination is below levels of concern given likely future uses and limited duration stays (i.e., no continuous occupancy).	Long-term extended occupancy at surface locations with residual tritium contamination becomes necessary for unforeseeable purposes.	Low. Rationale: There are ample land resources available in the surrounding areas available for occupants. No known reasons or needs for extended stays or occupancy at the site.	Low. Rationale: Even if occupancy becomes necessary, residual contamination levels would not likely result in adverse health impacts.	Land use restrictions prohibit the construction of permanent occupancy structures. Stays are limited to uses consistent with demonstration forest research and wildlife refuge investigations.	Notify the DOE of occupancy need. Potential occupants required to submit to baseline and periodic medical evaluations to ensure no adverse health impacts from residual contamination.
2	Cleanup actions have addressed site surface contamination. All sources of contamination have been identified. No exposure to unexpected contamination occurs.	Exposure occurs due to unauthorized excavation into historical disposal pit locations.	Low. Rationale: There are land use restrictions in place to prevent subsurface intrusions. Given the site's likely future use, there would not be a need to perform excavations deeper than protective barriers (e.g., mud pit covers).	Low for Hazardous Constituents. Rationale: Contaminant levels would not cause severe adverse health impacts. High for Radioactive Constituents. Rationale: Contaminant levels are low; however, public perception could lead to high cost and time impacts.	County construction permit program would catch legal requests at application. Periodic review and site inspection during monitoring events would not likely catch perpetrator, but could note that unauthorized event took place.	Request support from local law officials to locate perpetrator. If located, conduct extensive medical evaluation of potentially contaminated intruder. Request reimbursement of incurred medical expenditures from unauthorized excavator.
3	Test cavity will not leak contaminants into Local Aquifers 1, 2, and 3 given existing surrounding water resource usage and surface environmental conditions.	Contamination unexpectedly migrates beyond modeled boundary. Previously installed well plugs (approx. 3 intrusions to the test cavity and various others in the immediate proximity) fails, causing a migration pathway to aquifer.	Low. Rationale: The integrity of historical well plugs is not specifically known; however, there is no indication of failure to date. Recently plugged wells have a very low likelihood of failure given known plug installation methods.	High. Rationale: Outward flow of contaminants from the test cavity could lead to unacceptable levels of radioactive contamination in surrounding inhabitant's drinking water sources which, if consumed, could lead to adverse health impacts and legal damages to federal government.	Continued long-term maintenance of monitoring well system to ensure contaminant boundaries remain as expected. Monitoring wells should provide adequate indication of previous well plug performance.	Determine if modeled contaminant boundary can be safely extended. If not, develop additional drinking water supply wells in a safely distant up-gradient location or provide extensions to the existing surrounding community system.
4	Geology of the site remains stable as expected for the central southern U.S. region.	Severe geologic event causes major disruption (e.g., earthquake driven faulting) to the stable geology of the Salmon Site salt dome.	Very Low. Rationale: The region is not prone to earthquake or other catastrophic geologic conditions. Salt domes in this area are typically geologically stable and preclude the unobstructed inward and outward flow of subsurface waters.	High. Rationale: Should a fault bisect the salt dome, radioactive contaminants that were sealed within could have an additional outward pathway for entry into the local resource use water aquifers. Once contaminated, the aquifers could have long-term adverse impacts.	The integrity of existing wells should be immediately verified. Based on the severity and proximity of a geologic event epicenter, temporary increased monitoring frequency could be warranted. Continued long-term monitoring of the well system is recommended to ensure contaminant boundaries.	Pumping, treating, and disposing of contaminated groundwater may be the only viable mitigation action to resolve adverse impacts and prevent further spread of radioactive contamination by diffusion. Re-establish models and/or wells. Increase monitoring to define impacts. New wells may be necessary if changes to the groundwater system occur.

