GW - 114

WORK PLANS

7/95 INVESTIGATION

QUARTERLY REPORT
FOR
ADDITIONAL INVESTIGATION
AND REMEDIATION
DOWELL SCHLUMBERGER
ARTESIA, NEW MEXICO

July 13, 1995

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1.0 INTRODUCTION

1.0 INTRODUCTION

This report documents recent investigation and remediation activities at the Artesia, New Mexico oilfield service facility owned by Dowell Schlumberger (Dowell). This facility is located at 500 East Richey Avenue and has been in operation since 1969. Environmental investigations and remediation have been on-going at this facility since 1989, and have consisted of tank removals, soil vapor surveys, ground-water monitoring well installation, installation and operation of two soil vapor extraction (SVE) systems, and quarterly ground-water sampling since installation of the SVE systems.

1.1 Scope of Work

A number of activities at the Artesia facility are included in this document. Investigative activities include drilling and installation of six new off-site ground-water monitoring wells, and quarterly ground-water sampling from all new and existing monitoring wells. Remediation activities include operation and maintenance of the two existing SVE systems, and expansion of the wash bay SVE system off-site immediately north of the fence in the northeast corner of the property.

1.2 Authorization

Currently, environmental activities at the facility are supervised by two bureaus of the New Mexico Environment Department (NMED). The Underground Storage Tank Bureau initiated NMED's involvement at the facility during the removal of underground storage tanks in 1989 and subsequent investigation and remediation. Ground-water monitoring of pre-1995 site wells, and operation of the pre-1995 SVE systems continue under the Underground Storage Tank Bureau. Off-site installation and sampling of ground-water monitoring wells, off-site expansion of the wash bay SVE system, and the well survey are conducted at the request of the NMED Groundwater Protection and Remediation Bureau (reference February 16, 1995 letter from the Groundwater Protection and Remediation Bureau). To minimize duplicity of reporting, reports of site activities are copied to both bureaus.

1.3 Purpose of Additional Investigation and Remediation

Additional downgradient and grouped ground-water monitoring wells were installed at the request of the Groundwater Protection and Remediation Bureau to define the lateral and vertical extent of ground-water contamination at the facility. Two wells were located northeast of existing off-site wells to evaluate the downgradient extent of hydrocarbon contamination. The purpose of the grouped wells was to determine the vertical extent and distribution of ground-water contamination. The washbay SVE system was expanded to address an area of subsurface soil contamination north of the former wastewater tanks in the northeast corner of the property.

2.0 GEOLOGY AND HYDROGEOLOGY

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Artesia lies within the Roswell ground-water basin that extends from approximately 20 miles north of Roswell south to the Seven Rivers area between Artesia and Carlsbad. The eastern edge of the basin lies just east of the Pecos River and the western edge is some 20 miles west of Artesia. The principal formations in the Roswell ground-water basin near Artesia are the eastward-dipping rocks of the Permian San Andres Limestone and the younger Artesia Group, and the overlying Quaternary valley fill alluvium. The stratigraphy in the Artesia area and the geology of these formations are described on Figure 2-1. Erosional surfaces which have affected the permeability of the subjacent rocks are present between the San Andres and the basal Artesia Group (Grayburg Formation), and between the Artesia Group and the alluvium. Numerous closed depressions resulting from solution collapse are present in the erosional surface at the contact between the Artesia Group and the alluvium. One such large depression is located within 1 mile southeast of the Dowell facility (Lyford, 1973).

The Roswell ground-water basin is characterized by two aquifers separated by a leaky confining layer. The lower aquifer, termed the "artesian aquifer" by the New Mexico State Engineer's Office, is developed primarily in the Permian San Andres Limestone. The upper aquifer, similarly termed the "shallow aquifer", is present in the Quaternary alluvium, primarily in the quartzose unit (Figure 2-1). Water-bearing zones are present in the carbonate gravel unit, but production is limited. The aquifers are separated by a leaky confining layer comprised of less permeable intervals within the lower three formations of the Artesia Group (Grayburg, Queen, and Seven Rivers Formations).

Transmissivities in the 2 aquifers vary considerably due to the erratic occurrence of sand and gravel water-producing zones in the shallow aquifer (Hendrickson and Jones, 1952) and to irregular occurrence of fracture and solution permeability in the artesian aquifer. Transmissivities in the artesian aquifer range from 7500 to 196,000 feet^2/day and in the shallow aquifer from 4200 to 186,000 feet^2/day (Welder, 1983).

AGE/FORMATION		STRATIGRAPHY	THICKNESS (ARTESIA AREA)	LITHOLOGY	AQUIFER	HYDROLOGY
QUATERNARY ALLUVIAL VALLEY FILL	CARBONATE GRAVEL UNIT		TOTAL: 190–300 FT.	CAPPED BY TERRACE DEPOSITS LESS THAN 20 FT. THICK. (CLAY, SILT, SAND, W/ SOME CALICHE AND GRAVEL.) COARSE CARBONATE GRAVEL ALONG MAJOR TRIBUTARIES TO PECOS RIVER. BROWN TO RED CALCAREOUS SILT AND CLAY WITH ABUNDANT "THICK" BEDS OF CALICHE IN INTERSTREAM AREAS. MINOR AMOUNTS OF QUARTZOSE SAND AND GRAVEL PRESENT.	SHALLOW AQUIFER	CONTAINS SOME WATER–BEARING ZONES
	CLAY UNIT			LIGHT TO MEDIUM GREY SILT AND CLAY. MAY CONTAIN GASTROPOD AND PELECYPOD FOSSILS. MAY CONTAIN DARK ORGANIC MATTER. DISCONTINUOUS, PROBABLY LOCALIZED POND/LAKE DEPOSITS WITH COLLAPSED AREAS.		
	QUARTZOSE UNIT			RED QUARTZOSE SAND AND GRAVEL WITH LAYERS OF CLAY AND SILT. GRAIN SIZES IN SAND AND GRAVEL ARE MEDIUM–GRAINED SAND (0.25 mm) TO PEBBLE (16 mm). VARIABLY CEMENTED WITH CALCIUM CARBONATE. CONSIDERABLE SLUMPING AND DEFORMATION DUE TO SOLUTION/COLLAPSE OF UNDERLAYING PERMIAN ROCKS.		MAIN WATER–PRODUCING ZONE OF THE SHALLOW AQUIFER.
PERMIAN ARTESIA GROUP (LOWER 3 FORMATIONS)	SEVEN RIVERS FORMATION		TOTAL: 600–700 FT.	EXTENSIVELY THINNED BY EROSION, SOLUTION OF EVAPORITES, AND SUBSEQUENT COLLAPSE OF SANDSTONES AND MUDSTONES. ANHYDRITE, GYPSUM, AND RED MUDSTONE WITH INTERBEDDED LIMESTONE AND DOLOMITE. EROSIONAL CONTACT WITH OVERLAYING QUATERNARY ALLUVIUM.	LEAKY CONFINING LAYER	MAIN TYPES OF PERMEABILITY ARE COLLAPSE FRACTURES, SOLUTION–ENHANCED FRACTURES AND BEDDING PLANES, AND SOLUTION CAVITIES. ERRATICALLY AND IRREGULARLY DEVELOPED.
	QUEEN FORMATION			THINLY BEDDED FINE–GRAINED SANDSTONE AND MUDSTONE WITH INTERBEDDED LIMESTONE AND GYPSUM.		MAY PRODUCE SOME GROUND WATER.
	GRAYBURG FORMATION			THINLY BEDDED RED MUDSTONES AND SANDSTONES WITH SOME GYPSUM. OVERLIES BASAL LIMESTONE LAYER.		BASAL LIMESTONE IS AN IMPORTANT SOURCE OF GROUND WATER.
PERMIAN SAN ANDRES LIMESTONE	LIMESTONE		≈ 1000 FT.	LIMESTONE AND DOLOMITE. INCREASINGLY EVAPORITIC TOWARDS TOP OF FORMATION. EROSIONAL CONTACT WITH OVERLYING PERMIAN ARTESIA GROUP.	ARTESIAN AQUIFER	OLDEST FORMATION TO PROVIDE GROUND WATER TO WELLS IN EDDY COUNTY. MAIN FORMATION COMPRISING THE ARTESIAN AQUIFER. SOLUTION CAVITIES TO 2 FT. IN DIAMETER.
	BASAL SAND–STONE		≈ 100 FT.	SANDSTONE		DOES NOT PROVIDE WATER TO WELLS IN EDDY COUNTY.

EXPLANATION

- EROSIONAL CONTACT (UNCONFORMITY)
- SANDSTONE, SAND
- MUDSTONE, CLAY
- LIMESTONE/DOLOMITE/ CALICHE (IN ALLUVIUM)
- EVAPORITE (GYPSUM, ANHYDRITE)

SOURCES: HENDRICKSON AND JONES (1953)
KELLY (1971)
LYFORD (1973)
WELDER (1983)

NOT TO SCALE

FIGURE 2–1

SUMMARY OF GEOLOGY & HYDROLOGY

DOWELL SCHLUMBERGER
ARTESIA, NEW MEXICO

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The water quality from the deeper (quartzose) zones in the shallow aquifer and from the artesian aquifer is fair to good, and most wells are suitable for domestic, stock, and irrigation use (Hendrickson and Jones, 1952).

2.1 Artesian Aquifer

The artesian aquifer comprises as many as five different water-bearing zones within the San Andres Limestone and the lower part of the Artesia Group. The thickness of the aquifer ranges from 260 to 460 feet. Individual water-bearing zones are usually less than 50 feet thick. The main interval of water production rises stratigraphically from the middle of the San Andres Limestone at the north end of the Roswell ground-water basin, to the top of the San Andres at the midpoint near Artesia, then into the Grayburg and Queen Formations at the south end of the basin (Welder, 1983). Because ground water in the artesian aquifer moves principally through cavities and fractures, the yields of adjacent wells may differ greatly (Hendrickson and Jones, 1952) and it is difficult to correlate specific producing intervals between wells (Welder, 1983).

2.2 Leaky Confining Layer

The mudstones of the lower part of the Artesia Group (Grayburg, Queen, and Seven Rivers Formations) form a leaky confining layer between the artesian and the shallow aquifers (Hendrickson and Jones, 1952). Movement of ground water is typically from the artesian to the shallow aquifer, although Welder (1983) postulates that reversal in flow direction might occur during periods of very heavy pumpage of the artesian aquifer. Hantush (1957) estimated that the net rate of upward leakage through the confining layer for the Roswell ground-water basin in January 1954 was 12,400 acre-feet/month (Welder, 1983).

These rocks are slightly to moderately permeable and vary greatly in thickness due to solution/collapse and to erosion. Individual water-bearing zones within the confining layer do not appear to be laterally extensive. Some wells in the Roswell ground-water basin are completed solely in water-bearing zones within the confining layer, and produce as much as 10% of the total amount of ground water used in the basin (Welder, 1983).

2.3 Shallow Aquifer

The shallow aquifer is developed primarily in the Quaternary alluvial valley fill, but may also include saturated intervals in the uppermost part of the Permian sequence beneath the valley fill. The maximum saturated thickness of the aquifer is approximately 250 feet in a closed depression immediately southeast of Artesia (Lyford, 1973). There are 1 to 5 water-producing zones within the alluvium, the majority in the basal quartzose unit. The water-producing zones are typically sand and gravel, and are separated from adjacent zones by less permeable silt and clay. Most zones are less than 20 feet thick (Welder, 1983).

The shallow aquifer is under water table conditions. The general ground-water flow direction is to the east and then to the southeast in the vicinity of the Pecos River. However, heavy pumping from the shallow aquifer has produced a trough-like ground-water depression in the Artesia area. This has caused substantial local changes in the ground-water flow direction. Heads in the shallow aquifer have declined as much as 90 feet from pumping around Artesia. The main recharge to the shallow aquifer is from upward leakage of water from the artesian aquifer through the leaky confining layer (Welder, 1983).

Average pump rates for wells in the main producing zones of the shallow aquifer are 325 to 700 gallons per minute (gpm). High yield wells produce as much as 2200 gpm. One third or more of the high-yield alluvium is underlain by saturated zones in the Permian Artesia Group sediments (Welder, 1983).

2.4 Site Geology and Hydrogeology

Prior to the additional drilling in March 1995, described in Chapter 4, the deepest well drilled at the facility was 50 feet. The additional drilling has extended maximum depth drilled to 68 feet. All sediments to the maximum depth drilled at the facility are in the carbonate gravel unit. The quartzose unit has not been encountered at the site. If terrace deposits are present at the surface, they are not distinguishable from the alluvial sediments.

The sediments beneath the facility consist of red silt, silty clay, and clay interbedded with thin (2-4 inch) white or pinkish-cream carbonate or caliche layers. Zones where

carbonate/caliche layers are common may be identified from drill cores, but individual carbonate/caliche layers are difficult to trace laterally between even closely-spaced ground-water monitoring wells.

The water-bearing zones in this interval are the carbonate/caliche layers in which the permeability apparently has been enhanced by solution of carbonate minerals. Below the water table, many (but not all) of the carbonate/caliche layers are saturated, whereas the clays and silts appear only damp to moist. Zones of unsaturated (dry) carbonate/caliche below the water table are present irregularly. Carbonate/caliche zones above and below these dry zones are saturated.

The ground-water flow direction has been consistently to the northeast during the 5 years that ground-water monitoring has been conducted at the facility. This direction is 45 to 90 degrees away from the general east to southeast flow directions cited by local authorities, probably due to documented heavy pumping of the shallow.

3.0 WATER WELL SURVEY

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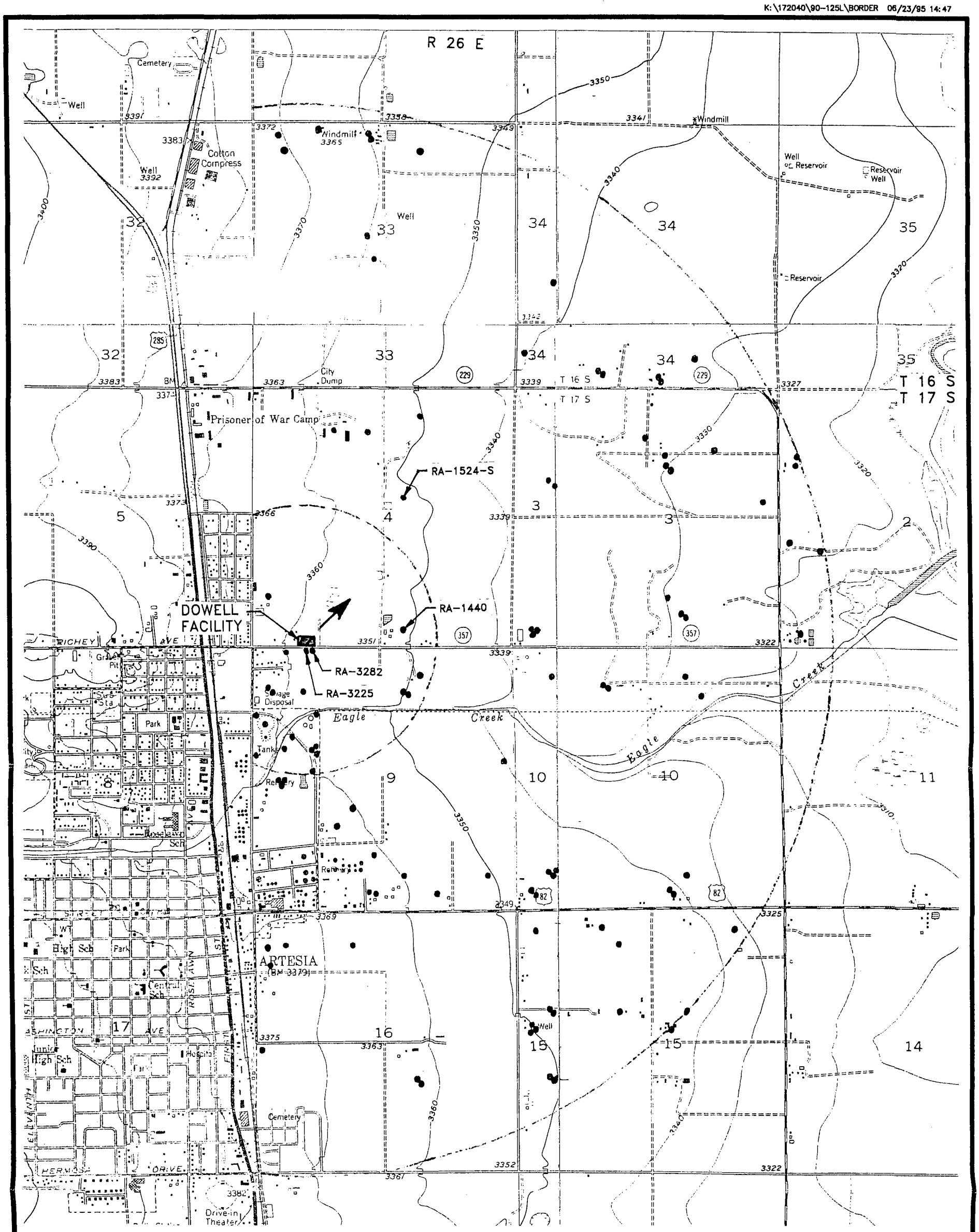
The NMED Groundwater Protection and Remediation Bureau requested that a well survey be conducted within a 2-mile radius downgradient of the facility (letter dated September 8, 1994). For purposes of this survey, the downgradient direction of ground-water flow from the facility was conservatively estimated to be a 180 degree half-circle from north to southeast of the site. This accounts for potential variations in the flow direction with the development of the pumping-induced ground-water trough present in the Artesia area.

3.1 Survey Methods

The Roswell office of the New Mexico State Engineer's Office provided all well logs used in this survey. The downgradient areas for which well logs were requested included Township 16S, Range 26E (New Mexico Principal Meridian), Sections 33 and 34, and Township 17S, Range 26E, Sections 2 (west half), 3, 4, 9, 10, 11 (west half), 15 (west half, northeast quarter), and 16. Information obtained from the well logs included location, total depth, screened interval, aquifer (shallow or artesian), depth to ground water, general lithology/stratigraphy, and water use. Pertinent information extracted from the well logs is contained in a summary table in Appendix A. The general locations of the wells are shown on Figure 3-1, with a description of the system of well location designators used in New Mexico. Information on ground-water usage was also obtained from published literature on the Roswell ground-water basin.