Table 2-3
Uncertainty Matrix
(Page 2 of 3)

Surface and Subsurface Uncertainties and Response Actions						
	Expected Condition	Potential Deviation (Risk Scenario)	Likelihood of Deviation	Impact of Deviation	Monitoring and Management Strategy	Contingency
5	Radioactive water injected into the Aquifer 5 Disposal Well will continue to be held to the salt dome by up-gradient hydrostatic head pressure and aquifer confining layers.	Hydrostatic head pressure is reversed or breached sufficiently to alter existing conditions (e.g., due to pumping or injection in the proximity of the Salmon Site, or if the aquifer is breached due to well plug failure [see uncertainty #4 above]). Reverse flow or breach leads to the spread of contamination within the brackish water of Aquifer 5, or leads to the cross contamination of other aquifers.	Low to Very Low. Rationale: Non-potable water uses in the immediate vicinity of the Salmon Site are not likely, to the extent necessary to reverse the existing hydrostatic flow. Failure of disposal well plugs, to an extent that would cause cross-contamination to other aquifers, is not likely.	Medium to high depending on non-potable water use. Rationale: Non-potable water use could lead to extensive cleanup efforts if used for such things as dust suppression, which could also have negative health impacts. Non-potable water use in things such as drilling mud or cooling systems would likely lead to impacts to groundwater and the need to dispose, decontaminate, or replace contaminated equipment. Cross-contamination of aquifers would be the highest impact due to high costs associated with pumping, treating, and disposing of contaminated groundwater, and public perception issues. Health impacts from Aquifer 5 Disposal Well contamination would likely be low.	Continued long-term maintenance of monitoring well system to ensure contaminant boundaries. Monitor surrounding community non-potable water uses (through permit review, use and approval processes) for frequency or abundance changes. If use increases, or if a breach is suspected, either conduct more frequent monitoring well evaluations or conduct sampling of use ports.	If contamination is detected, contact local law officials for a halt to the adverse actions and propose alternative water sources. If contaminated non-potable water has already been used, immediately conduct equipment seizure actions, surface cleanup operations, and health evaluations, as necessary. Review other aquifers for potential impacts. If impacted, new models may need to be run and/or new monitoring wells would need to be developed.
Administrative Uncertainties and Response Actions						
1	Budget is maintained at levels sufficient to conduct all long-term activities as described in the Salmon Site LTS Plan.	Budget cuts result in reduced or suspended monitoring, inspection, and reporting activities.	Moderate. Rationale: Budget cuts are probably not likely in the near future. However, as time goes by and negative results prevail, interest and needs may change.	High. Rationale: Reduction or elimination of the early warning from periodic groundwater monitoring could lead to prolonged extensive radioactive contaminant consumption. Significant impact on health and perception.	Continue to fulfill budget request responsibilities. Emphasize State stakeholder and public official support. Maintain other controls (land use, institutional), as possible.	Petition Congress for restitution if funding should cease. Prepare a State-run contingency fund for emergency monitoring use. Take State legal action.
2	Records are maintained sufficiently for future use if access is required. Records include electronic and paper files, historical images, and various records in various locations (e.g., County Courthouse, DOE).	Needed records are not available or are not usable, eventually leading to a general loss of historical information, knowledge, and associated residual risks.	Low. Rationale: Formal control records are normally in non-electronic format which does not rely on advances in technology, but can be susceptible to physical damage (e.g., aging, fire, flood). Redundant copies of State and DOE records should ensure the continuous availability of records.	High. Rationale: Control over the site ceases to exist. Established institutional controls and use restrictions are forgotten. Eventual intrusion into contaminated areas would be inevitable. Intrusion would likely lead to adverse health and property impacts. Adverse impacts may not be immediately known. The longer the delay in discovering contamination, the wider the spread of contaminants and the more serious the health impact.	Maintain paper copies of formal records and critical data sources in multiple locations (DOE, State Office County Courthouse, etc.). Convert electronic files to new technology formats as they are installed. Include periodic record reviews at source storage areas.	Retrieve duplicate records at alternative source locations. Attempt to obtain previous electronic format technology to copy onto current format. Contact previous personnel knowledgeable about the site and residual contamination. Resample areas in question. Restart monitoring program (adapt as knowledge increases).

Table 2-3
Uncertainty Matrix
 (Page 3 of 3)

Surface and Subsurface Uncertainties and Response Actions						
	Expected Condition	Potential Deviation (Risk Scenario)	Likelihood of Deviation	Impact of Deviation	Monitoring and Management Strategy	Contingency
3	Institutional controls such as fences and signs will remain in place and legible to the end of the surface monitoring period. The SGZ monument will remain in its current state indefinitely.	Fences and signs are either torn down, stolen or otherwise vandalized; or are overgrown by native vegetation to an extent that causes non-functionality.	High. Rationale: No continuous on-site controls exist at the Salmon Site to monitor for, nor prohibit, vandalism. Local residents (e.g., hunters) may desire entry onto lands within the fenced area. The vegetation in the area of the Salmon Site is lush and dense, and the only normal clearing control is to maintain open access roads to the site.	Low. Rationale: A loss of the on-site institutional controls would not automatically result in the spread of contamination or adverse impact to human health. The loss of these controls would remove one layer of the barriers in place to preclude negative impacts from residual contamination at the site. Another potential adverse effect could be the public perception of an apparent lack of control by the managing agencies.	Perform cursory visual inspections during monitoring events to ensure the integrity of the on-site institutional controls. Conduct a thorough visual inspection of all institutional controls and determine repair or replacement needs during maintenance and clearing operations of the Salmon Site access roads. Identify methods and actions needed for repair/replacement work.	If controls require repair or replacement, let a contract for the necessary actions to re-establish damaged or lost controls. This could involve repair of chain-link fencing, creation of replacement signs, or procurement of services to repair or replace the SGZ monument (involves potential brass plate and granite work).

2.4 Long-Term Monitoring of Groundwater

The monitoring program outlined below will commence upon approval of this plan. The objectives of the long-term monitoring are: (1) to monitor the existing plumes; and (2) to monitor the test cavity for leakage. Monitoring of the shallow groundwater will continue on an annual basis for five years following the adoption of this plan. The sampling will include only those COCs and locations identified in Table 1-4. After the parameters are all below the regulatory limits, the frequency of the sampling will be reduced to once every five years. At the outset of this plan, the groundwater model developed for the Remedial Investigation will be reviewed and revised to incorporate data acquired between 2000 and 2004. The review will serve to determine if the model is still valid and to guide additional sampling events. At the conclusion of the first five years, the groundwater model will be again reviewed to determine if observed conditions are consistent with those predicted by the model.

After all the parameters are below the regulatory levels, three additional sampling events will be conducted for that particular well (these events may be on a five year frequency). If the results continue to be below the MCL, there is no further utility for the well(s), and with the concurrence of the stakeholders, no further sampling will be required. Once no further sampling is required, the well(s) will be plugged for abandonment at the next available opportunity.

A proposed schedule for the shallow groundwater monitoring portion of the LTS Plan is given in Table 2-4. The primary purposes of monitoring are to inspect plumes and to provide early detection at contaminant migration beyond the expected boundary.

The wells completed in the deeper aquifers (i.e., Local Aquifer; Aquifers 1, 2a, 2b, 3 and 4) will be sampled at five-year intervals. The wells will be sampled for radionuclides and chemical constituents of concern identified in this report.

As with the shallow aquifer, the groundwater model will be reviewed every five years to ensure that the observed conditions are consistent with the predicted conditions, that the model is still valid, and to ensure that the monitoring well network is still protective of human health and the environment.

A proposed schedule for the monitoring and evaluation of the deeper aquifers at the Salmon Site is given in Table 2-4. This table does not consider unusual, catastrophic, or special events.