3.2 Results and Discussion

Since the first artesian ground-water well was drilled in the Roswell ground-water basin in 1891, there has been increasingly heavy use of the ground water from both the alluvial and artesian aquifers. By 1978, excluding domestic and stock wells, approximately 1500 active irrigation, commercial, industrial and public-supply wells were in existence in the basin. The principal means of discharge from both aquifers is currently through pumping from wells. For



EXPLANATION

- 2 MILE RADIUS DOWNGRADIENT OF DOWELL FACILITY
- 1/2 MILE RADIUS DOWNGRADIENT OF DOWELL FACILITY
- DOWELL FACILITY
- ARTESIAN WELL
- ALLUVIAL WELL
- GROUND-WATER FLOW DIRECTION AT DOWELL FACILITY
- NEW MEXICO STATE ENGINEER'S WELL LOCATION DESIGNATORS:

17 . 26 . 4 . 334

TOWNSHIP	RANGE	SECTION	QUARTER SECTIONS (LARGE→SMALL)
17 S	26 E	4	NW (1), NE (2), SW (3), SE (4)

0 2000 FT.
SCALE

FIGURE 3-1

LOCATIONS OF PERMITTED GROUND-WATER WELLS

DOWELL SCHUMBERGER
ARTESIA, NEW MEXICO

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example, during a year-long period from November 1987 to October 1978, a total of 377,851 acre-feet of water were used in the basin. Of this amount, 64% came from the artesian aquifer, 32% from the shallow aquifer, and 4% from surface sources. The vast majority (95%) of the water was used for irrigation, with 4% used for municipal and 1% for industrial and commercial purposes (Welder, 1983).

Approximately 139 ground-water wells were identified within the 2-mile radius downgradient from the facility. There are 32 permitted wells completed in the artesian aquifer and 107 wells in the alluvial aquifer. Excluding 35 shallow monitoring wells associated with the Dowell facility and the Navajo Refinery, total depths of the alluvial wells range from 55 to 326 feet below surface. Three quarters of the shallow aquifer wells are completed in the interval from 100 to 260 feet below surface. The majority of the water produced from the shallow aquifer comes from the quartzose sand and conglomerate at the base of the alluvial section. Water from some of the wells less than 100 feet deep may come from the carbonate unit of the alluvium, although it is often difficult to distinguish the carbonate from the quartzose unit from well log descriptions. Total depths of the artesian wells range from 821 to 1310 feet below surface. The closest well directly northeast of the facility (RA-1524-S; 17.26.4.233) is approximately 5/8-mile away. This well was installed in 1907 to a depth of 100 feet below surface. The water use was not specified on the well log. Water-bearing zones were documented from 35 to 40 feet and from 85 to 98 feet below surface, but the perforated interval was not specified on the well log.

Excluding Dowell's monitoring wells, there are only 11 wells located within the 180 degree 1/2-mile radius downgradient from the facility. Of these wells, 7 are completed in the shallow aquifer at total depths ranging from 100 to 320 feet below surface. The remaining 4 wells are completed in the artesian aquifer at total depths ranging from 971 to 1205 feet below surface. None of these wells is located directly downgradient (northeast) of the facility, however 3 wells, one to the east and two to the southeast, are noteworthy because of their locations (Figure 3-1).

The east well (RA-1440; 17.26.4.430), used for irrigation, was drilled in 1959 into the shallow aquifer at a total depth of 295 feet and was cleaned out and re-lined in 1960. Water-producing zones were reported from 188 to 210 feet and from 215 to 220 feet below surface.

The screened interval begins at 113 feet and presumably continues to 295 feet. Reported water levels in this well were 20 feet below surface in 1959 and 40 feet in 1960.

The southeast wells (RA-3225 and RA-3282; 17.26.9.122) have no use specified on the well logs, but reportedly are located at two residences on the south side of Richey Avenue immediately southeast of the site. These wells are cross-gradient from the facility. Both wells were installed in 1954. RA-3225 was drilled to a depth of 100 feet with the perforated interval from 65 to 94 feet. Water-bearing zones were present from 65 to 70 feet and 80 to 94 feet, and the water level in the well upon completion was 25 feet. RA-3282 was drilled to a depth of 125 feet with the perforated interval from 105 to 125 feet. Water-bearing zones were present from 80 to 92 feet and 105 to 123 feet, and the water level in the well upon completion was 60 feet.

3.3 Water Usage

Water usage for the permitted ground-water wells was determined from the State Engineer's well records. No field check has been made to verify the current status of the wells. Of the 107 shallow aquifer wells, 28 had no use specified, 28 were listed as domestic, 6 as domestic/stock, 6 as irrigation, 3 as stock, 1 as commercial, and 35 as monitoring wells. For the 32 artesian wells, 27 had no use specified, 4 were listed as irrigation, and 1 as domestic.

4.0 MONITORING WELL INSTALLATION

4.0 MONITORING WELL INSTALLATION

On March 27 through April 1, 1995, six additional ground-water monitoring wells were installed downgradient of the facility. These included two wells downgradient from the northeasternmost existing wells, and four grouped wells located approximately 36 feet east of MW-12 (Figure 4-1). Prior to installation of new wells, a pilot hole was drilled 82 feet east of the grouped wells to define the stratigraphy and locate the discrete zones to be screened by the grouped wells. The approximate locations of all ground-water monitoring wells were determined jointly by the Groundwater Protection and Remediation Bureau and Dowell.

All new wells and the pilot hole are located on platted and dedicated Eddy County rights of way. Prior to field work, the Eddy County Special Services Supervisor was contacted to obtain permission to drill in these areas. Additionally, a New Mexico licensed land surveyor marked the locations of the rights-of-way, and utility company representatives located all underground utilities. The right-of-way map generated by the surveyor is contained in Appendix B.

4.1 Drilling and Well Completion

All monitoring wells and the pilot hole were drilled with an air rotary drilling rig using a 5-inch drag bit and were continuously cored using 2-foot split spoon samplers. The cores were logged by a professional geologist for sediment type, approximate grain size and sorting, color, structure, moisture, and hydrocarbon contamination. The presence or absence of hydrocarbon contamination was determined by visual and olfactory inspection of the cored sediments and by screening the cores with an Environmental Instruments 580D photoionization detector (PID) during logging. Geologic logs for the pilot hole and the new wells are presented in Appendix C.

To eliminate the potential for cross-contamination between wells, drilling equipment was decontaminated prior to beginning each well borehole. Decontamination occurred in the wash bay located in the northeast corner of the facility and consisted of a hot water spray wash.

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50 FT. WIDE PLATTED COUNTY RIGHT-OF-WAY

SOUTHEAST READY MIX

MW-10

MW-8

MW-18

MW-7

MW-11

60 FT. WIDE PLATTED COUNTY RIGHT-OF-WAY

MW-19

50 FT. WIDE PLATTED COUNTY RIGHT-OF-WAY

CITY WATER LINE

GAS LINE

COMPRESSOR

MW-9

MW-12

MW-17C

MW-17B

MW-17A/D

PILOT HOLE

WASTEWATER TANK

FRAC SAND SILOS

BULK CEMENT

CEMENT WARE-HOUSE

CONCRETE PAD

WELL EQUIPMENT STORAGE

FORMER ACID PLANT

CHEMICAL WARE-HOUSE

ACID LOADING SLAB

MW-15

FORMER SUMP

DRUM STORAGE

SEPARATOR

MW-3

WASH BAY

WASH BAY SVE SYSTEM

MW-6

DOWELL SCHLUMBERGER FACILITY

MW-13

MW-14

GRAVEL PARKING AREA

ABOVE GROUND OIL STORAGE

FORMER FUEL USTs

MW-5

MAINTENANCE SHOP SVE SYSTEM

MW-1

BM

MW-16

MAINTENANCE SHOP

MW-2

FORMER FUEL ISLAND

MW-4

OFFICE

GRAVEL PARKING AREA

SEPTIC TANKS

GATE

GATE

RICHEY AVENUE

SOUTHEAST READY MIX

0 60 FT.

SCALE

BASE MAP MODIFIED FROM REED & ASSOCIATES

EXPLANATION

MW-14	WWC MONITORING WELL LOCATION AND IDENTIFICATION
MW-6	REED AND ASSOCIATES MONITORING WELL LOCATION AND IDENTIFICATION
BM	BENCHMARK – ARBITRARY ELEVATION = 100.00 FT.
-------	AIR PIPING
•	SVE EXTRACTION WELL

FIGURE 4-1

MONITORING WELL LOCATIONS

DOWELL SCHLUMBERGER
ARTESIA, NEW MEXICO

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After completion of drilling and geologic logging, the pilot hole was backfilled with 3/8-inch chipped bentonite. The bentonite was allowed to hydrate in place from natural ground-water.

4.1.1 Completion of Downgradient Wells

The two downgradient wells, MW-18 and MW-19, were completed to total depths of 28 feet below surface. Before installation of the monitoring wells, the borehole was reamed out using a 6.75-inch drag bit. Casing consisting of ten feet of 2-inch threaded Schedule 40 PVC screen (0.020-inch factory slots) and 20 feet of blank was placed in each borehole. A filter pack of 12/20-mesh silica sand was emplaced around the screen and extended to 2 feet above the top of the screen. A 3-foot thick seal of 3/8-inch chipped bentonite was emplaced immediately above the sand and was hydrated in place. The remainder of the borehole annulus to 5 feet below surface was filled with cuttings. A second bentonite seal was set from 4 to 5 feet below surface, and an above-ground steel well protector was cemented in place at the surface. Details of well completion are illustrated on the well logs in Appendix C.

4.1.2 Completion of the Grouped Wells

The grouped wells were designed to monitor water levels and quality in discrete saturated carbonate/caliche zones (called "rubble zones" in previous reports, based on their appearance in cores). The objective of monitoring discrete zones was to determine whether the tight and unsaturated clays and silty clays separating these carbonate/caliche zones acted as barriers to water and hydrocarbon contaminant migration between the carbonate/caliche zones.

To prevent contamination from shallow carbonate/caliche intervals from contacting deeper carbonate/caliche zones during drilling and to ensure isolation of deeper ground-water zones through the well annulus, the two deeper wells (MW-17C and MW-17B) were cased from the surface to immediately above the interval to be screened. The surface casing consisted of threaded 6-inch diameter Schedule 40 PVC blank pipe. To set the surface casing, the initial 5-inch borehole was reamed out using a 10-inch tri-cone bit and approximately 1 foot of bentonite chips were poured into the bottom of the borehole. The PVC casing was lowered into the hole and the base of the casing was pushed gently into the bentonite and a short distance into the

natural clay at the bottom of the borehole using the kelley of the drill rig. The surface casing was sealed in place by cement grout tremied into the bottom of the borehole annulus. The cement was allowed to harden for at least 24 hours before further drilling occurred.

Before drilling below the base of the surface casing, any water remaining inside the casing was air-lifted out. A 5-inch diameter drag bit was used to drill the borehole below the surface casing. Examination of the cores and estimation of amount of water production were used to determine the interval to be screened. The screened interval in MW-17C was from 51 to 61 feet, and in MW-17B from 29 to 34 feet below surface. Well completion materials used for these two wells were the same as for the downgradient wells. Care was taken to ensure that the bentonite seal above the sand pack extended at least 10 feet up into the inside of the surface casing. Above the bentonite seal, the annulus between the surface casing and the PVC well casing was filled with cuttings (MW-17C to 10 feet below surface) or bentonite and cement grout (MW-17B to 18 and 1.5 feet below surface, respectively). In MW-17C, a second bentonite seal was emplaced above the cuttings and below the cement surface seal. An above-ground steel surface protector was cemented into place at the surface in each well.

Because carbonate/caliche zones at 17 to 19 feet and 22 to 26 feet below surface were separated by several feet of apparently tight clay, two monitoring wells were completed in one borehole to allow separate evaluation of these two zones. The deeper of these two wells (MW-17A) was screened from 23 to 26 feet. A filter pack of 12/20-mesh silica sand surrounded the screen and extended 0.5 feet above the screen. A 3.5-foot thick seal of 3/8-inch bentonite chips was emplaced above the sand and was hydrated in place. Subsequently, several inches of silica sand were placed on top of the bentonite. The second and shallowest well, MW-17D, was screened from 12 to 19 feet below surface. A sand filter pack was emplaced around this screen and extended approximately 1 foot above the screen. A second bentonite seal was emplaced from the top of the filter pack to approximately 1 foot below the surface. A single steel above-ground protective casing was cemented into place at the surface. Details of well completion are given on the logs in Appendix C.

4.2 Soil Sampling Methods and Results

Two soil samples were collected from zones where visible hydrocarbon staining and faint hydrocarbon odors were apparent. These intervals were 57.3 to 57.5 feet in MW-17C, and approximately 17.5 feet in MW-17A/D. After logging, sediment from the stained interval was composited in a clean steel bowl, and transferred to glass jars supplied by the laboratory. The sample was placed immediately into a cooler with ice, and was kept cold until delivered to the laboratory. Sampling equipment was decontaminated with water and detergent prior to sampling.

Samples were analyzed for purgeable volatile aromatic and chlorinated hydrocarbons by EPA Method 8240. Laboratory analytical reports are contained in Appendix D. No analytes were detected above method detection limits in the sample from MW-17C, and only a very low concentration of benzene (0.0059 mg/kg) was detected in the sample from MW-17A/D.

4.3 Well Development

Five of the six new wells were developed shortly after installation by bailing at least 10 well volumes of water from each well using a weighted polyethylene bailer. An attempt was made to develop the two deeper grouped wells (MW-17B and MW-17C) by pumping water with the driller's grout pump, but this was successful only in MW-17B. In all wells except MW-17C, water initially opaque from reddish-brown suspended silts and clays rapidly cleared up with continued bailing or pumping. The deepest of the grouped wells, MW-17C, was not developed until the day after installation. Water from this well never contained reddish-brown suspended sediment even at the start of development, nor was water from the bottom of the well more sediment-laden than water from the top of the water column. The end result of bailing in all six wells was transparent but very slightly milky water that was practically free of fine-grained sediments.

4.4 Surveying and Well Location

The six new ground-water monitoring wells were surveyed for measuring point and ground elevations. The measuring point for each well is located on the north side top of the 2-inch PVC casing and is the point from which static water level elevations are measured and

water level elevations are calculated. All surveyed elevations were referenced to a temporary benchmark at the northeast corner of the shop facility (Figure 4-1). This is the same benchmark used to establish elevation during earlier elevation surveys of the site wells. The temporary benchmark is given the arbitrary elevation of 100.00 feet. The new wells were located for position by measuring with a tape from established landmarks such as the northeast fence corner, existing monitoring wells, and the right-of-way corners established by the land surveyor.

5.0 QUARTERLY GROUND-WATER SAMPLING

5.0 QUARTERLY GROUND-WATER SAMPLING

On April 2 and 3, 1995, water levels were measured and ground-water samples were collected from all new and existing monitoring wells associated with the facility. This constitutes second quarterly ground-water monitoring event for 1995. The next sampling event will occur in July.

5.1 Field and Analytical Methods

On April 2, prior to ground-water sampling, water levels were measured with an oil-water interface probe. All wells were opened and allowed to equilibrate with atmospheric pressure before measuring water levels. Wells were measured from least to most contaminated, and the interface probe was rinsed with distilled water before each measurement to minimize cross-contamination between wells.

After completion of water level measurements, three well volumes of water were bailed from each well using dedicated polyethylene bailers. Bailed water was placed into two galvanized steel stock tanks located near the wash bay and was allowed to evaporate.

On April 3, after the wells were allowed to recover, ground-water samples were collected from each well using the polyethylene bailers and VOA sampling attachments. Water samples were collected into VOA vials and were placed into a cooler with ice immediately after sampling. Samples were kept cool until delivery to the laboratory. Jeff Walker of the Groundwater Protection and Remediation Bureau collected split samples from the six new wells. A duplicate sample was collected from MW-3 in the northeast corner of the facility. A second sample was collected from the deepest of the grouped wells (MW-17C) from the bottom of the well. All other samples were collected from the top 5 feet of the water column. Because the water column in MW-17C is approximately 44 feet in height, a second sample was believed necessary to verify that the concentrations at the top of the water column were essentially the same an those at the bottom of the column. Ground-water samples were analyzed for volatile aromatic and chlorinated hydrocarbons by EPA Method 8240.

5.2 Results

The April 1995 water level measurements are presented in Table 5-1 with historic water level data for comparison. A map of the potentiometric surface generated from the latest water level elevations is depicted on Figure 5-1. The ground-water flow direction is to the northeast, consistent with earlier determinations. The ground-water elevations of the 4 grouped wells (MW-17D, MW-17A, and MW-17B) are essentially the same. The differences in ground-water elevation among the grouped wells ranged from 0 to 0.12 feet. The variations in these water level measurements are within the range of possible errors due to surveying the measuring point elevation or reading the oil/water interface probe. In this area, there is no vertical head gradient in the intervals screened by the 4 grouped wells.

The analytical results for the April 1995 ground-water samples are summarized in Table 5-2, along with previous water quality data. Laboratory analytical reports are presented in Appendix E. Concentrations of volatile aromatic and chlorinated hydrocarbons in the 15 pre-existing monitoring wells are in the range of historic concentration variations.

Volatile hydrocarbons, primarily 1,1-dichloroethane (1,1-DCA), 1,1-dichloroethene (1,1-DCE), 1,1,1-trichloroethane (1,1,1-TCA), trichloroethene (TCE),and tetrachloroethene (PCE), were detected in the new monitoring wells. The concentrations of chlorinated hydrocarbons in the four grouped wells are very similar and do not exhibit substantial changes with depth. Aromatic hydrocarbons were detected in only two wells, MW-17A and MW-17C. Concentrations of these chemicals are higher in the deeper well (MW-17C).

TABLE 5-1. GROUND-WATER MEASUREMENTS AND ELEVATIONS, DOWELL SCHLUMBERGER, ARTESIA, NEW MEXICO.

WELL #	DATE	DEPTH TO GROUND WATER (ft)	MEASURING POINT ELEVATION* (ft)	GROUND-WATER ELEVATION* (ft)
MW-1	01/23/91	17.41	100.56	83.15
	09/13/91	16.04		84.52
	11/22/91	14.50		86.06
	03/16/93	13.72		86.84
	01/09/94	14.62		85.94
	04/19/94	14.48		86.08
	07/20/94	14.38		86.18
	10/24/94	14.73		85.83
	01/24/95	14.20		86.36
	04/02/95	14.37		86.19
MW-2	01/23/91	16.95	99.56	82.61
	09/13/91	15.01		84.55
	11/22/91	13.76		85.80
	03/16/93	13.16		86.40
	01/09/94	13.91		85.65
	04/19/94	13.80		85.76
	07/20/94	13.65		85.91
	10/24/94	13.88		85.68
	01/24/95	13.41		86.15
	04/02/95	13.67		85.89
MW-3	01/23/91	17.28	98.33	81.05
	09/13/91	14.66		83.67
	11/22/91	13.63		84.70
	03/16/93	12.89		85.44
	01/09/94	13.66		84.67
	04/19/94	NM		NM
	07/20/94	13.18		85.15
	10/24/94	13.27		85.06
	01/24/95	13.23		85.10
	04/02/95	13.6		84.73
MW-4	01/23/91	20.17	103.18	83.01
	09/13/91	18.54		84.64
	11/22/91	17.15		86.03
	03/16/93	16.49		86.69
	01/09/94	17.28		85.90
	04/19/94	17.15		86.03
	07/20/94	16.99		86.19
	10/24/94	17.25		85.93
	01/24/95	16.78		86.40
	04/02/95	16.98		86.20
MW-5	01/23/91	17.20	99.87	82.67
	09/13/91	15.52		84.35
	11/22/91	14.19		85.68
	03/16/93	13.47		86.40
	01/09/94	14.31		85.56
	04/19/94	14.17		85.70
	07/20/94	13.97		85.90
	10/24/94	14.21		85.66
	01/24/95	13.78		86.09
	04/02/95	14.05		85.82

TABLE 5-1. GROUND-WATER MEASUREMENTS AND ELEVATIONS, DOWELL SCHLUMBERGER, ARTESIA, NEW MEXICO.