**Table 2-4
Proposed Groundwater Sampling and Evaluation Schedule**

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 11	Year 16	Year 21	Year 27
Shallow Aquifer										
Sample for COCs	X	X	X	X	X	X	X	X	X	X
Revise Groundwater Model					X	X	X	X	X	X
Evaluate Condition of Wells	X					X	X	X	X	X
Replace Wells ^a						X ^b				X ^c
Deeper Aquifers										
Sample for COCs	X					X	X	X	X	X
Revise Groundwater Model					X	X	X	X	X	X
Evaluate Condition of Wells						X	X	X	X	X
Replace Wells						X ^b			X ^c	

^aWells will be replaced, as necessary, based on performance, not because they are 25 years old

^b1978 series (HM-S, HM-L, HM-2L, HM-1, HM-2a, HM-2b, HM-3, E-7)

^c1996/1997 series (SA2-1-L, SA2-2-L, SA2-4-L, SA1-8-L, SA1-11-3, SA3-11-3, SA5-4-4, SA5-5-4)

2.4.1 Decision Points Groundwater Sampling and Monitoring

Groundwater Sampling

1. If analytical results indicate that contaminant levels have attenuated to below the established MCL(s), then the results must be confirmed by three subsequent sampling events.
2. If there is no future utility for the monitoring points (wells), the wells will be plugged and abandoned.
3. If analytical results indicate an increase in contaminants, wells will be resampled to eliminate laboratory error, and discussion/negotiation with the State will be initiated to determine further action.

Groundwater Modeling

4. If the groundwater model review indicates that the existing model is still valid (i.e., agrees with observed conditions), continue monitoring program.
5. If the groundwater model review indicates that the existing model is no longer valid, the model needs to be revised and the monitoring program reviewed.
6. If the monitoring program review indicates that the monitoring well network is no longer adequate to monitor the groundwater, additional wells will need to be installed.

Monitoring Well Maintenance

7. If a monitoring well ceases to perform as designed or has reached the end of its service life, the well needs to be repaired or replaced.

2.5 Institutional and Physical Controls

Most institutional controls are legally binding provisions designed to provide assurance that land use will be compatible with long-term stewardship goals by limiting development and/or restricting access to a site or location within a site with residual contamination. Examples include governmental controls (such as State and Federal laws and local zoning ordinances) and proprietary controls, which allow property administrators to control the use of, or limit access to, their properties. Proprietary controls include:

- Advisories - warnings to public (not legally enforceable)
- Government Withdrawal - ensures that property and control remain with the Government
- Reversions - cause ownership to revert to the previous owner should land use differ from that stipulated in a deed
- Use Restrictions - warn future interested parties of the extent of remediation and any residual contamination that may remain in a property; use restrictions limit the use of a property
- Site Registries - identify and describe hazardous waste sites within a specific tract of land. Registries can be kept at local, State, or Federal levels and are reviewed during land transfer. The institutional controls for the Salmon Site will incorporate both surface institutional controls and site subsurface use restrictions. Implementation of these controls provides assurance of long-term land use that is compatible with the monitoring and maintenance activities developed for the site. Copies of all use restrictions pertaining to the Salmon Site will be maintained by MDEQ and/or MSDOH.

Physical controls limit access to constituents and exposure to hazards. Proper maintenance is required for these controls to be effective. Physical controls used at the Salmon Site include a clean fill cover over disposed mud; signs; protective casings, posts, and locking caps on monitoring structures; and erosion control features.

2.6 Information Systems

The information system developed for the Salmon Site stewardship program will provide present and future stakeholders with records of locations and characteristics of residual contamination.

Information provided includes both hard-copy documents and electronic database files. Documents related to activities at the Salmon Site may be found in Administrative Record and Public Reading Facility locations listed in Section 2.6.3. In addition, the long-term environmental monitoring report will be issued directly to interested stakeholders and posted on the NNSA/NSO website at <http://www.nv.doe.gov>. An internal management electronic database (i.e., EMIS) has been initiated by NNSA/NSO to aid staff and managers in the implementation of project activities, including long-term monitoring and stewardship. EMIS stewardship information is intended to be easily transferred to the site landlord (Office of Legacy Management) upon completion of the NNSA/NSO environmental management mission at the Salmon Site.