WELL #	DATE	DEPTH TO GROUND WATER (ft)	MEASURING POINT ELEVATION* (ft)	GROUND-WATER ELEVATION* (ft)
MW-6	01/23/91	19.59	100.84	81.25
	09/13/91	17.43		83.41
	11/21/91	16.30		84.54
	03/16/93	15.57		85.27
	01/09/94	16.42		84.42
	04/19/94	16.29		84.55
	07/19/94	15.79		85.05
	10/24/94	15.83		85.01
	01/24/95	15.94		84.90
	04/02/95	16.38		84.46
MW-7	01/23/91	19.01	100.23	81.22
	09/13/91	17.43		82.80
	11/21/91	16.00		84.23
	03/16/93	14.91		85.32
	01/09/94	15.99		84.24
	04/19/94	15.83		84.40
	07/19/94	15.24		84.99
	10/24/94	15.32		84.91
	01/24/95	15.54		84.69
	04/02/95	16		84.23
MW-8	01/23/91	20.16	101.47	81.31
	09/13/91	18.80		82.67
	11/21/91	17.29		84.18
	03/16/93	16.03		85.44
	01/09/94	17.23		84.24
	04/19/94	17.05		84.42
	07/19/94	16.50		84.97
	10/24/94	16.56		84.91
	01/24/95	16.79		84.68
	04/02/95	17.24		84.23
MW-9	01/26/91	20.08	102.18	82.10
	09/13/91	18.93		83.25
	11/21/91	17.35		84.83
	03/16/93	16.19		85.99
	01/09/94	17.31		84.87
	04/19/94	17.33		84.85
	07/19/94	16.85		85.33
	10/24/94	17.05		85.13
	01/24/95	16.92		85.26
	04/02/95	17.23		84.95
MW-10	01/26/91	19.68	101.34	81.66
	09/13/91	18.56		82.78
	11/21/91	16.96		84.38
	03/16/93	15.64		85.70
	01/09/94	16.89		84.45
	04/19/94	16.73		84.61
	07/19/94	16.29		85.05
	10/24/94	16.39		84.95
	01/24/95	16.48		84.86
	04/02/95	16.88		84.46

TABLE 5-1. GROUND-WATER MEASUREMENTS AND ELEVATIONS, DOWELL SCHLUMBERGER, ARTESIA, NEW MEXICO.

WELL #	DATE	DEPTH TO GROUND WATER (ft)	MEASURING POINT ELEVATION* (ft)	GROUND-WATER ELEVATION* (ft)
MW-11	01/26/91	19.27	100.60	81.33
	09/13/91	17.81		82.79
	11/21/91	16.35		84.25
	03/16/93	15.20		85.40
	01/09/94	16.31		84.29
	04/19/94	16.17		84.43
	07/19/94	15.63		84.97
	10/24/94	15.72		84.88
	01/24/95	15.89		84.71
	04/02/95	16.33		84.27
MW-12	01/26/91	19.24	100.69	81.45
	09/13/91	17.59		83.10
	11/21/91	16.21		84.48
	03/16/93	15.22		85.47
	01/09/94	16.25		84.44
	04/19/94	16.13		84.56
	07/19/94	15.63		85.06
	10/24/94	15.73		84.96
	01/24/95	15.80		84.89
	04/02/95	16.23		84.46
MW-13	09/13/91	15.10	99.25	84.15
	11/21/91	13.95		85.30
	03/16/93	13.22		86.03
	01/09/94	14.03		85.22
	04/19/94	13.90		85.35
	07/20/94	13.70		85.55
	10/24/94	13.86		85.39
	01/24/95	13.56		85.69
	04/02/95	13.87		85.38
MW-14	09/13/91	14.60	98.74	84.14
	11/21/91	13.61		85.13
	03/16/93	13.00		85.74
	01/09/94	13.71		85.03
	04/19/94	13.63		85.11
	07/20/94	13.39		85.35
	10/24/94	13.48		85.26
	01/25/95	13.26		85.48
	04/02/95	13.61		85.13
MW-15	09/13/91	16.30	100.05	83.75
	11/21/91	15.01		85.04
	03/16/93	13.95		86.10
	01/09/94	14.91		85.14
	04/19/94	14.80		85.25
	07/20/94	14.56		85.49
	10/24/94	14.73		85.32
**	01/24/95	16.00		84.05
	04/02/95	14.8		85.25

TABLE 5-1. GROUND-WATER MEASUREMENTS AND ELEVATIONS, DOWELL SCHLUMBERGER, ARTESIA, NEW MEXICO.

WELL #	*DATE*	*DEPTH TO GROUND WATER (ft)*	*MEASURING POINT ELEVATION* (ft)*	*GROUND-WATER ELEVATION* (ft)*
MW-17D	04/02/95	16.8	101.29	84.49
MW-17A	04/02/95	16.05	100.57	84.52
MW-17B	04/02/95	16.79	101.28	84.49
MW-17C	04/02/95	16.93	101.33	84.40
MW-18	04/02/95	14.77	98.72	83.95
MW-19	04/02/95	14.86	99.08	84.22

NOTES:
* = measured from a temporary benchmark of arbitrary elevation = 100.00 feet. Benchmark is located on the concrete right up against the east shop wall, at the northeast corner of the shop.
NM = not measured
** = water level measurement may be in error

K:\172040\90-125L\PDT 06/28/95 13:16

50 FT. WIDE PLATTED COUNTY RIGHT-OF-WAY

SOUTHEAST READY MIX

50 FT. WIDE PLATTED COUNTY RIGHT-OF-WAY

60 FT. WIDE PLATTED COUNTY RIGHT-OF-WAY

CITY WATER LINE

GAS LINE

COMPRESSOR

FRAC SAND SILOS

BULK CEMENT

CEMENT WARE-HOUSE

CONCRETE PAD

WELL EQUIPMENT STORAGE

FORMER ACID PLANT

CHEMICAL WARE-HOUSE

ACID LOADING SLAB

FORMER SUMP

MW-15 85.25

DRUM STORAGE

WASTEWATER TANK

SEPARATOR

WASH BAY

WASH BAY SVE SYSTEM

MW-9 84.95

MW-10 84.46

MW-12 84.46

MW-17C 84.40

MW-17B 84.49

MW-17A/D 84.52/84.49

PILOT HOLE

MW-3 84.73

MW-18 83.95

MW-8 84.23

MW-7 84.23

MW-11 84.27

MW-6 84.46

MW-19 84.22

84.00

84.20

84.40

84.60

84.80

85.00

85.20

85.40

85.60

85.80

86.00

86.20

DOWELL SCHLUMBERGER FACILITY

MW-13 85.38

MW-14 85.13

GRAVEL PARKING AREA

ABOVE GROUND OIL STORAGE

FORMER FUEL USTs

MW-5 85.82

MW-1 86.19

MW-16

MAINTENANCE SHOP

MAINTENANCE SHOP SVE SYSTEM

RM

MW-2 85.89

FORMER FUEL ISLAND

MW-4 86.20

OFFICE

SEPTIC TANKS

GRAVEL PARKING AREA

GATE

GATE

RICHEY AVENUE

SOUTHEAST READY MIX

0 60 FT.

SCALE

BASE MAP MODIFIED FROM REED & ASSOCIATES

EXPLANATION

- MW-14 85.03 — WWC MONITORING WELL LOCATION, IDENTIFICATION, AND GROUND-WATER ELEVATION
- MW-6 84.42 — REED AND ASSOCIATES MONITORING WELL LOCATION, IDENTIFICATION, AND GROUND-WATER ELEVATION
- TBM — TEMPORARY BENCH MARK
- 84.4 — POTENTIOMETRIC SURFACE CONTOUR
- GROUND-WATER FLOW DIRECTION
- AIR PIPING
- SVE EXTRACTION WELL

FIGURE 5-1

POTENTIOMETRIC SURFACE (04/02/95)

DOWELL SCHLUMBERGER
ARTESIA, NEW MEXICO

Western Water Consultants, Inc.

TABLE 5-2. RESULTS FROM LABORATORY ANALYSES OF GROUND-WATER SAMPLES, DOWELL SCHLUMBERGER, ARTESIA, NEW MEXICO

WELL NUMBER	SAMPLE DATE	BENZENE (mg/L)	ETHYL-BENZENE (mg/L)	TOLUENE (mg/L)	XYLENES (mg/L)	1,1-DCA (mg/L)	1,2-DCA (mg/L)	1,1-DCE (mg/L)	1,1,1-TCA (mg/L)	1,1,2-TCA (mg/L)	TCE (mg/L)	PCE (mg/L)	ACETONE (mg/L)
MW-1	01/26/91	0.033	ND(0.005)	0.029	0.13	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.05)
	09/15/91	ND(0.001)	ND(0.001)	0.002	0.009	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.01)
	11/22/91	0.026	ND(0.001)	0.007	0.014	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.01)
	03/16/93	0.016	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.01)
	01/10/94	0.006	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.01)
	04/19/94	0.035	0.001J	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)
	07/20/94	0.008	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)
	10/25/94	0.027	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)
	01/25/95	0.025	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)
	04/03/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)
MW-2	01/26/91	0.21	0.59	0.071	1.7	0.048	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	ND(0.01)	0.11	ND(0.1)
dup.	01/26/91	0.19	0.45	0.062	1.3	0.043	ND(0.01)	ND(0.01)	0.011	ND(0.01)	ND(0.01)	0.078	ND(0.1)
	09/15/91	0.12	0.05	0.006	0.69	0.1	ND(0.005)	0.005	0.023	ND(0.005)	ND(0.005)	0.15	ND(0.05)
*	11/22/91	0.033	0.001	0.001	0.088	0.11	ND(0.001)	0.007	0.016	ND(0.001)	ND(0.001)	0.064	ND(0.01)
	03/16/93	0.019	ND(0.001)	ND(0.001)	ND(0.005)	0.06	ND(0.001)	0.002	0.003	ND(0.001)	ND(0.001)	0.028	ND(0.01)
	01/10/94	0.024	ND(0.001)	0.001	ND(0.005)	0.039	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.001	0.079	ND(0.01)
	04/19/94	0.045	0.004J	ND(0.005)	ND(0.005)	0.028	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.001J	0.048	ND(0.1)
dup.	04/19/94	0.043	0.005J	ND(0.005)	ND(0.005)	0.03	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.001J	0.052	ND(0.1)
	07/20/94	0.022	ND(0.005)	ND(0.005)	ND(0.005)	0.026	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.021	ND(0.1)
	10/25/94	0.045	0.008	ND(0.005)	ND(0.005)	0.03	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.001J	0.037	ND(0.1)
	01/25/95	0.057	0.022	ND(0.005)	ND(0.005)	0.024	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.079	ND(0.1)
	04/03/95	0.05	ND(0.005)	ND(0.005)	ND(0.005)	0.026	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.035	ND(0.1)
MW-3	01/26/91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	09/15/91	0.2	1.2	1.2	14	ND(0.2)	ND(0.2)	ND(0.2)	0.33	ND(0.2)	ND(0.2)	ND(0.2)	3.7
*	11/22/91	0.11	0.68	0.53	6.8	0.094	0.004	0.19	0.11	0.002*	0.15	0.057	0.811
	03/16/93	ND(0.001)	1	0.65	8.6	ND(0.001)	ND(0.001)	ND(0.001)	0.26	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.01)
dup.	03/16/93	0.13	0.78	0.54	9	ND(0.001)	ND(0.001)	0.044	0.26	ND(0.001)	0.037	0.33	0.22
	07/01/93	0.14	1	0.52	9.1	0.14	ND(0.05)	ND(0.05)	0.16	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)
	01/10/94	0.14	1	0.7	11	0.19	ND(0.1)	ND(0.1)	0.21	ND(0.1)	ND(0.1)	ND(0.1)	ND(1)
	04/19/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
*	07/20/94	0.092	0.46	0.16	3	0.077	0.002J	0.036	0.069	ND(0.005)	0.064	0.011	0.048J
	10/25/94	0.13	0.96	0.25	4.2	0.2	ND(0.05)	0.064	ND(0.05)	ND(0.05)	0.13	0.21J	ND(0.1)
dup.	10/25/94	0.11	0.83	0.3	4.7	0.18	ND(0.05)	0.051	ND(0.05)	ND(0.05)	0.1	0.024J	ND(0.1)
	01/25/95	ND(1)	0.81J	ND(1)	7.1	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)	ND(2)
	04/03/95	0.047	0.45	ND(0.025)	1.3	0.1	ND(0.025)	0.11	ND(0.025)	ND(0.025)	0.15	ND(0.025)	ND(0.5)
dup.	04/03/95	0.047	0.45	ND(0.025)	1.2	0.1	ND(0.025)	0.12	ND(0.025)	ND(0.025)	0.15	ND(0.025)	ND(0.5)

TABLE 5-2. RESULTS FROM LABORATORY ANALYSES OF GROUND-WATER SAMPLES, DOWELL SCHLUMBERGER, ARTESIA, NEW MEXICO

WELL NUMBER	SAMPLE DATE	BENZENE (mg/L)	ETHYL-BENZENE (mg/L)	TOLUENE (mg/L)	XYLENES (mg/L)	1,1-DCA (mg/L)	1,2-DCA (mg/L)	1,1-DCE (mg/L)	1,1,1-TCA (mg/L)	1,1,2-TCA (mg/L)	TCE (mg/L)	PCE (mg/L)	ACETONE (mg/L)
MW-4	01/26/91	0.098	0.011	ND(0.001)	0.025	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.01)
	09/15/91	0.26	ND(0.002)	ND(0.002)	0.015	0.006	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.002)	ND(0.02)
	11/22/91	0.18	0.1	0.001	0.037	ND(0.001)	ND(0.001)	0.019	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.01)
	03/16/93	0.072	0.051	ND(0.001)	ND(0.005)	0.001	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.01)
	01/10/94	0.064	0.074	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.01)
	04/19/94	0.074	0.085	ND(0.005)	0.003J	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)
	07/20/94	0.1	0.053	ND(0.005)	0.005	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)
	10/25/94	0.14	0.26	ND(0.005)	0.004J	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.005	ND(0.1)
	01/25/95	0.15	0.4	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.1)
	04/03/95	0.1	0.19	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)
MW-5	01/26/91	0.014	ND(0.001)	ND(0.001)	ND(0.005)	0.004	ND(0.001)	0.002	0.001	ND(0.001)	ND(0.001)	0.01	ND(0.01)
	09/15/91	ND(0.001)	0.001	ND(0.001)	ND(0.005)	0.005	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.018	ND(0.01)
	11/22/91	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	0.005	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.018	ND(0.01)
	03/16/93	0.078	0.007	ND(0.001)	ND(0.005)	0.013	ND(0.001)	0.003	ND(0.001)	ND(0.001)	0.001	0.026	ND(0.01)
	01/10/94	0.025	ND(0.001)	ND(0.001)	ND(0.005)	0.008	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.026	ND(0.01)
	04/19/94	0.07	0.011	ND(0.005)	ND(0.005)	0.008	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.002J	0.015	ND(0.1)
	07/20/94	0.22	0.041	ND(0.005)	ND(0.005)	0.011	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.004J	0.025	ND(0.1)
dup.	07/20/94	0.32	0.076	ND(0.005)	0.001J	0.026	ND(0.005)	0.002J	ND(0.005)	ND(0.005)	0.006	0.039	ND(0.1)
	10/25/94	0.24	0.059	ND(0.005)	ND(0.005)	0.02	ND(0.005)	0.002J	ND(0.005)	ND(0.005)	0.008J	0.043	ND(0.1)
	01/25/95	0.46	0.13	ND(0.005)	ND(0.005)	0.023	ND(0.005)	0.002J	ND(0.005)	ND(0.005)	0.018	0.093	ND(0.1)
	04/03/95	0.39	0.087	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.015	0.062	ND(0.1)
MW-6	01/26/91	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	0.007	ND(0.001)	0.17	0.007	ND(0.001)	ND(0.001)	0.083	ND(0.01)
	09/15/91	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	0.006	ND(0.001)	0.084	ND(0.001)	ND(0.001)	ND(0.001)	0.043	ND(0.01)
	11/22/91	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	0.005	ND(0.001)	0.064	ND(0.001)	ND(0.001)	ND(0.001)	0.035	ND(0.01)
	03/16/93	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	0.007	ND(0.001)	0.098	0.001	ND(0.001)	ND(0.001)	0.056	ND(0.01)
	01/10/94	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	0.017	ND(0.001)	0.14	0.002	ND(0.001)	ND(0.001)	0.12	ND(0.01)
	04/19/94	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.013	ND(0.005)	0.07	0.002J	ND(0.005)	ND(0.005)	0.072	ND(0.1)
	07/20/94	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.009	ND(0.005)	0.098	0.001J	ND(0.005)	ND(0.005)	0.065	ND(0.1)
dup.	07/20/94	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.013	ND(0.005)	0.11	0.001J	ND(0.005)	ND(0.005)	0.073	ND(0.1)
	10/25/94	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.012	ND(0.005)	0.079	ND(0.005)	ND(0.005)	ND(0.005)	0.059	ND(0.1)
	01/25/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.012	ND(0.005)	0.065	ND(0.005)	ND(0.005)	ND(0.005)	0.057	ND(0.1)
	04/03/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.015	ND(0.005)	0.074	ND(0.005)	ND(0.005)	ND(0.005)	0.048	ND(0.1)

TABLE 5-2. RESULTS FROM LABORATORY ANALYSES OF GROUND-WATER SAMPLES, DOWELL SCHLUMBERGER, ARTESIA, NEW MEXICO

WELL NUMBER	SAMPLE DATE	BENZENE (mg/L)	ETHYL-BENZENE (mg/L)	TOLUENE (mg/L)	XYLENES (mg/L)	1,1-DCA (mg/L)	1,2-DCA (mg/L)	1,1-DCE (mg/L)	1,1,1-TCA (mg/L)	1,1,2-TCA (mg/L)	TCE (mg/L)	PCE (mg/L)	ACETONE (mg/L)
MW-7	01/26/91	0.006	ND(0.001)	ND(0.001)	ND(0.005)	0.021	ND(0.001)	0.26	0.01	ND(0.001)	0.068	0.2	ND(0.01)
	09/15/91	0.009	ND(0.001)	ND(0.001)	ND(0.005)	0.038	ND(0.001)	0.32	0.005	ND(0.001)	0.069	0.27	ND(0.01)
dup.	09/15/91	0.009	ND(0.001)	ND(0.001)	ND(0.005)	0.034	ND(0.001)	0.31	0.006	ND(0.001)	0.069	0.28	ND(0.01)
	11/22/91	0.009	ND(0.005)	ND(0.005)	ND(0.025)	0.035	ND(0.005)	0.36	ND(0.005)	ND(0.001)	0.053	0.31	ND(0.05)
	03/16/93	0.007	ND(0.001)	ND(0.001)	ND(0.005)	0.027	ND(0.001)	0.28	0.002	ND(0.001)	0.05	0.16	ND(0.01)
	01/10/94	0.005	ND(0.001)	ND(0.001)	ND(0.005)	0.023	ND(0.001)	0.21	0.004	ND(0.001)	0.046	0.16	ND(0.01)
	04/19/94	0.007J	ND(0.005)	ND(0.005)	ND(0.005)	0.021	ND(0.005)	0.12	0.003J	ND(0.005)	0.038	0.12	ND(0.1)
	07/20/94	0.006	ND(0.005)	ND(0.005)	ND(0.005)	0.018	ND(0.005)	0.22	0.003J	ND(0.005)	0.04	0.16	ND(0.1)
	10/25/94	0.007	ND(0.005)	ND(0.005)	ND(0.005)	0.033	ND(0.005)	0.23	ND(0.005)	ND(0.005)	0.05	0.24	ND(0.1)
dup.	10/25/94	0.006J	ND(0.025)	ND(0.025)	ND(0.025)	0.026	ND(0.025)	0.2	ND(0.025)	ND(0.025)	0.045	0.23	ND(0.1)
	01/25/95	0.005	ND(0.005)	ND(0.005)	ND(0.005)	0.027	ND(0.005)	0.21	0.002J	ND(0.005)	0.041	0.33	ND(0.1)
	04/03/95	0.0057	ND(0.005)	ND(0.005)	ND(0.005)	0.029	ND(0.005)	0.29	ND(0.005)	ND(0.005)	0.038	0.26	ND(0.1)
MW-8	01/26/91	ND(0.001)	ND(0.001)	ND(0.001)	0.005	ND(0.001)	ND(0.001)	0.015	0.004	ND(0.001)	0.001	0.003	ND(0.01)
	09/15/91	0.007	ND(0.001)	ND(0.001)	ND(0.005)	0.017	ND(0.001)	0.101	0.007	ND(0.001)	0.039	0.05	ND(0.01)
	11/22/91	0.004	ND(0.001)	ND(0.001)	ND(0.005)	0.02	ND(0.001)	0.087	0.003	ND(0.001)	0.045	0.063	ND(0.01)
	03/16/93	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	0.004	ND(0.001)	0.054	0.005	ND(0.001)	0.006	0.009	ND(0.01)
	01/10/94	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	0.004	ND(0.001)	0.054	0.004	ND(0.001)	0.006	0.006	ND(0.01)
dup.	01/10/94	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	0.005	ND(0.001)	0.073	0.004	ND(0.001)	0.008	0.01	ND(0.01)
	04/19/94	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.004J	ND(0.005)	0.039	0.004J	ND(0.005)	0.004J	0.007	ND(0.1)
	07/20/94	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.004J	ND(0.005)	0.069	0.005	ND(0.005)	0.006	0.011	ND(0.1)
	10/25/94	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.008	ND(0.005)	0.082	ND(0.005)	ND(0.005)	0.01	0.019	ND(0.1)
	01/25/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.007	ND(0.005)	0.076	0.006	ND(0.005)	0.011	0.022	ND(0.1)
	04/03/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.0055	ND(0.005)	0.074	ND(0.005)	ND(0.005)	0.0083	0.017	ND(0.1)
MW-9	01/26/91	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	0.022	ND(0.001)	0.002	ND(0.001)	ND(0.001)	ND(0.001)	0.001	ND(0.01)
	09/15/91	0.002	0.032	ND(0.001)	ND(0.005)	0.035	ND(0.001)	0.002	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.019
	11/22/91	0.004	0.17	ND(0.001)	ND(0.005)	0.029	ND(0.001)	0.002	ND(0.001)	ND(0.001)	ND(0.001)	0.001	0.014
	03/16/93	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	0.012	ND(0.001)	0.001	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.01)
	01/10/94	ND(0.001)	ND(0.001)	0.002	ND(0.005)	0.012	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.01)
	04/19/94	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.01	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)
	07/20/94	ND(0.005)	ND(0.005)	ND(0.005)	0.001J	0.017	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.009J
	10/25/94	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.014	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)
	01/25/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.014	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)
	04/03/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.015	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)

TABLE 5-2. RESULTS FROM LABORATORY ANALYSES OF GROUND-WATER SAMPLES, DOWELL SCHLUMBERGER, ARTESIA, NEW MEXICO

WELL NUMBER	SAMPLE DATE	BENZENE (mg/L)	ETHYL-BENZENE (mg/L)	TOLUENE (mg/L)	XYLENES (mg/L)	1,1-DCA (mg/L)	1,2-DCA (mg/L)	1,1-DCE (mg/L)	1,1,1-TCA (mg/L)	1,1,2-TCA (mg/L)	TCE (mg/L)	PCE (mg/L)	ACETONE (mg/L)
MW-10	01/26/91	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.001)	0.004	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	0.017
	09/15/91	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.001)	0.012	0.002	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.01)
	11/22/91	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.001)	0.029	0.005	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.01)
	03/16/93	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.001)	0.025	0.001	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.01)
	01/10/94	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	ND(0.001)	ND(0.001)	0.021	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.01)
	04/19/94	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.022	0.001J	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)
	07/20/94	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.052	0.004J	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)
	10/25/94	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.051	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)
	01/25/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.042	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)
dup.	01/25/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.057	0.005	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)
	04/03/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.07	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)
MW-11	01/26/91	0.01	ND(0.005)	ND(0.005)	ND(0.025)	0.045	ND(0.005)	0.31	ND(0.005)	ND(0.005)	0.14	0.36	ND(0.05)
	09/15/91	0.056	ND(0.001)	ND(0.001)	ND(0.005)	0.068	ND(0.001)	0.47	0.017	ND(0.001)	0.12	0.33	ND(0.01)
*	11/22/91	0.048	ND(0.001)	ND(0.001)	ND(0.005)	0.052	ND(0.001)	0.39	0.018	ND(0.001)	0.11	0.32	ND(0.01)
*	03/16/93	0.005	ND(0.001)	ND(0.001)	ND(0.005)	0.04	ND(0.001)	0.22	0.004	ND(0.001)	0.074	0.16	ND(0.01)
	01/10/94	0.005	ND(0.001)	ND(0.001)	ND(0.005)	0.042	ND(0.001)	0.25	ND(0.001)	ND(0.001)	0.083	0.32	ND(0.01)
	04/19/94	0.009	ND(0.005)	0.002J	ND(0.005)	0.042	ND(0.005)	0.17	0.006	ND(0.005)	0.079	0.17	ND(0.1)
	07/20/94	ND(0.025)	ND(0.025)	ND(0.025)	ND(0.025)	0.057	ND(0.025)	0.46	0.01J	ND(0.025)	0.12	0.36	ND(0.5)
	10/25/94	0.009	ND(0.005)	ND(0.005)	ND(0.005)	0.067	0.001J	0.22	ND(0.005)	ND(0.005)	0.11	0.3	ND(0.1)
	01/25/95	0.012	ND(0.005)	ND(0.005)	ND(0.005)	0.072	ND(0.005)	0.24	0.014	ND(0.005)	0.12	0.36	0.013J
	04/03/95	0.0085	ND(0.005)	ND(0.005)	ND(0.005)	0.062	ND(0.005)	0.41	0.013	ND(0.005)	0.1	0.43	ND(0.1)
MW-12	01/26/91	0.26	0.95	0.23	4.5	0.14	ND(0.025)	ND(0.025)	0.057	ND(0.025)	0.073	0.042	2.2
	09/15/91	0.15	0.62	0.63	2.2	0.12	ND(0.001)	0.3	0.11	ND(0.001)	0.2	0.061	0.29
*	11/22/91	0.11	0.43	0.034	0.81	0.11	0.002	0.24	0.1	ND(0.001)	0.26	0.051	0.056
*	03/16/93	0.16	0.8	0.014	1.0	0.12	ND(0.001)	0.039	0.055	ND(0.001)	0.036	0.018	0.017
	01/10/94	0.16	0.87	0.026	0.99	0.15	ND(0.01)	0.075	0.053	ND(0.01)	0.07	0.024	ND(0.1)
	04/19/94	0.11	0.11	0.049	0.25	0.11	0.002J	0.064	0.065	ND(0.005)	0.073	0.033	ND(0.1)
*	07/20/94	0.16	0.72	0.071	0.61	0.15	ND(0.025)	0.073	0.075	ND(0.025)	0.086	0.022J	ND(0.5)
	10/25/94	0.096	0.66	ND(0.025)	0.1	0.16	ND(0.025)	0.085	ND(0.025)	ND(0.025)	0.12	0.015J	ND(0.1)
*	01/25/95	0.16	0.68	0.089	0.66	0.19	ND(0.005)	0.12	0.095	ND(0.005)	0.076	0.069	0.008J
dup.	01/25/95	0.14	0.85	0.075	0.86	0.15	ND(0.005)	0.09	0.075	ND(0.005)	0.062	0.053	ND(0.1)
	04/03/95	0.15	0.79	0.2	1.1	0.16	ND(0.005)	0.11	0.096	ND(0.005)	0.043	0.056	ND(0.1)

TABLE 5-2. RESULTS FROM LABORATORY ANALYSES OF GROUND-WATER SAMPLES, DOWELL SCHLUMBERGER, ARTESIA, NEW MEXICO

WELL NUMBER	SAMPLE DATE	BENZENE (mg/L)	ETHYL-BENZENE (mg/L)	TOLUENE (mg/L)	XYLENES (mg/L)	1,1-DCA (mg/L)	1,2-DCA (mg/L)	1,1-DCE (mg/L)	1,1,1-TCA (mg/L)	1,1,2-TCA (mg/L)	TCE (mg/L)	PCE (mg/L)	ACETONE (mg/L)
MW-13	09/15/91	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	0.03	0.002	0.038	0.005	ND(0.001)	0.004	0.24	ND(0.01)
	11/22/91	0.43	ND(0.001)	ND(0.001)	ND(0.005)	0.016	0.001	0.025	0.002	ND(0.001)	0.002	0.11	ND(0.01)
	03/16/93	0.033	ND(0.001)	ND(0.001)	ND(0.005)	0.013	ND(0.001)	0.014	ND(0.001)	ND(0.001)	0.002	0.062	ND(0.01)
dup.	03/16/93	0.034	ND(0.001)	ND(0.001)	ND(0.005)	0.013	0.001	0.015	ND(0.001)	ND(0.001)	0.002	0.066	ND(0.01)
	01/10/94	0.022	ND(0.001)	ND(0.001)	ND(0.005)	0.016	ND(0.001)	0.007	ND(0.001)	ND(0.001)	0.003	0.055	ND(0.01)
	04/19/94	0.013	ND(0.005)	ND(0.005)	ND(0.005)	0.011	0.001J	0.003J	ND(0.005)	ND(0.005)	0.003J	0.032	ND(0.1)
	07/20/94	0.016	ND(0.005)	ND(0.005)	ND(0.005)	0.016	0.001J	0.005J	ND(0.005)	ND(0.005)	0.004J	0.034	ND(0.1)
	10/25/94	0.011	ND(0.005)	ND(0.005)	ND(0.005)	0.013	ND(0.005)	0.004J	ND(0.005)	ND(0.005)	0.004J	0.04	ND(0.1)
	01/22/95	0.008	ND(0.005)	ND(0.005)	ND(0.005)	0.015	ND(0.005)	0.002J	ND(0.005)	ND(0.005)	0.005	0.029	ND(0.1)
	04/03/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.013	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.022	ND(0.1)
MW-14	09/15/91	0.022	ND(0.001)	ND(0.001)	ND(0.005)	0.13	0.002	0.3	0.014	0.001	0.002	0.46	ND(0.01)
	11/22/91	0.002	ND(0.001)	ND(0.001)	ND(0.005)	0.14	0.002	0.31	0.009	ND(0.001)	0.002	0.4	ND(0.01)
dup.	11/22/91	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	0.11	0.002	0.32	0.01	ND(0.001)	ND(0.001)	0.44	ND(0.01)
	03/16/93	0.02	ND(0.001)	ND(0.001)	ND(0.005)	0.08	0.001	0.18	0.004	ND(0.001)	0.002	0.21	ND(0.01)
	01/10/94	0.011	ND(0.001)	ND(0.001)	ND(0.005)	0.057	ND(0.001)	0.1	ND(0.001)	ND(0.001)	0.002	0.3	0.011
	04/19/94	0.005	ND(0.005)	ND(0.005)	ND(0.005)	0.058	ND(0.005)	0.056	0.001J	ND(0.005)	ND(0.005)	0.16	ND(0.1)
	07/20/94	0.01J	ND(0.025)	ND(0.025)	ND(0.025)	0.072	ND(0.025)	0.11	ND(0.025)	ND(0.025)	ND(0.025)	0.21	ND(0.5)
	10/25/94	0.01	ND(0.005)	ND(0.005)	ND(0.005)	0.079	0.001J	0.094	ND(0.005)	ND(0.005)	ND(0.005)	0.23	ND(0.1)
	01/25/95	0.004J	ND(0.005)	ND(0.005)	ND(0.005)	0.083	ND(0.005)	0.07	ND(0.005)	ND(0.005)	ND(0.005)	0.022	ND(0.1)
	04/03/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.063	ND(0.005)	0.058	ND(0.005)	ND(0.005)	ND(0.005)	0.13	ND(0.1)
MW-15	09/15/91	0.002	0.01	ND(0.001)	0.006	0.026	0.001	0.005	ND(0.001)	ND(0.001)	ND(0.001)	0.004	0.024
	11/22/91	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.005)	0.033	0.001	0.009	ND(0.001)	ND(0.001)	0.003	0.006	ND(0.01)
*	03/16/93	0.001	0.002	ND(0.001)	ND(0.005)	0.082	0.001	0.013	ND(0.001)	ND(0.001)	0.006	0.009	ND(0.01)
	01/10/94	ND(0.001)	0.008	ND(0.001)	ND(0.005)	0.048	ND(0.001)	0.009	ND(0.001)	ND(0.001)	0.004	0.013	ND(0.01)
dup.	01/10/94	0.001	0.009	0.002	ND(0.005)	0.054	ND(0.001)	0.01	ND(0.001)	ND(0.001)	0.004	0.015	ND(0.01)
	04/19/94	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.027	ND(0.005)	0.005J	ND(0.005)	ND(0.005)	0.003J	0.008	ND(0.1)
	07/20/94	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.049	0.001J	0.006	ND(0.005)	ND(0.005)	0.004J	0.005	ND(0.1)
	10/25/94	0.001J	ND(0.005)	ND(0.005)	ND(0.005)	0.029	ND(0.005)	0.006	ND(0.005)	ND(0.005)	0.004J	0.006	ND(0.1)
	01/25/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.027	ND(0.005)	0.006	ND(0.005)	ND(0.005)	0.005	0.008	ND(0.1)
	04/03/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.02	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.1)

TABLE 5-2. RESULTS FROM LABORATORY ANALYSES OF GROUND-WATER SAMPLES, DOWELL SCHLUMBERGER, ARTESIA, NEW MEXICO

WELL NUMBER	SAMPLE DATE	BENZENE (mg/L)	ETHYL-BENZENE (mg/L)	TOLUENE (mg/L)	XYLENES (mg/L)	1,1-DCA (mg/L)	1,2-DCA (mg/L)	1,1-DCE (mg/L)	1,1,1-TCA (mg/L)	1,1,2-TCA (mg/L)	TCE (mg/L)	PCE (mg/L)	ACETONE (mg/L)
MW-17D	04/03/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.062	ND(0.005)	0.018	0.012	ND(0.005)	0.019	0.014	ND(0.1)
MW-17A	04/03/95	0.0087	ND(0.005)	ND(0.005)	ND(0.005)	0.079	ND(0.005)	0.061	0.029	ND(0.005)	0.025	0.066	ND(0.1)
MW-17B	04/03/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.036	ND(0.005)	0.18	0.019	ND(0.005)	ND(0.005)	0.18	ND(0.1)
MW-17C	04/03/95	0.032	0.06	0.0051	0.054	0.058	ND(0.005)	0.099	ND(0.005)	ND(0.005)	0.091	0.013	ND(0.1)
2nd #		0.034	0.057	ND(0.005)	0.045	0.063	ND(0.005)	0.11	ND(0.005)	ND(0.005)	0.095	0.017	ND(0.1)
MW-18	04/03/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.017	ND(0.005)	0.093	ND(0.005)	ND(0.005)	0.034	0.071	ND(0.1)
MW-19	04/03/95	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)	0.011	ND(0.005)	0.15	ND(0.005)	ND(0.005)	ND(0.005)	0.11	ND(0.1)

NOTES:

mg/L = milligrams per liter (equivalent to parts per million)
ND(0.001) = chemical not detected at detection limit shown in parentheses
dup. = duplicate sample
* = minor amounts of other chemicals also detected (see previous laboratory reports)
# = minor amounts of other chemicals also detected (see laboratory reports in Appendix E)

CHEMICAL ABBREVIATIONS:
1,1-DCA = 1,1-dichloroethane
1,2-DCA = 1,2-dichloroethane
1,1-DCE = 1,1-dichloroethene
1,1,1-TCA = 1,1,1-trichloroethane
1,1,2-TCA = 1,1,2-trichloroethane
TCE = trichloroethene
PCE = tetrachloroethene

6.0 WASH BAY SVE SYSTEM EXPANSION

6.0 WASH BAY SVE SYSTEM EXPANSION

In October 1994, an investigation of the vadose zone sediments in an Eddy County right-of-way immediately north of the existing wash bay soil vapor extraction (SVE) system showed that hydrocarbon contamination was present in this area. At that time, 20 SVE wells were installed to accelerate remediation of the contaminated sediments. A work plan describing the proposed SVE expansion was submitted to NMED/Groundwater Protection and Remediation Bureau on January 3, 1995. Approval for installation of the wash bay SVE expansion was granted by NMED in a letter dated February 16, 1995.

6.1 Installation of the SVE Expansion

Trenching and preparations for installation of PVC piping were conducted during the week of March 27, 1995. The new wells were connected to the existing wash bay SVE system through a new manifold during the week of April 3, 1995. The expansion added three new zones to the wash bay system. In the work plan, these zones were termed Zone 4, Zone 5, and Zone 6. For simplicity, these zones have been renamed, respectively, Zone 1 North, Zone 2 North, and Zone 3 North (Figure 6-1), to concur with nomenclature for the original zone to which each new zone is attached.