2.6.1 Development

As required under standard site closure procedures, administrative records have been developed and are available for the information relevant to the Salmon Site. These records provide a comprehensive, publicly available report on types of contaminants present and risk assessments. Each administrative record is officially closed upon issuance of the *Salmon Site Completion Report*. However, the compiled documentation remains available for public review at the public reading facilities. Documents maintained in the administrative record include:

- Investigation reports: present characterization data and list contaminants of concern
- Feasibility studies: evaluate potential corrective actions and associated risks
- Baseline risk assessments: evaluate potential human health and ecological impacts related to site conditions
- Supporting documents: special studies, data summaries, and periodic site environmental reports
- Decisions: designate the selected remedy and describe how the corrective action will be implemented

Documentation generated after the Completion Report is signed, will also be placed in the local repositories to ensure ongoing public accessibility to information about the site.

During planning for transition to OLM, NNSA/NSO will evaluate site-specific historical documentation and identify items pertinent to long-term monitoring and maintenance activities.

Copies of these documents will be submitted to the OLM. The electronic database files would undergo an evaluation, and relevant data files would be transmitted as well.

2.6.2 Maintenance

Stewardship information must be kept up to date and must be retrievable for the lifetime of the stewardship program. The DOE OLM is tasked with maintaining an archive and providing detailed information.

Currently, duplicate sets of approved documents are maintained in multiple locations. The administrative record for the Salmon Site related information is maintained by the NNSA/NSO contractors and is contained within database systems (such as EMIS). The OLM will follow DOE record policies regarding the future of the documents.

Duplicate copies of final approved documents are also sent to the DOE Office of Science and Technical Information Center located in Oak Ridge, Tennessee, and local repositories as indicated in Section 2.6.3.

2.6.3 Accessibility

Local repositories are designated for public access to the Salmon Site Surface final approved documents listed in Table I-1. These repositories are:

U.S. Department of Energy
National Nuclear Security Administration
Nevada Site Office
Public Reading Facility
c/o Nuclear Testing Archive
P.O. Box 98521, M/S 400
Las Vegas, NV 89193-8521

Purvis Public Library
145 Shelby Speights Road
Purvis, MS 39475

3.0 *Contacts*

3.1 *NNSA/NSO Contacts*

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3.2 *MDEQ Contacts*

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3.3 *MSDOH Contacts*

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Attachment A

Salmon Site Use Restriction Information

Subsurface use restrictions in the vicinity of the Salmon Site Test will remain in place in perpetuity. This restriction is described on the permanent monument located at the surface group zero on the site. The restriction is as follows:

“No excavation, drilling, and/or removal of materials is permitted without U.S. Government permission to penetrate below Mean Sea Level on the 1470 acre tract situated within Sections 11, 12, 13, and 14, T2N, R16W, ST. Meridian, Mississippi.”

Permanent recordation of surface and subsurface use restrictions in the Master Title Plat for the land encompassing the Salmon Site have not been finalized. Final use restrictions will be determined and recorded by the DOE Office of Legacy Management with concurrence from the State of Mississippi.

Attachment B

**List of Salmon Site Reports
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RI/FS Background	Book 4
RI/FS Background	Book 5
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Forward - Guidance for Using the Tatum Dome Test Site Remedial Investigation/Feasibility Study Work Plan.....	RF6
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Appendix F

State Comment/DOE Response Form

(6 Pages)

NEVADA ENVIRONMENTAL RESTORATION PROJECT DOCUMENT REVIEW SHEET

1. Document Title/Number: Salmon Site Completion Report and Long-term Stewardship Plan, US DOE			2. Document Date: April 2004	
3. Revision Number: 0			4. Originator/Organization: IT/SNJV	
5. Responsible NNSA/NSO ERP Subproject Mgr.: John Jones/Pete Sanders			6. Date Comments Due: Comments Received 5/5/2005	
7. Review Criteria:				
8. Reviewer/Organization/Phone No.: Bob Merrill, State of Mississippi; Mississippi Department of Environmental Quality			9. Reviewer's Signature:	
10. Comment Number/ Location	11. Type^a	12. Comment/Rationale	13. Comment Response	14. Accept
1 Appendix E, Page 15, Paragraph 3		The test states that "environmental media meet the clean up criteria agreed to with the state agencies; therefore, the end state for the Salmon Site has been reached". This statement needs qualification because: - A: contamination remains in groundwater and soil above MCLs and health screening levels although the mechanism and documentation for site access and land use restriction has not been finalized, and - B: debris exposed to washing and channeling of overburden has been observed on site (e.g., Reeco Pits).	The cited text states " ...environmental media meet the clean-up criteria agreed to with the State Agencies, therefore, the end state for the Salmon site surface (emphasis added) has been reached. Changed text to read "...surface soils meet the clean-up" A: Agree that contamination remains in groundwater above MCLs. B: In 2002, exposed debris was removed from a drainage channel in Source Area 2 (REECO Pits area) (See Section 7.0 of the Completion Report). Inspection of the Reeco pits during the 2004 sampling did not reveal debris or waste exposed. The Reeco pits are re-vegetated naturally.	