To accommodate the expansion, the original blower was replaced with a new and more powerful blower. There were no changes during construction and installation of the wash bay SVE expansion occurred as specified in the work plan.

6.2 Testing and Operation

Operation of the expanded system began on April 3, 1995. As submitted in the work plan, the 3 new zones are operated simultaneously with the 3 existing zones. With 1 exception (Zone 2 North, with 6 wells), each zone contains 7 extraction wells. The new blower allows the same vacuum as before to be applied to each well in the dual original and expanded zones.

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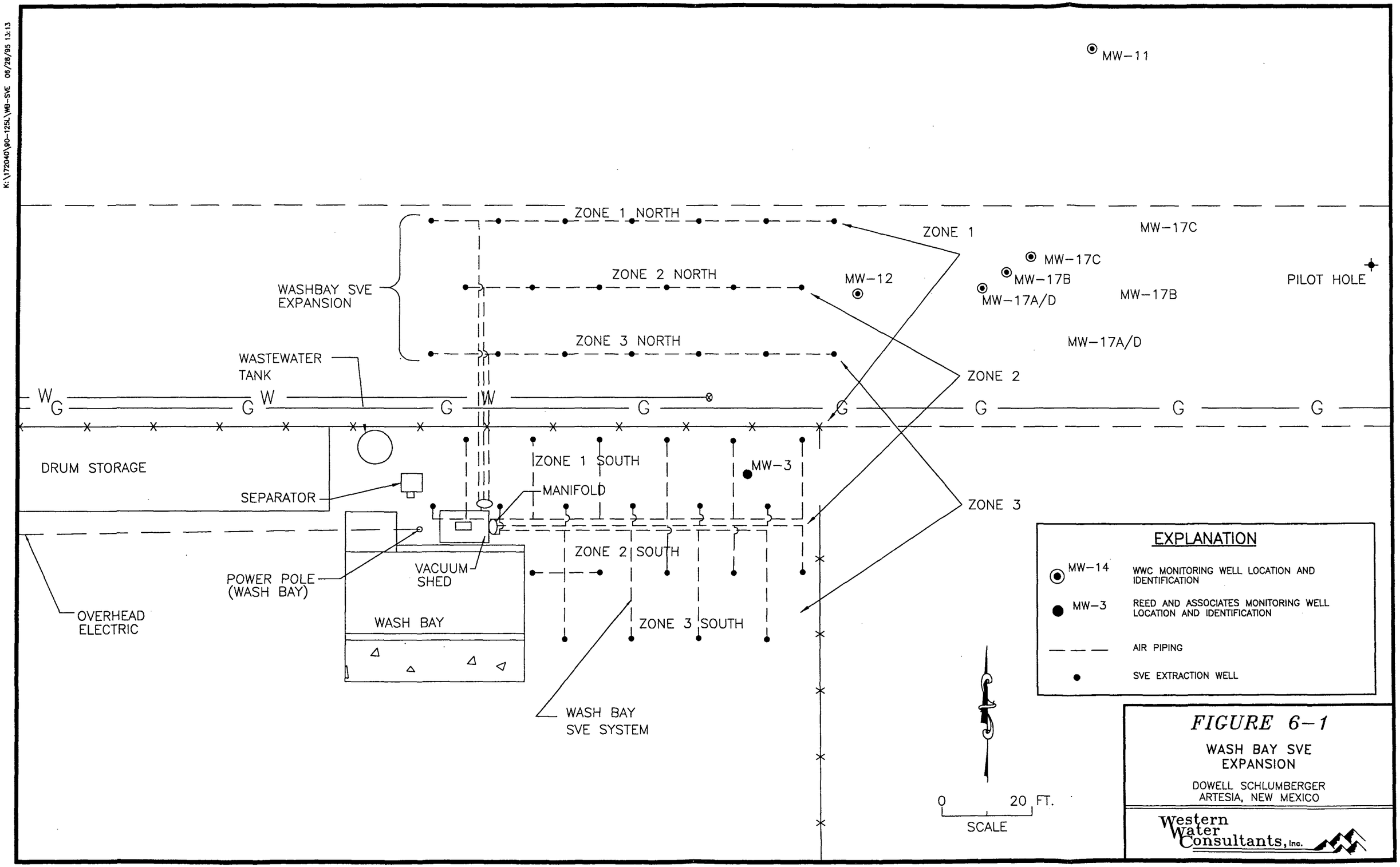

FIGURE 6-1

WASH BAY SVE EXPANSION

DOWELL SCHLUMBERGER
ARTESIA, NEW MEXICO

Western Water Consultants, Inc.

To determine removal rates, stack velocities were measured on April 5, 1995 using a hot-wire anemometer. Measurements were taken in increments of 5 units for a range of vacuum pressures from 20 to 60 inches of water. A regression equation was developed from the measured velocities to permit the stack velocity to be to be estimated from the vacuum reading. A stack flow rate was calculated using the estimated stack velocity and the area of the pipe. Removal rates were then calculated by multiplying the flow rate by the concentration of volatile organic vapors as measured by a PID. PID readings were taken on April 5, 1995 and again on May 9, 1995. The results are summarized in Table 7-2, with the rest of the SVE operational data.

The wash bay SVE expansion will be monitored on the same schedule as the shop and the original wash bay SVE systems. Maintenance will be conducted concurrently with monitoring or as needed due to any system malfunctions.

7.0 OPERATION AND MAINTENANCE OF SHOP AND WASH BAY SVE SYSTEMS

7.0 OPERATION AND MAINTENANCE OF SHOP AND WASH BAY SVE SYSTEMS

The Dowell facility in Artesia has two SVE systems which have been in operation since January 31, 1994. One system is located east and north of the truck maintenance shop and the other system is located east and north of the truck wash bay in the northeast corner of the property (Figure 7-1). The latter system was recently expanded to the north as described in Chapter 6.

7.1 Overall Operation

Both the wash bay and the maintenance shop SVE systems have operated almost continuously since the last quarterly reporting period which ended in January 1995. The wash bay SVE system was shut down for several days in late March and early April 1995 to allow the wash bay SVE expansion to be connected to the original system.

The SVE systems are checked on a monthly basis. To monitor system operation, the vacuum is measured at the blower and at the system manifolds. These measurements are presented in Tables 7-1 (maintenance shop SVE system) and 7-2 (wash bay SVE system). The differences between the measurements at the blower and system manifold are small, indicating that the filters are not plugged.

7.2 Volatile Organics in Soil Vapors

The concentrations of volatile organic components in the extracted soil vapor and the exhausted vapor are measured with a PID during each site visit. These data are presented in Tables 7-3 (maintenance shop system) and 7-4 (wash bay system). On May 9, 1995, samples of the vapors were collected for laboratory analysis using EPA Method 8240. The analytical data from these samples are summarized in Table 7-5. Copies of the laboratory analytical reports are presented in Appendix F.

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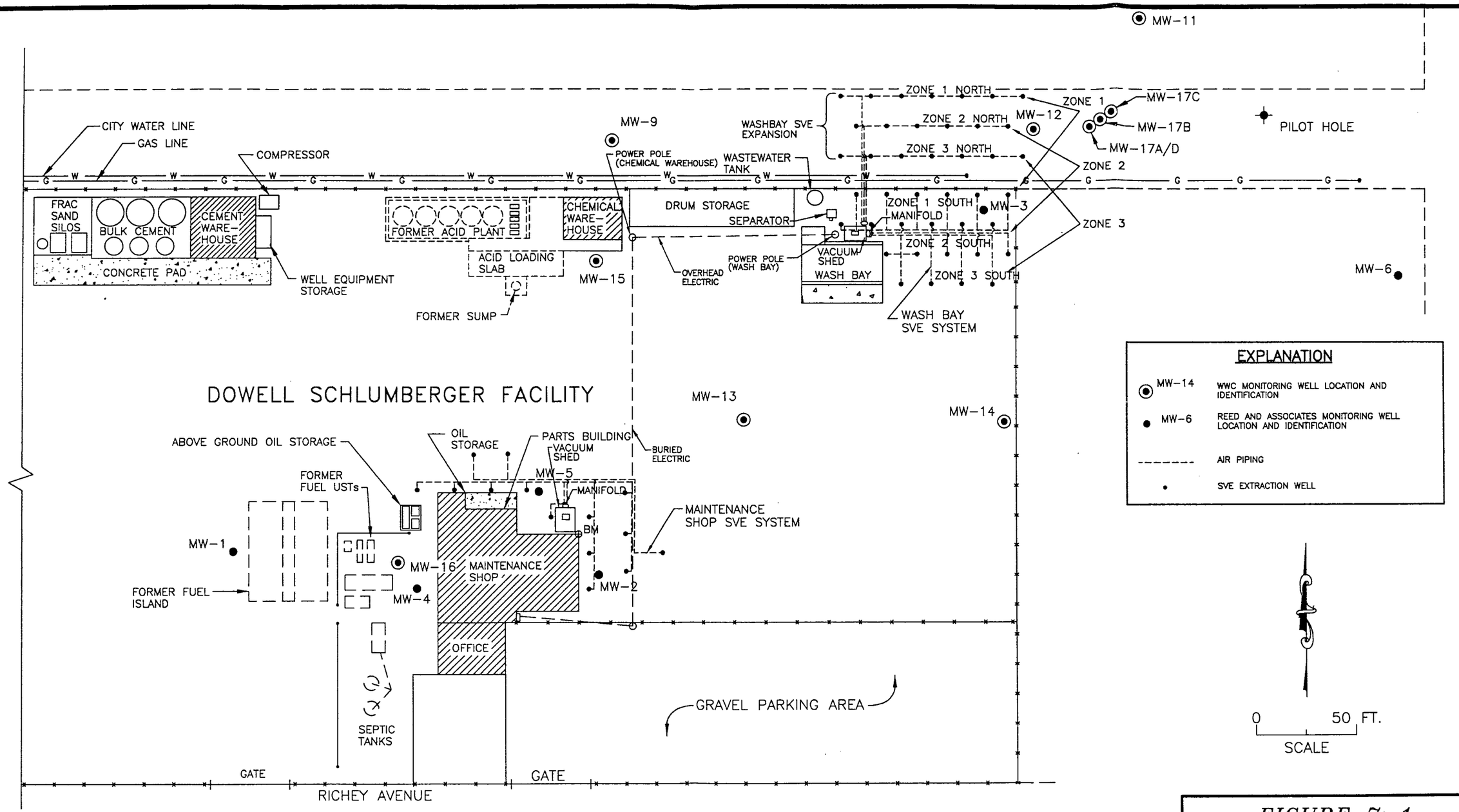

EXPLANATION

- MW-14 — WWC MONITORING WELL LOCATION AND IDENTIFICATION
- MW-6 — REED AND ASSOCIATES MONITORING WELL LOCATION AND IDENTIFICATION
- AIR PIPING
- SVE EXTRACTION WELL

0 50 FT.
SCALE

SITE PLAN

FIGURE 7-1

LOCATION OF SVE SYSTEMS

DOWELL SCHLUMBERGER
ARTESIA, NEW MEXICO

Western Water Consultants, Inc.

TABLE 7-1. OPERATIONAL CONDITIONS, MAINTENANCE SHOP SVE SYSTEM
DOWELL SCHLUMBERGER, ARTESIA, NEW MEXICO

DATE	HOUR METER	VACUUM (INCHES OF WATER) ZONE 1 MANIFOLD	ZONE 1 BLOWER	ZONE 2 MANIFOLD	ZONE 2 BLOWER
01/31/94	0.0				
02/01/94	5.1	44	48	48	50
02/02/94	23.2			48	50
02/03/94	47.8			41	46
02/10/94	219.4			43	45
02/16/94	362.1	30	35		
02/23/94	531.0			37	41
03/04/94	748.6	27	32		
03/11/94	915.3			37	41
03/18/94	1,086.1	28	33		
03/28/94	1,325.8	29	34		
04/08/94	1,583.0			38	42
04/19/94	1,857.6	31	36	33	38
05/06/94	2,256.0	46	48	48	50
05/18/94				47	49
06/01/94				51	53
06/16/94	3,099.9	49	52	48	51
07/06/94	3,100.1	50	52	47	49
07/21/94	3,457.6	44	49	52	54
08/09/94	3,899.9	51	54	49	52
09/07/94	4,093.7	48	50	48	49
09/30/94	4,647.1	52	54	49	51
10/11/94	4,911.1	53	55	48	51
11/03/94	5,445.6	58	60	54	57
12/05/94	6,204.9	57	62	57	61
01/25/95	7,397.0	59	62	54	60
04/05/95	9,047.5	50	65	47	58
05/09/95	9,838.5	55	64	50	60

TABLE 7-2. OPERATIONAL CONDITIONS, WASH BAY SVE SYSTEM
DOWELL SCHLUMBERGER, ARTESIA, NEW MEXICO

DATE	HOUR METER	VACUUM (INCHES OF WATER) ZONE 1 MANIFOLD	ZONE 1 BLOWER	ZONE 2 MANIFOLD	ZONE 2 BLOWER	ZONE 3 MANIFOLD	ZONE 3 BLOWER
01/31/94	0.0						
02/01/94	5.3	43	44	41	42	43	44
02/02/94	20.6	40	42				
02/03/94	45.3	38	42			43	45
02/10/94	217.7	34	38				
02/16/94	359.7					41	43
02/23/94	528.5					39	42
03/04/94	746.2	32	36				
03/11/94	912.0					39	40
03/18/94	1,083.9			33	37		
03/28/94	1,322.8	32	36				
04/08/94	1,581.2			32	36		
04/19/94	1,855.2	31	34	33	36	35	38
05/06/94	2,253.8	41	44	45	46	43	44
05/18/94						43	44
06/01/94		44	44				
06/16/94	3,241.2	44	45	46	47	46	47
07/06/94	3,712.1	43	44	44	45	45	45
07/21/94	3,858.3	43	45	48	48	50	51
08/09/94	3,859.7	43	44	45	46	45	46
09/07/94	4,519.5	44	45	46	47		
09/30/94	5,073.4	44	47	44	46	49	50
10/11/94	5,328.8	48	50	41	44	48	50
11/03/94	5,864.3	39	43	57	58	58	58
12/05/94	6,546.8	57	58	57	58	58	59
01/25/95	7,738.0	45	50	58	58	60	58
04/05/95*	8,682.1	SOUTH (42) NORTH (40)	44	SOUTH (54) NORTH (52)	48	SOUTH (55) NORTH (55)	48
05/09/95*	9,489.0	SOUTH (47) NORTH (45)	42				

* During the week of April 3, 1995 the Wash Bay SVE System was expanded to include north and south zones.

TABLE 7-3. VOLATILE ORGANIC COMPOUNDS, MAINTENANCE SHOP SVE SYSTEM
DOWELL SCHLUMBERGER, ARTESIA, NEW MEXICO

DATE	HOUR METER	PID/HNu READING (PPM)		
		EXHAUST	ZONE 1	ZONE 2
02/03/94	47.8	0	4	35
02/10/94	219.4	0	1	12
02/16/94	362.1	0	1	6
02/23/94	531.0	3	3	8
03/04/94	748.6	0	1	6
03/11/94	915.3	3	3	7
03/18/94	1,086.1	0	0	2
03/28/94	1,325.8	0	0	2
04/08/94	1,583.0	0	0	3.5
05/18/94		0		
07/06/94	3,100.1	0	0	0
07/21/94	3,457.6	0	0	0
08/09/94	3,899.9	0	0	1
09/06/94	4,093.7	0	0	1
09/30/94	4,647.1	0	0.5	1
10/11/94	4,911.1	3	1.8	1
11/03/94	5,445.6	22	4.5	6.3
12/05/94	6,204.9	4	2	5
04/05/95	9,047.5	21	5	5
05/09/95	9,838.5	1.4	0	3

TABLE 7-4. VOLATILE ORGANIC COMPOUNDS, WASH BAY SVE SYSTEM
DOWELL SCHLUMBERGER, ARTESIA, NEW MEXICO

DATE	HOUR METER	PID/HNu READING (PPM) EXHAUST	ZONE 1	ZONE 2	ZONE 3
02/03/94	45.3	2	84	110	180
02/10/94	217.7	0	56	69	137
02/16/94	359.7	0	23	37	133
02/23/94	528.5	3	22	54	118
03/04/94	746.2	3	42	46	91
03/11/94	912.0	7	44	42	93
03/18/94	1,083.9	40	33	44	77
03/28/94	1,322.8	18	26	13	21
04/08/94	1,581.2	7	29	39	67
05/18/94		0			
07/06/94	3,712.1	1	24	66	135
07/21/94	3,858.3	0	110	48	71
08/09/94	3,859.7	1	31	67	126
09/06/94	4,519.5	0	29	40	79
09/30/94	5,073.4	44	33	69	95
10/11/94	5,328.8	7	43	78	118
11/03/94	5,864.3	8	151	434	745
12/05/94	6,546.8	4	30	152	240
04/05/95*	8,682.1	0	46	119	199
			SOUTH (51)	SOUTH (347)	SOUTH (419)
			NORTH (218)	NORTH (125)	NORTH (408)
04/06/95*		0	62	156	194
			SOUTH (92)	SOUTH (348)	SOUTH (256)
			NORTH (301)	NORTH (567)	NORTH (767)
05/09/95*	9,489.0	151			
			SOUTH (16)	SOUTH (23)	SOUTH (44)
			NORTH (31)	NORTH (80)	NORTH (116)

* During the week of April 3, 1995 the Wash Bay SVE System was expanded to include north and south zones.

TABLE 7-5. Results from Laboratory Analyses of SVE Air Samples
Dowell Schlumberger, Artesia, New Mexico.