^aComment Types: M = Mandatory, S = Suggested.

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1 General		The entire site needs to be inspected and evaluated by all pertinent entities in a partnering effort to identify potentially problematic areas. Areas containing buried waste and debris that are prone to washing need to be stabilized by grading and planting of vegetative cover. "All such areas need to be characterized and accurately located so that they can be evaluated during future inspections.	DOE/NSO would welcome a joint inspection of the property. However, note that as described in Section 7 of the completion report, construction debris has been removed and drainage ditches have been re-sloped and stabilized. A history of site characterization and remediation activities has been compiled and is included as Table 1-1 of the LTSP. Periodic site inspections of the REECO Pits area is covered on page 17 of the LTSMP.	
2 Appendix E Page 20, Paragraph 3		Text discussions (beginning on <i>Appendix E</i>, page 20, paragraph 3) concerning identification of state agencies as stewards and associated responsibilities need further evaluation, as these elements of closure have not been formally evaluated and accepted by OPC.	The paragraph on page 20 lists stakeholders, and refers to Section 2.0 for information on the stewards for the Salmon Site and their respective responsibilities. For the definition of stewards and their responsibilities, see section 2.2 and Table 2-1. Note there were no comments on this section or Table 2-1. All the discussions regarding all the different state agencies as stakeholders, with the exception of MDEQ and MSDOH has been removed.	

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2 Second part (Comment is on Appendix E)		The statement that the "future use of the Salmon Site as outlined in Public Law 104-201 (PL, 1997) is as a wildlife refuge area and working demonstration forest" needs clarification. Demonstration is needed concerning acceptance by pertinent legal and regulatory entities of the state of Mississippi concerning land ownership transfer and acceptance of land use and applicable restrictions. Such agreements should be concluded in a partnering effort among all pertinent state and federal entities. This has not occurred.	The wording in the document acknowledges that the law exists and that some time in the future the conveyance could occur and that DOE will work with the appropriate state agencies when the time comes. The Completion Report does not define who will control the site, although it lists MDEQ, and MSDOH as stakeholders.	
3 Appendix E Page 35 (Paragraph 1)		Page 35 (paragraph 1) of Appendix E states that sampling will include only the contaminants of concern (COC)s and locations shown on table 1-4 (page 14). Metals are listed as COCs in groundwater of operable units (OUs) 1 and 3 of Source Area (SA) 1, OU 1 and 2 of SA2, and OU 2 of SA 4 on Table 1-3 (page 14) but only chromium for well HM3 is listed for sampling on Table 1-4. According to Table 6-1 (page 6-2) mercury exceeded the MCL at a concentration of 11.0 ppb in MW SA 1-7-H. According to Table 6-4 (page 6-5) chromium and lead exceeded MCLs with reported concentrations of 130.0 ppb and 24.0 ppb in wells HM3 and SA4-5-L respectively. Sampling for RCRA metals should be planned and reflected on Table 1-4.	Agreed: The metals analysis performed for the last 3 years have included RCRA metals (silver, arsenic, barium, cadmium, chromium, mercury and selenium) plus beryllium, nickel, antimony, and zinc. The table will be modified to rename the Chromium column to a "Metals" column, and a footnote will be added stating what metals this analysis covers. The mercury reported in Table 6-1 of the Completion Report was an un-validated value. The validation process resulted in both a U and a J qualifier for that value. (See attached table). The value in Table 6-1 will be corrected and the qualifiers shown. Also provided in the table are all the detected values for SA1-7-H metals from 2002 through 2005. Therefore SA1-7-H will not be required to have RCRA metals as a sampling parameter. HM-3 continues to contain barium and chromium at detectable levels (see attached	

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			table.) It has been retained as a well to be sampled for Metals in Table 1-4. SA4-5-L data is also reported in the attached table. Note that with the exception of the chromium and lead levels in the 2002 data this well has not exceeded an MCL. DOE does not see the need to continue sampling this well for metals.	
4 Appendix E General Pages 14 and 19		Clarification is needed concerning the use of operable units (OUs) and pertinent aquifers. For example, the "Local Aquifer" is included with OU 1 and OU 3 on Table 1-3 (page 14) although the text (page 19, paragraph 4) description places the Local Aquifer in OU 2.	Agreed that there is confusion between OUs, 1 and 2, which are defined as surface soil and shallow aquifer (OU-1) and intermediate aquifers and Test Cavity (OU-2), and Source Areas, which are defined as specific areas on the land surface. Table 1-3 indicates that wells for both Source Areas 2 and 4 contain contaminants within the local aquifer. OUs are not mentioned in Table 1-3 to avoid this confusion.	
5 Appendix E Page 19		Clarification is needed in the text discussion (page 19, last paragraph) of contaminant migration and the monitoring associated with injection well HT-2M (monitor wells screened in Aquifer 4) for potential leakage from Aquifer 5 (e.g., Leakage of what).	Aquifer 5 has been used for injection of oil and gas waste. The text will be clarified to discuss what would be expected if leakage between aquifers occurs. The following will be inserted: "...where radioactive material was injected. This injected material did include 3,253 curies of tritium and 38 curies of beta and gamma activities. If leakage from Aquifer 5 were to occur, the best indicators would be tritium. The tritium level in both wells (SA5-4-4 and SA5-4-5) has been well below drinking water standards since the wells were rehabilitated."	
6 Table 6-4		The MCL of 5 ppb for naphthalene in Table 6-4 should be removed.	Agree.	

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7 General		A separate, detailed Long Term Groundwater Monitoring Plan should be submitted indicating relevant sampling methods and protocols. The one supplied in this document is very general and brief.	The groundwater monitoring described in this plan is based on conversations with the agencies. A more detailed Long Term Groundwater Monitoring plan will be developed as part of the Long Term Stewardship and Monitoring Plan (LTSMP) for the site. The LTSMP will be developed by the DOE Office of Legacy Management.	
8 General		The actual remedial alternative planned for the Salmon Site is unclear, although natural attenuation of groundwater is strongly implied in text discussions (only monitoring of groundwater is mentioned). If natural attenuation is the intended remedial action, then protocol for monitored natural attenuation should be followed and all associated parameters should be evaluated according to guidance.	The surface of the Salmon Site has been remediated by various activities described in the Completion Report. The remediation of the subsurface will consist of institutional controls with monitoring.	

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Table showing metals data from 2002-2005 for Wells SA1-7-H, HM-3, and SA4-5-L.

Well Number	Parameter	2002	2003	2004	2005	Units	MCL
SA1-7-H	Mercury	0.000011 UJ	ND	ND	ND	mg/l	0.0020
	Arsenic	0.0200	0.0210	ND	ND	mg/l	1.0000*
	Barium	0.3900	0.1600	0.1900	0.1720	mg/l	2.0000
HM-3	Barium	0.2800	0.2800	0.2800	ND	mg/l	2.0000
	Chromium	0.1100	0.1300	0.1300	ND	mg/l	0.1000
SA4-5-L	Barium	0.2600	0.1100	0.0120	0.8360	mg/l	2.0000
	Chromium	0.1600	ND	ND	0.0209	mg/l	0.1000
	Lead	0.0240	ND	ND	ND	mg/l	0.0150+
	Zinc	ND	ND	ND	0.2410	mg/l	5.0000

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Plate

Plates are not available in electronic format.

Please e-mail lm.records@lm.doe.gov to request the appendix.