SAMPLE I.D.	DATE SAMPLED	SAMPLE LOCATION	1,1-DCE (ppm)	1,1-DCA (ppm)	CHLOROFORM (ppm)	1,1,1-TCA (ppm)	BENZENE (ppm)	CARBON TETRACHLORIDE (ppm)	TOLUENE (ppm)	1,1,2-TCA (ppm)	PCE (ppm)	ETHYL BENZENE (ppm)	TOTAL XYLENE (ppm)
H1885-1	12/05/95	SHOP, ZONE 1	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.196	ND (0.001)	NT
H1885-2	12/05/95	WASH BAY, ZONE 2	ND (0.001)	ND (0.001)	ND (0.001)	ND (0.001)	0.239	0.284	1.655	ND (0.001)	0.230	1.400	NT
H1885-3	12/05/95	WASH BAY, ZONE 3	0.029	0.059	ND (0.001)	ND (0.001)	0.541	0.510	5.860	ND (0.001)	0.723	2.620	NT
H1885-4	12/05/95	WASH BAY, ZONE 1	ND (0.001)	ND (0.001)	ND (0.001)	0.266	ND (0.001)	ND (0.001)	0.144	ND (0.001)	0.044	0.188	NT
H1939-1	01/25/95	WASH BAY, ZONE 2	ND (0.04)	ND (0.04)	ND (0.04)	ND (0.04)	ND (0.04)	ND (0.04)	0.91	ND (0.04)	ND (0.04)	0.69	10.67
H1939-2	01/25/95	WASH BAY, ZONE 3	ND (0.04)	ND (0.04)	ND (0.04)	0.41	0.08	ND (0.04)	4.49	ND (0.04)	0.37	2.75	23.23
H1939-3	01/25/95	WASH BAY, ZONE 2	ND (0.04)	ND (0.04)	ND (0.04)	0.93	ND (0.04)	ND (0.04)	ND (0.04)	ND (0.04)	0.07	ND (0.04)	0.12
H1939-4	01/25/95	WASH BAY, ZONE 1	ND (0.04)	ND (0.04)	ND (0.04)	ND (0.04)	ND (0.04)	ND (0.04)	0.12	ND (0.04)	ND (0.04)	0.155	1.19
H2033-1	05/09/95	WASH BAY, ZONE 1	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	0.8	ND (0.2)	0.28	0.78	8.24
H2033-2	05/09/95	WASH BAY, ZONE 2	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	5.44	ND (0.2)	ND (0.2)	0.91	14.67
H2033-3	05/09/95	WASH BAY, ZONE 3	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	5	ND (0.2)	0.4	2.3	25.72
H2033-4	05/09/95	WASH BAY, ZONE 1 NORTH	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	1.27	ND (0.2)	19.7	ND (0.2)	1.88	5.43	80.19
H2033-5	05/09/95	WASH BAY, ZONE 2 NORTH	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	2.13	ND (0.2)	22.5	ND (0.2)	1.17	5.57	51.92
H2033-6	05/09/95	WASH BAY, ZONE 3 NORTH	0.23	ND (0.2)	ND (0.2)	ND (0.2)	0.58	ND (0.2)	8.08	ND (0.2)	0.6	2.38	18.57
H2033-7	05/09/95	SHOP, ZONE 2	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.2)	1.68	ND (0.2)	0.4

Notes: DCE= Dichloroethene DCA=Dichloroethane TCA=Trichloroethane PCE=Tetrachloroethene
ppm=parts per million (mg/M3)
ND=Not Detected at detection limit shown in parentheses. NT= Analytical method did not include this chemical.

A new blower was installed permitting the addition of Zones 1 North, 2 North, & 3 North to the WASH BAY system on April 5, 1995.

7.3 Maintenance

The SVE systems have been relatively maintenance free. Minor problems have been corrected as they occur. The carbon filters have been replaced as needed at the maintenance shop and wash bay SVE systems.

8.0 DISCUSSION AND RECOMMENDATIONS

8.0 DISCUSSION AND RECOMMENDATIONS

Information generated from environmental investigations at the Dowell facility and review of the published literature indicates that the geology and hydrology of the Artesia region is complex. The following list summarizes general and site-specific geologic and hydrogeologic information for the Dowell facility:

General:

- the facility is underlain by 190 to 250 feet of Quaternary alluvium consisting up to 3 different lithologic units (carbonate gravel, clay, quartzose);
- beneath the alluvium are eastward-dipping Permian sediments consisting of approximately 600 to 700 feet of red sandstones, siltstones, mudstones, evaporites, and limestones of the Artesia Group overlying up to 1000 feet of limestones, dolomites, and evaporites of the San Andres Formation;
- the Permian rocks have been extensively but erratically thinned by post-depositional erosion, dissolution of evaporites, and the resultant collapse of interbedded clastic sediments, often forming closed depressions (a large one of which is located within a half mile southeast of the facility);
- the alluvial sediments are thickened and deformed by slumping in the vicinity of subsurface collapse structures;
- two main aquifers are present beneath the facility, the shallow aquifer in the alluvial sediments, and the artesian aquifer in the San Andres Limestone and the basal Grayburg and Queen Formations of the Artesia Group;
- these aquifers are separated by leaky confining layers in the Artesia Group sediments through which there is substantial upward migration of artesian ground water;
- permeability in the Permian sediments is principally due to collapse fractures and dissolution, and is highly variable vertically and laterally;
- the primary producing interval in the alluvial aquifer is the basal quartzose sand and conglomerate unit, although some production may occur from the carbonate gravel unit.

Site-specific:

- the carbonate gravel unit is at least 68 feet thick (the maximum depth drilled) and no sands or gravels of the quartzose unit have been encountered to this depth;
- the sediments consist of reddish silts, silty clays, and clays interbedded with thin white to pinkish-cream soft earthy to indurated and brecciated carbonate/caliche layers;
- saturated intervals are first encountered from 18 to 22 feet below surface, but water levels in ground-water monitoring wells are approximately 14 to 15 feet below surface;
- the ground-water flow direction is to the northeast;
- the ground water is flowing principally in solution-enhanced (brecciated or "rubblized") carbonate/caliche interbeds rather than in the surrounding tight clays and silty clays;
- the individual carbonate/caliche layers do not appear to be laterally continuous, nor are zones (several closely-spaced carbonate/caliche layers) uniformly saturated laterally;
- in an erratic manner, carbonate/caliche layers appear to be developed vertically as well as horizontally, possibly providing vertical connection among the various carbonate/caliche layers through what appear in drilling cores as tight fine-grained sediments;
- to 61 feet below surface, sediments appear to be behaving as a single hydrologic package or unit, and ground-water and probably contaminant migration in this unit appear to be controlled more by fracture-like flow than by flow through a homogenous permeable sediment; and
- there is no vertical hydraulic head gradient between 19 and 61 feet below surface in the grouped wells.

The depth to the bottom of the alluvium and the thickness of the various alluvial units beneath the site are not known. The relationships of water-bearing intervals in the carbonate gravel to the main water-producing zones in the quartzose unit are also unknown. Due to the

geologic and hydrologic complexity of the alluvial sediments, is not feasible to define these issues except in a general sense.

8.1 Recommendations

The hydrogeologic complexities of the underlying sediments at the Artesia facility preclude precise definition of contaminant migration. Dowell suggests that further investigation be designed to collect data for the performance of a risk assessment. The risk assessment will allow evaluation of the hazards to ground-water users that may be exposed to hydrocarbons from the Artesia facility. This evaluation will guide the selection of the most appropriate method of remediation.

To determine the lateral extent of contamination, Dowell proposes to drill up to 3 wells, to maximum depths of 50 feet, northeast of the known area of ground-water contamination. To evaluate the main water-producing zone in the shallow aquifer, a deeper well will be installed into the top of the quartzose zone adjacent to the new shallow well with the highest concentration of total halocarbons in the ground water (if hydrocarbon contamination is present) or adjacent to the most northeasterly new shallow well (if no hydrocarbons are detected). For the quartzose zone well, surface casing will be set through the carbonate gravel unit to eliminate contact between these two units through the well and allow monitoring of water solely from the quartzose zone.

REFERENCES

REFERENCES

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APPENDIX A

GROUND-WATER WELL SURVEY

APPENDIX A. SUMMARY OF PERMITTED GROUND-WATER WELL SURVEY WITHIN 2-MILE RADIUS DOWNGRADIENT OF THE DOWELL SCHLUMBERGER FACILITY, ARTESIA, NEW MEXICO

TWNSHP/ RANGE	SEC.	QTR SEC.	PERMIT #	DATE	USE	AQ.	TOTAL DEPTH (ft.*)	PERFORATED INTERVAL (ft.*)	MAIN WATER-BEARING ZONES (ft.*)	DTW (ft.*)	EST. YIELD (gpm)	LITHOLOGY OF PRODUCING INTERVAL
T16S,R26E	33	100	RA-3410	1955	-	S	171	120-130; 155-171	120-125; 155-165	40	-	white sand; sand and gravel
T16S,R26E	33	110	-	1906	-	A	1023	-	816; 918; 970	-	1408(flow)	hard rock
T16S,R26E	33	111243	RA-6492	1979	dom.	S	280	180-275	140-150; 180-275	70	10; 30	sand; sand and gravel
T16S,R26E	33	122	RA-3923	1958	dom.	S	200	-	60-65; 130-140	50	not much	red sand
T16S,R26E	33	122	RA-3540	1962	dom.	S	326	130-160; 250-295	45-60; 90-102; 138-157; 300-326	120	-	sand; sand and gravel
T16S,R26E	33	144	RA-4890	1963	dom.	S	72	50-72	55-65	50	-	yellow sand and gravel
T16S,R26E	33	210	-	1907	-	A	1070	-	-	-	538(flow)	-
T16S,R26E	33	211133	RA-2483	1954	-	A	1168	-	400-440; 3 zones >1000	40	-	@ 420ft=sand; >1000 ft=limestone
T16S,R26E	33	32221	RA-8873	1994	dom./stk	S	200	140-200	82-200	45	100	sand
T16S,R26E	33	44341	RA-8090	1992	dom.	S	180	94-167	75-80; 135-142; 155-160	50	7; 10; 8	brown water sand
T16S,R26E	34	11111	RA-5700	1971	dom.	S	150	-	-	-	-	-
T16S,R26E	34	211	RA-5375	1967	dom.	S	153	86-153	44-45; 60-105; 120-152	55?	-	sand; sand and gravel
T16S,R26E	34	2443	RA-5718	1972	dom./stk	S	100	77-96	61-95	27	-	sand and gravel
T16S,R26E	34	31233	RA-7387	1985	stk	S	170	104-160	60-95; 115-135; 158-167	42	20	tan sand; sand and gravel
T16S,R26E	34	330	RA-5384	1967	dom./stk	S	154	121-154	30-85; 125-151	30	-	sand; sand and small gravel
T16S,R26E	34	343	RA-7509	1986	dom.	S	120	20-120	35-115	35	30	white sand
T16S,R26E	34	343	RA-4447	1961	dom.	S	140	100-140	50-80; 110-140	30	-	sand; red sand
T16S,R26E	34	4333	RA-5442	1968	dom.	S	174	144-169	100-106; 144-167	45	-	sand
T16S,R26E	34	4333	RA-5441	1968	dom.	S	175	145-175	101-107; 145-170	45	-	sand
T16S,R26E	34	43412	RA-6325	1978	dom.	S	120	95-110	95-120	60	40	sand and gravel
T17S,R26E	2	100	RA-1398	1936	-	S	86	-	20-23: 42-86	-	-	sand
T17S,R26E	2	13112	RA-1606-S	1983	irr.	S	125	90-120	50-60; 70-80; 110-120	45	1200	sand; sand and gravel
T17S,R26E	2	212	RA-5815	1973	mon.	S	20	20-24	5-23	5	-	sand and clay
T17S,R26E	2	310	RA-2219	1946	-	S	55	-	18-21; 45-55	-	-	gravel/sand; sand
T17S,R26E	2	311331	RA-5945	1974	dom./stk	S	95	65-95	-	-	-	sand and gravel
T17S,R26E	2	333	RA-4308	1960	dom.	S	138	108-139	17-20; 115-133	17	-	sand
T17S,R26E	3	12442	RA-6096	1976	dom./stk	S	90	60-90	45-65	52	-	sand
T17S,R26E	3	130	RA-1606	1937	-	S	104	-	-	-	-	-
T17S,R26E	3	13411	RA-6634	1980	dom.	S	180	120-180	30-40; 150-180	30	3; 60	gravel; sand and gravel
T17S,R26E	3	200	RA-7552	1987	stk	S	85	50-85	65-85	-	30	sand
T17S,R26E	3	231	RA-5008	1964	dom.	S	100	90-100	40-103	-	-	sand
T17S,R26E	3	231	RA-1606	1955	-	S	177	50-172	40-60; 70-90; 102-120; 135-170	-	-	sand; sand and gravel
T17S,R26E	3	23112	RA-1606-S	1993	com.	S	176	74-163	50-60; 75-80; 138-152	35	1500	brown sand; lt. brown sand
T17S,R26E	3	244	RA-7553	1986	dom.	S	130	98-130	60-75; 115-130	115	30; 60	brown sand
T17S,R26E	3	333	RA-1488	1937	-	S	135	-	-	-	-	-
T17S,R26E	3	333	RA-1479	1960	dom.	S	250	231-250	40-150; 170-195; 235-240	13	-	sand; sand and gravel
T17S,R26E	3	333	RA-1488	1960	irr.	S	283	101-251	40-150; 170-195; 235-240	13	-	sand; sand and gravel
T17S,R26E	3	430	RA-5294	1966	dom.	S	200	160-200	50-60; 180-200	50	-	sand; gravel

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TWNSHP/ RANGE	SEC.	QTR SEC.	PERMIT #	DATE	USE	AQ.	TOTAL DEPTH (ft.*)	PERFORATED INTERVAL (ft.*)	MAIN WATER-BEARING ZONES (ft.*)	DTW (ft.*)	EST. YIELD (gpm)	LITHOLOGY OF PRODUCING INTERVAL
T17S,R26E	3	430	RA-1668	1938	-	S	110	-	-	-	-	-
T17S,R26E	3	431	RA-1668	1958	irr.	S	185	105-185	30-40; 170-175	-	-	sand
T17S,R26E	4	123	RA-3852	1958	dom.	S	138	108-138	20-45; 115-125	27	-	sand
T17S,R26E	4	142	RA-2564	1950	-	S	108	83-108	83-108	-	-	sand
T17S,R26E	4	210	RA-4806	1963	dom.	S	100	55-100	55-60; 95-100	40	-	sand
T17S,R26E	4	233	RA-1524-S	1907	-	S	100	-	35-40; 85-98	-	-	fine sand; "cavity formation"
T17S,R26E	4	331	RA-1380	1936	-	S	212	-	18-23; 218-245?	-	-	gravel
T17S,R26E	4	334	-	1989	mon.	S	30	10-30	0-30	14	5-15	DSIMW-1; Quaternary alluvium
T17S,R26E	4	334	-	1989	mon.	S	30	10-30	0-30	14	5-15	DSIMW-2; Quaternary alluvium
T17S,R26E	4	334	-	1989	mon.	S	30	10-30	0-30	14	5-15	DSIMW-3; Quaternary alluvium
T17S,R26E	4	334	-	1989	mon.	S	50	15-50	0-30	14	5-15	DSIMW-4; Quaternary alluvium
T17S,R26E	4	334	-	1989	mon.	S	30	10-30	0-30	15	5-15	DSIMW-5; Quaternary alluvium
T17S,R26E	4	334	-	1989	mon.	S	30	10-30	0-30	14	5-15	DSIMW-6; Quaternary alluvium
T17S,R26E	4	334	-	1989	mon.	S	30	10-30	0-30	14	5-15	DSIMW-7; Quaternary alluvium
T17S,R26E	4	334	-	1989	mon.	S	30	10-30	0-30	15	<5	DSIMW-8; Quaternary alluvium
T17S,R26E	4	334	-	1991	mon.	S	30	10-30	21-30	15	<5	DSIMW-9; carbonate layers in silty clay
T17S,R26E	4	334	-	1991	mon.	S	30	10-30	21-30	15	<5	DSIMW-10; carbonate layers in silty clay
T17S,R26E	4	334	-	1991	mon.	S	30	20-30	20-30	15	<5	DSIMW-11; carbonate layers in silty clay
T17S,R26E	4	334	-	1991	mon.	S	31	20-30	19-30	15	<5	DSIMW-12; carbonate layers in silty clay
T17S,R26E	4	334	-	1991	mon.	S	50	20-50	20-50	14	<5	DSIMW-13; carbonate layers in silty clay
T17S,R26E	4	334	-	1991	mon.	S	35	20-35	25-35	14	<5	DSIMW-14; carbonate layers in silty clay
T17S,R26E	4	334	-	1991	mon.	S	34	24-34	22-34	15	<5	DSIMW-15; carbonate layers in silty clay
T17S,R26E	4	334	-	1991	mon.	S	48	18-48	25-48	15	<5	DSIMW-16; carbonate layers in silty clay
T17S,R26E	4	334	-	1995	mon.	S	19/26	D=12-19/A=24-26	D=18-19/A=23.8-25	15/15	<5	DSIMW-17A/D; carbonate layers in silty clay
T17S,R26E	4	334	-	1995	mon.	S	34	29-34	23-25; 30-32	15	<5	DSIMW-17B; carbonate layers in silty clay
T17S,R26E	4	334	-	1995	mon.	S	61	51-61	17-18; 22-23; 28-33; 52-53; 55-56; 58-59	15	<5	DSIMW-17C; carbonate layers in silty clay
T17S,R26E	4	334	-	1995	mon.	S	28	18-28	20-22; 24-30	13	<5	DSIMW-18; carbonate layers in silty clay
T17S,R26E	4	334	-	1995	mon.	S	28	18-28	20-22.5; 27-28	13	<5	DSIMW-19; carbonate layers in silty clay
T17S,R26E	4	430	RA-1440	1959	irr.	S	295	113-220	188-210; 215-220	20	-	sand
T17S,R26E	9	-	RA-1533	1937	ref.	S	258	-	10-20; 180-238; 238-258	-	-	sandy clay; sand and gravel
T17S,R26E	9	110	RA-2654	1950	-	S	200	-	130-140	-	-	sand
T17S,R26E	9	112	RA-3282	1954	-	S	125	105-125	80-92; 105-123	60	-	fine sand; sand and gravel
T17S,R26E	9	112	RA-3225	1954	-	S	100	65-94	65-70; 80-94	25	-	sand
T17S,R26E	9	113	RA-602	1963	irr.	A	1180	-	858-897; 1103-1112; 1150-1157	-	-	"water rock" (w/in limestome)
T17S,R26E	9	113	RA-602	1906	-	A	1005	-	880; 940	-	576(flow)	hard lime rock
T17S,R26E	9	114	RA-2488	1957	dom.	S	200	140-200	150-160; 180-192	70	-	sand
T17S,R26E	9	13111	RA-6969	1982	mon.	S	19	15-19	16-19	10	-	fine anhydritic sand and red shale
T17S,R26E	9	13222	RA-6975X8	1982	mon.	S	21.5	17-22	18-20	8	-	anhydritic sand and gravel
T17S,R26E	9	1323	RA-7098X2	1982	mon.	S	21.5	15-20	15-20	7	-	dolomite gravel in tight sandy silty clay

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TWNSHP/ RANGE	SEC.	QTR SEC.	PERMIT #	DATE	USE	AQ.	TOTAL DEPTH (ft.*)	PERFORATED INTERVAL (ft.*)	MAIN WATER-BEARING ZONES (ft.*)	DTW (ft.*)	EST. YIELD (gpm)	LITHOLOGY OF PRODUCING INTERVAL
T17S,R26E	9	13313	RA-6972	1982	mon.	S	20	16-20	15-18	11	-	fine red and grey anhydritic sand
T17S,R26E	9	13322	RA-6975X2	1982	mon.	S	19	15-20	16-18	8	-	anhydritic sand
T17S,R26E	9	1342	RA-7098X4	1982	mon.	S	20.5	12-17	14-18	8	-	anhydritic sand in silty clay w/ gypsum
T17S,R26E	9	1342	RA-7098X3	1982	mon.	S	25	12-17	14-15.5	7	-	anhydritic sand in tight gypsum clay
T17S,R26E	9	13422	RA-6975X7	1982	mon.	S	21.5	17-22	20-21.5	11	-	anhydritic sand
T17S,R26E	9	1344	RA-7908X5	1982	mon.	S	23.5	16-21	16-21	6	-	anhydrite sand in grey silty clay
T17S,R26E	9	210	-	1906	-	A	971	-	809-814; 940-946; 966-971	-	1145(flow)	"water rock"
T17S,R26E	9	213	RA-1440	1941	-	S	320	-	110-130; 196-225; 245-260; 285-320	-	-	sand; "water rock"
T17S,R26E	9	213	RA-7	1958	irr.	A	1205	-	290; 1105	12	-	"water rock" (w/in limestome)
T17S,R26E	9	244	RA-2698	1951	stk	S	140	-	18-30; 50-80; 130-140	10	-	gypsum; clay and gravel; gravel
T17S,R26E	9	31122	RA-6975X	1982	mon.	S	20	15-20	15-17	9	-	anhydritic sand
T17S,R26E	9	31222	RA-6971	1982	mon.	S	33	29-33	16-20	7	-	fine grey anhydritic sand and shale
T17S,R26E	9	31222	RA-6975	1982	mon.	S	19	16-20	16-18	5	-	gypsum sand
T17S,R26E	9	320	-	1911	-	A	1180	-	28-58; 5 zones >880	-	966(flow)	sand; "water rock" w/in limestone
T17S,R26E	9	323	RA-768	1943	-	A	1214	-	-	-	-	"water rock" (w/in limestome)
T17S,R26E	9	34223	RA-6975X6	1982	mon.	S	30	25-30	10-12	10	-	anhydritic sand
T17S,R26E	9	344	RA-313	1940	-	A	1157	-	931-972; 1020-1035; 1070-1100	-	-	"rock"
T17S,R26E	9	344	-	1905	-	A	942	-	795; 932; 942	-	1494(flow)	"water rock"
T17S,R26E	9	430	RA-314	1952	-	A	1196	-	strata w/in 960-1146	8	-	-
T17S,R26E	9	430	RA-1440	1959	irr.	S	310	126-226	130-150	10	-	sand
T17S,R26E	9	434	RA-2723	1951	dom.	S	318	240-318?	240-318	40	-	sand rock
T17S,R26E	9	440	-	1923	-	A	1250	-	strata w/in 1000-1100	-	1024(flow)	"water rock" (w/in limestome)
T17S,R26E	10	110	RA-4922	1963	dom.	S	218	118-139 (orig.)	25-35; 96-139	25	-	sand
T17S,R26E	10	12323	RA-6550	1979	dom./stk	S	125	90-120	95-120	50	10	sand
T17S,R26E	10	12323	RA-7180	1983	dom.	S	220	180-220	100-210	80	20	fine sand
T17S,R26E	10	210	-	1908	-	A	1310	-	1130-1290	-	1748(flow)	white limestone
T17S,R26E	10	213	RA-3368	1954	-	S	240	193-215	193-215	40	-	sand and gravel
T17S,R26E	10	330	RA-307	1926	-	A	1263	-	1186	-	(flow)	-
T17S,R26E	10	330	RA-4798	1963	dom.	A	850	840-850	-	120	-	-
T17S,R26E	10	333	RA-1331	1939	-	S	278	-	-	-	-	-
T17S,R26E	10	333	RA-4196	1960	dom.	S	294	275-294	280-292	80	-	sand and gravel
T17S,R26E	10	430	RA-1300	1937	-	S	210	-	18; 36-40; 55-70; 157-175; 200-210	-	-	gravel; sand
T17S,R26E	10	433	RA-397	1954	-	A	1095	-	815-830; 1040-1045	-	-	"water rock"; broken limestone
T17S,R26E	10	433	RA-3195	1909	-	A	1007	-	856-865	-	900(flow)	"water rock"
T17S,R26E	11	310	RA-1414	1956	irr.	S	295	-	-	11	-	-
T17S,R26E	11	310	W-8	1906	-	A	821	-	720-821	-	-	"water rock"
T17S,R26E	11	333	RA-763	1946	-	A	955	all slotted	4 zones >750	-	-	rock; water increase bottom 47 ft.

APPENDIX A. SUMMARY OF PERMITTED GROUND-WATER WELL SURVEY WITHIN 2-MILE RADIUS DOWNGRADIENT OF THE DOWELL SCHLUMBERGER FACILITY, ARTESIA, NEW MEXICO

TWNSHP/ RANGE	SEC.	QTR SEC.	PERMIT #	DATE	USE	AQ.	TOTAL DEPTH (ft.*)	PERFORATED INTERVAL (ft.*)	MAIN WATER-BEARING ZONES (ft.*)	DTW (ft.*)	EST. YIELD (gpm)	LITHOLOGY OF PRODUCING INTERVAL
T17S,R26E	15	111	RA-1227	1935	-	S	240	194-240	10-15; 175-240	-	-	white clay; sand
T17S,R26E	15	120	RA-1183	1934	-	S	225	220-225?	20-25; 155-225	-	-	water gravel; water gravel
T17S,R26E	15	121	RA-3353	1951	-	S	295	232-295	260-295	-	-	sand and clay
T17S,R26E	15	130	-	1953	-	S	182	"bottom joint"	-	128	-	-
T17S,R26E	15	130	P-3	1908	-	A	1285	-	821-828; 1046-1050; 1124-1285	-	1076(flow)	hard rock; white lime rock
T17S,R26E	15	133	RA-1503	1944	-	S	240	-	10-15; 73-83; deeper = not specified	-	-	sand
T17S,R26E	15	133	RA-2050	1955	irr.	A	1231	-	1016-1035	42	-	water rock
T17S,R26E	15	133	RA-4684	1962	dom.	S	220	185-220	25-30; 185-200	50	-	sand; sand and gravel
T17S,R26E	15	140	RA-4765	1963	dom.	S	185	155-185	20-50; 150-185	70	-	sand
T17S,R26E	15	212	RA-2222	1945	-	S	171	141-170	141-171	-	-	sand
T17S,R26E	15	230	-	1926	-	A	1293	-	22-35; 818; 1180-1230	-	1128(flow)	water sand; hard rock; lime rock
T17S,R26E	15	233	RA-2221	1945	-	S	180	133-180	133-180	-	-	sand
T17S,R26E	15	234	-	1909	-	A	1254	748-1254?	748; 754; 1170; 1200; 1210; 1254	-	2350(flow)	water rock
T17S,R26E	15	234	RA-279	1950	-	A	1000	-	721-1000	-	-	rock and sand
T17S,R26E	15	310	RA-1251	**	-	S	212	85-212?	-	-	-	-
T17S,R26E	15	310	RA-300	1906	-	A	936	760-936?	760; 830	-	866(flow)	water rock
T17S,R26E	15	331	RA-298	1952	aba.?	A	1098	795-815; 980-1059	4 zones >790	4	-	broken lime
T17S,R26E	16	110	-	1917	-	A	1182	-	1025	-	-	rock
T17S,R26E	16	113	RA-2568	1950	-	S	232	216-232?	216-220	42	-	water sand
T17S,R26E	16	113	RA-2568	1933	-	S	200	-	-	-	-	sand and conglomerate gravel
T17S,R26E	16	113121	RA-1090	1930	-	A	1233	-	7 zones >900	-	-	water rock in lime rock
T17S,R26E	16	120	-	1908	-	A	935	703-935?	715; 920; 935	-	1114 (flow	gumbo; hard water rock
T17S,R26E	16	311113	RA-1044	1960	irr.	A	1225	-	1095-1105	98	-	water rock
T17S,R26E	16	411	RA-4110	1965	dom.	S	240	200-238	50-80; 180-220	80	-	gravel; sand
T17S,R26E	16	411	RA-1045	1947	-	A	1169	-	795-860; 934-943; 980-990; 995-1000	-	-	water rock

Notes:

TWNSHP = Township
QTR SEC. = quarter section (New Mexico notation: 1=NW, 2=NE, 3=SW, 4=SE)
AQ. = aquifer (A=artesian, S=shallow)
DTW = depth to water
EST. YIELD = estimated yield
(ft*) = feet below ground surface
- = not specified in well log

dom. = domestic
dom./stk = domestic/stock
stk = stock
irr. = irrigation
mon. = monitoring/observation
com. = commercial
ref. = unspecified use at Navajo Refinery

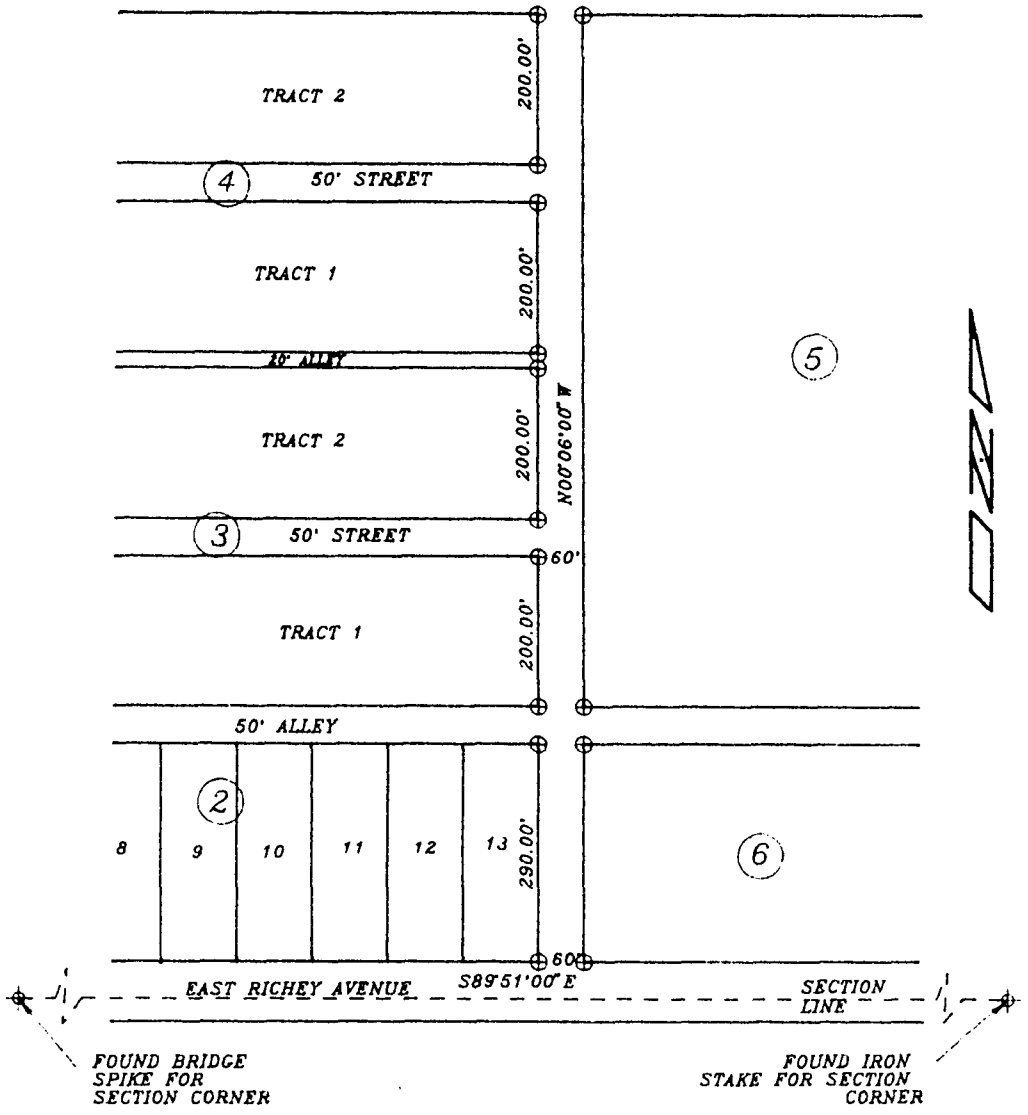
Western Water Consultants, Inc

APPENDIX B

LAND SURVEYOR'S PLAT

PLAT OF SURVEY

PLAT SHOWING CORNERS SET WITHIN ARTESIA INDUSTRIAL ADDITION AND THE SUPPLEMENTAL PLAT OF PART OF ARTESIA INDUSTRIAL ADDITION LOCATED IN S/2 SW1/4 SEC. 4, T17S, R26E, N.M.P.M., EDDY COUNTY, NEW MEXICO.



200 0 200 600

Scale 1" = 200 ft

⊕ SET 1/2" REBAR WITH PLASTIC CAP PS#5412

CERTIFICATION:
THIS IS TO CERTIFY THAT THE FOREGOING PLAT WAS MADE FROM FIELD NOTES OF A BONA FIDE SURVEY, MADE BY ME, MEETING THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

DAN R. REDDY, NM PE&PS NO. 5412
401 W. GREENE ST./P.O. BOX 597
CARLSBAD, NEW MEXICO 88221
APR. 3, 1995
PREPARED FOR: WESTERN WATER CONSULTANTS

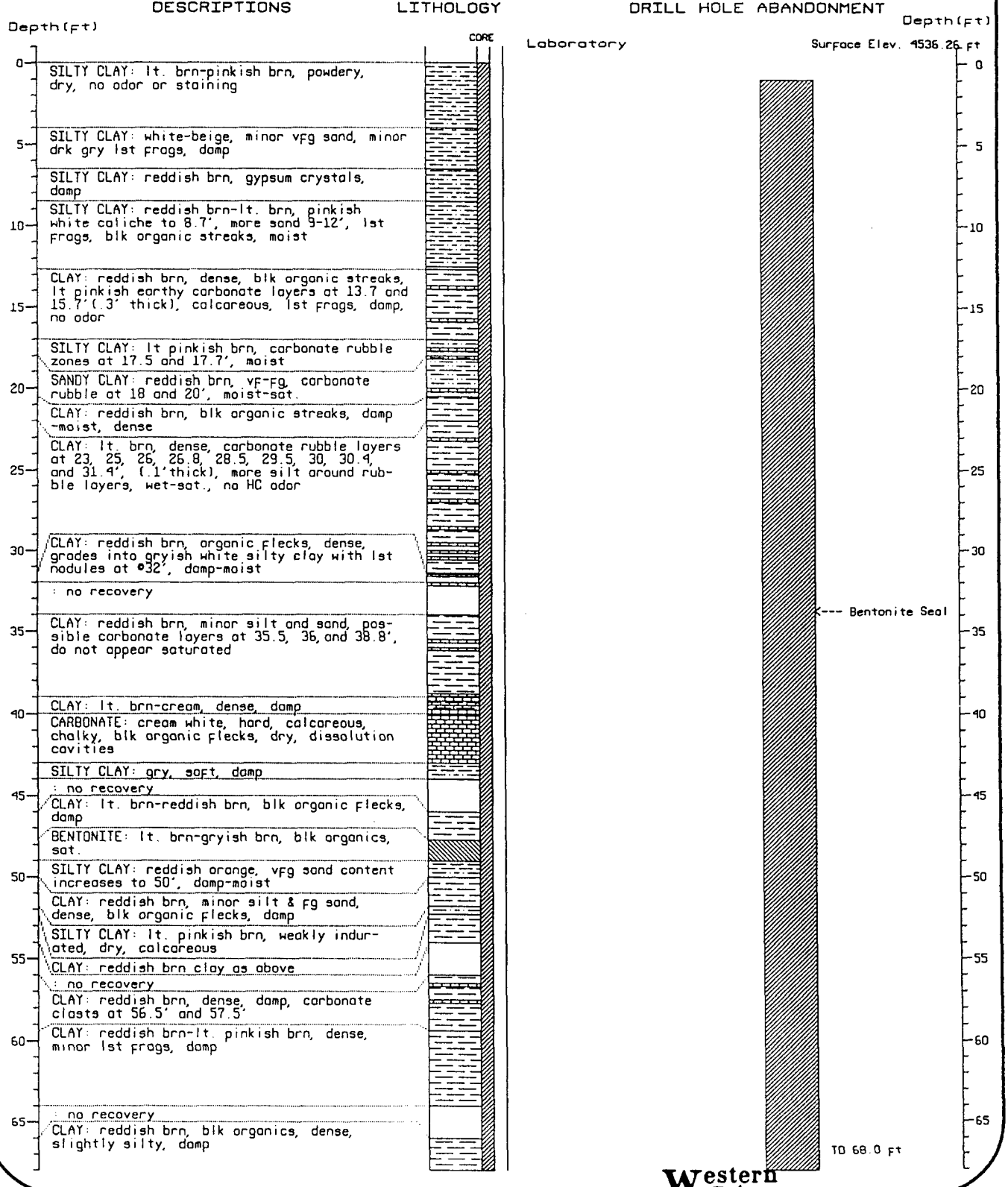
APPENDIX C

BOREHOLE AND WELL LOGS

SOIL BORING PILOT HOLE

LOCATION: Dowell Schlumberger, Artesia, New Mexico
37' N and 124' E of NE fence corner
T17S, R26E, Sec 9, SE 1/4, SW 1/4, SW 1/4
LOG: Western Water Consultants Inc. (Kevin Mattson)
DRILLER: Scarbourgh Drilling (Lane Scarbourgh)
ST ENGINEER NO.: NA
DRILLING DATE: March 27, 1995

WELL OWNER: Dowell Schlumberger Inc. (JN 90-125)
DRILLING METHOD: Hollow Stem Auger, 6.0" OD
WATER TABLE ELEVATION NA
(Reference Datum: Arbitrary = 100.00 feet)

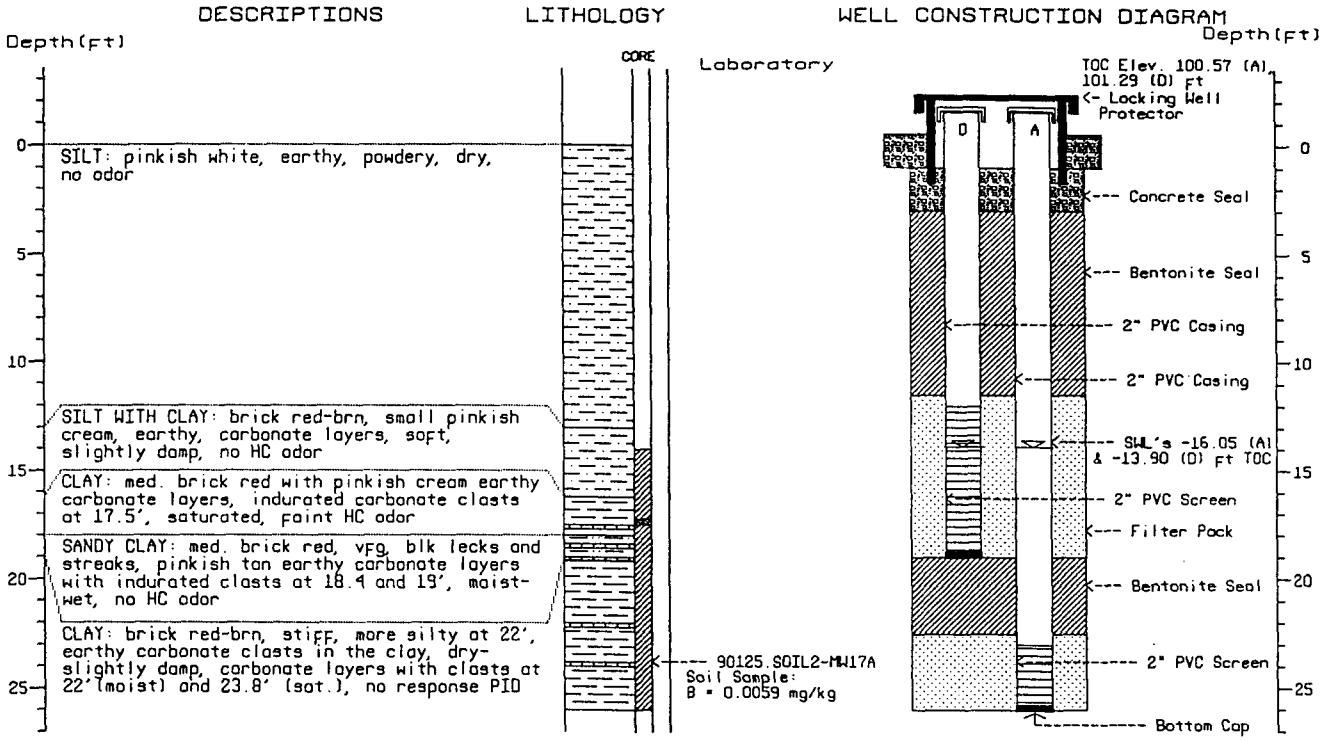


Western Water Consultants, Inc.

MONITORING WELLS MW-17A and MW-17D

LOCATION: Dowell Schlumberger, Artesia, New Mexico
32' N and 38' E of NE fence corner
T17S, R26E, Sec 9, SE 1/4, SW 1/4, SW 1/4
LOG: Western Water Consultants Inc. (Robin Daley)
DRILLER: Scarbourgh Drilling (Lane Scarborough)
STATE ENGINEER NO: NA
INSTALLATION DATE: March 31, 1995

WELL OWNER: Dowell Schlumberger Inc. (JN 90-125)
DRILLING METHOD: Air Rotary, 6.0" OD
CASING: 2" Dia. Flush Joint Sch. 40 PVC
SCREEN: Slotted Casing; 0.010 Inch Slots
FILTER PACK: 20/40 Mesh Silica Sand
WATER TABLE ELEVATIONS: 84.52 (A) & 84.49 (D)
(Reference Datum: Arbitrary = 100.00 feet)

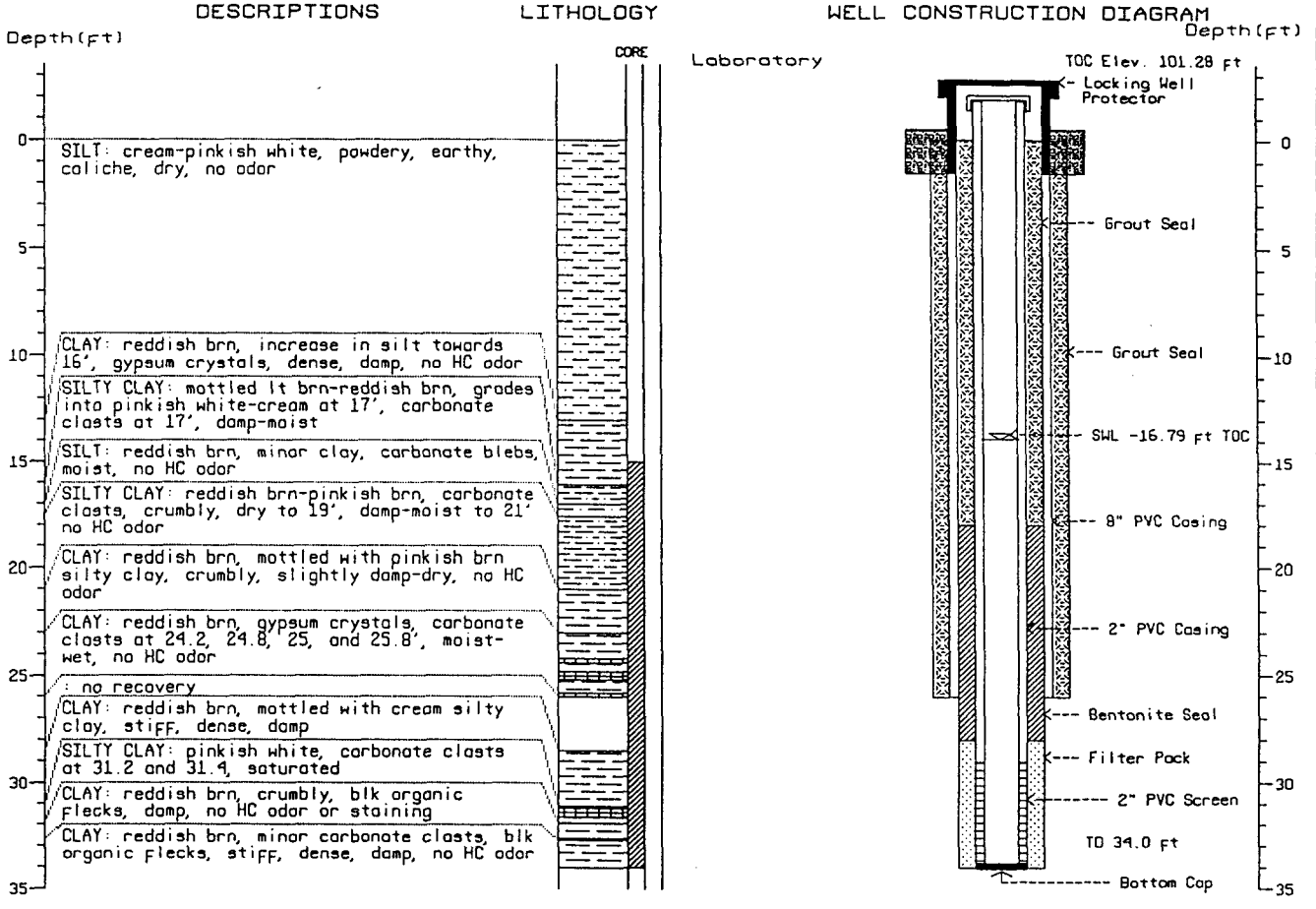


Western Water Consultants, Inc.

MONITORING WELL MW-17B

LOCATION: Dowell Schlumberger, Artesia, New Mexico
35' N and 42.5' E of NE fence corner
T17S, R26E, Sec 4, SE 1/4, SW 1/4, SW 1/4
LOG: Western Water Consultants Inc. (Kevin Mattson)
DRILLER: Scarbourgh Drilling (Lane Scarborough)
STATE ENGINEER NO: NA
INSTALLATION DATE: March 29, 1995

WELL OWNER: Dowell Schlumberger Inc (JN 90-125)
DRILLING METHOD: Air Rotary, 6.0" OD
CASING: 2" Dia Flush Joint Sch. 40 PVC
SCREEN: Slotted Casing; 0.010 Inch Slots
FILTER PACK: 20/40 Mesh Silica Sand
WATER TABLE ELEVATION: 84.49 (4/2/95)
(Reference Datum: Arbitrary = 100.00 feet)

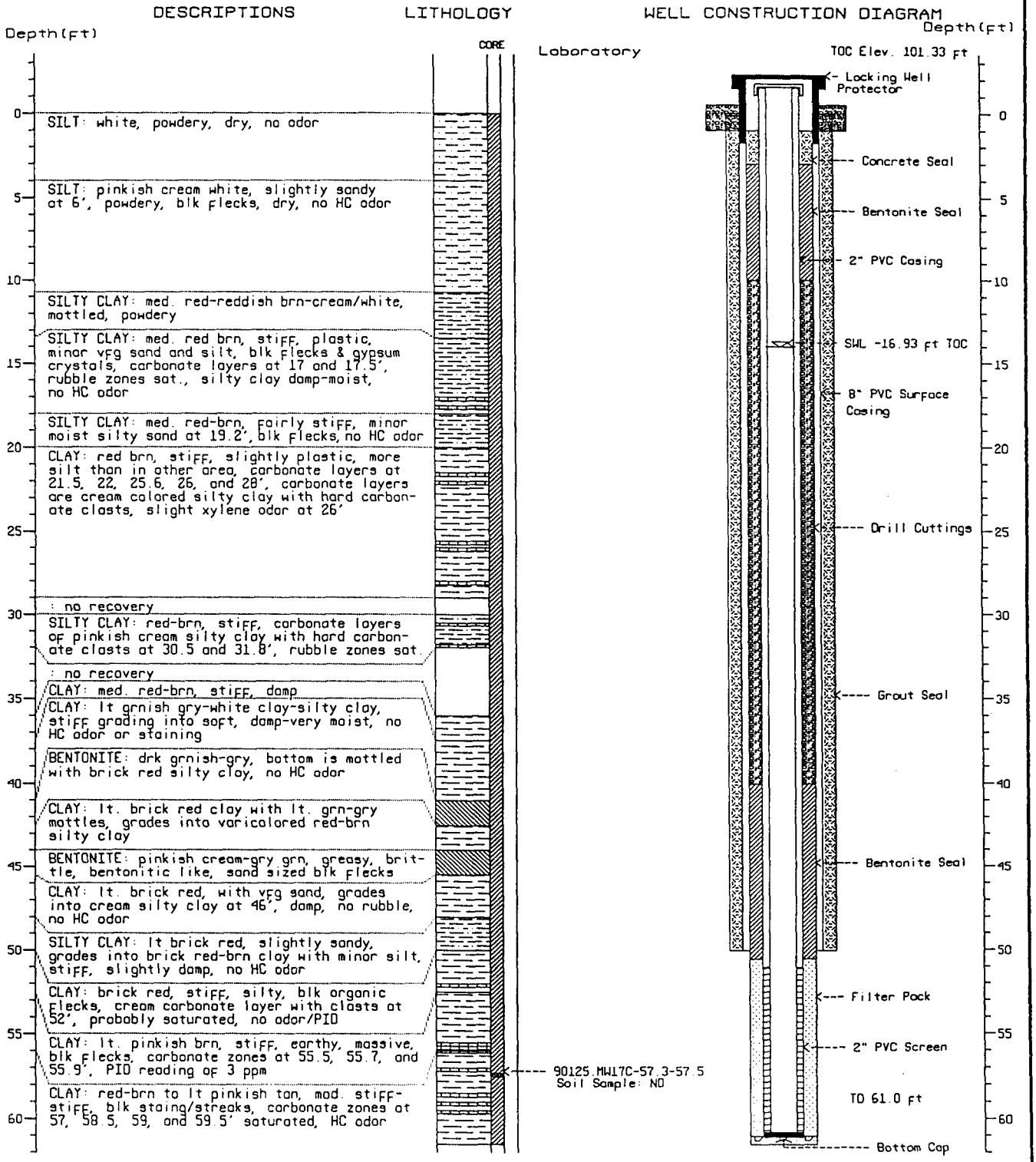


Western Water Consultants, Inc.

MONITORING WELL MW-17C

LOCATION: Dowell Schlumberger, Artesia, New Mexico
38' N and 47' E of NE fence corner
T17S, R26E, Sec 4, SE 1/4, SW 1/4, SW 1/4
LOG: Western Water Consultants Inc. (Robin Daley)
DRILLER: Scarbourgh Drilling (Lane Scarborough)
STATE ENGINEER NO: NA
INSTALLATION DATE: March 28, 1995

WELL OWNER: Dowell Schlumberger Inc. (JN 90-125)
DRILLING METHOD: Air Rotary, 6.0" OD
CASING: 2" Dia Flush Joint Sch. 40 PVC
SCREEN: Slotted Casing; 0.010 Inch Slots
FILTER PACK: 20/40 Mesh Silica Sand
WATER TABLE ELEVATION: 84.40 (4/2/95)
(Reference Datum Arbitrary = 100.00 feet)



Western Water Consultants, Inc.

MONITORING WELL MW-18

LOCATION: Dowell Schlumberger, Artesia, New Mexico
NE of site along N-S road (200' N of MW-19)
T17S, R26E, Sec 9, SE 1/4, SW 1/4, SW 1/4
LOG: Western Water Consultants Inc. (Robin Daley)
DRILLER: Scarbourgh Drilling (Lane Scarborough)
STATE ENGINEER NO: NA
INSTALLATION DATE: March 30, 1995

WELL OWNER: Dowell Schlumberger Inc. (JN 90-125)
DRILLING METHOD: Air Rotary, 6.0" OD
CASING: 2" Dia Flush Joint Sch. 40 PVC
SCREEN: Slotted Casing; 0.010 Inch Slots
FILTER PACK: 20/40 Mesh Silica Sand
WATER TABLE ELEVATION: 83.95 (9/2/95)
(Reference Datum: Arbitrary = 100.00 feet)

DESCRIPTIONS

Depth(ft)

0 — SILT: white, powdery, dry, no odor

5 — SILTY CLAY: lt pinkish tan, stiff, earthy cream carbonate blebs, gypsum crystals, gry lst frags., dry-moist, no HC odor

SILTY CLAY: earthy, powdery, cream-white carbonate with interbeds of med. red-brn silty clay, carbonate layers have lst clasts at 12, 12.5-12.8, 13, and 13.8' dry -damp, no HC odor

10 — CLAY: med. red brn, stiff, blk streaks, increase in silt content with depth, no HC odor

15 — SILTY CLAY: med. red-brn with interbeds of pink-cream carbonate layers, no HC odor

CLAY: med. red-brn to brick red, stiff, more silt and vfg sand from 17.5-18.5' (moist), minor carbonate blebs and blk flecks, sat. carbonate layer at 19.5, increase in silt to 20', soft

20 — SANDY CLAY: brick red-brn, vfg, wet, lt pinkish brn carbonate layers at 20.3 and 21.8', wet, carbonate layer at 22.1 (dry)

25 — CLAY: med. red-brn to brick red-brn, stiff, lt pinkish brn carbonate layers with clasts at 22.5 (dry), 25 (wet), 26.8 and 27.2 (wet), 28 and 28.5 (wet), and 30' (wet), no HC odor

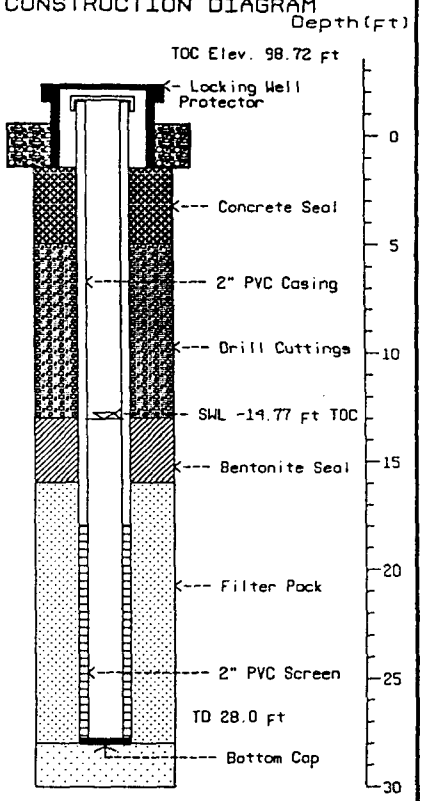
30

LITHOLOGY

CORE

Laboratory

WELL CONSTRUCTION DIAGRAM



Western Water Consultants, Inc.

MONITORING WELL MW-19

LOCATION: Dowell Schlumberger, Artesia, New Mexico
7' due west of SW corner of block 5
T17S, R26E, Sec 4, SE 1/4, SW 1/4, SW 1/4
LOG: Western Water Consultants Inc. (Kevin Mattson)
DRILLER: Scarbourgh Drilling (Lane Scarbourgh)
STATE ENGINEER NO: NA
INSTALLATION DATE: March 30, 1995

WELL OWNER: Dowell Schlumberger Inc. (JN 90-125)
DRILLING METHOD: Air Rotary, 6 0" OD
CASING: 2" Dia Flush Joint Sch. 40 PVC
SCREEN: Slotted Casing, 0.010 Inch Slots
FILTER PACK: 20/40 Mesh Silica Sand
WATER TABLE ELEVATION: 84.22 (4/2/95)
(Reference Datum: Arbitrary = 100.00 feet)

DESCRIPTIONS LITHOLOGY WELL CONSTRUCTION DIAGRAM

Depth(ft)

CORE

Laboratory

0 SILT: white, powdery, dry, no odor

SILTY CLAY: reddish brn-lt brn, dense, interbeds of white carbonate with clasts, gypsum crystals, silty at 8', no HC odor

5 SILTY CLAY: cream, grades into gryish brn at 12', mod. indurated layers, lst clasts, damp

SILTY CLAY: red-brn, mottled with cream silt, lst clasts, hard at 13', crumbly, dry-damp, no HC odor

10 CLAY: gry-reddish brn, mottled with cream silty clay, blk organic streaks, carbonate layer with clasts at 17', damp

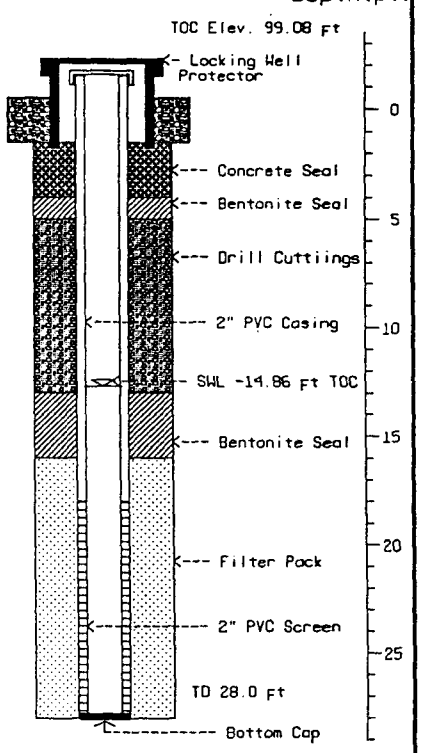
SILTY CLAY: reddish-brn, dense, carbonate layer with clasts at 17.5 (damp), 18 (moist), and 18.5' (dry), increase in silt at 18'

15 CLAY: reddish brn, minor silt, blk organic flecks, interbed of cream silty clay at 19.3', damp, no HC odor or staining

20 SILTY CLAY: reddish brn, gry blebs of silt, moist, sandy at 20.6', vfg, pinkish cream carbonate layers with clasts at 20.1 (sat.) and 21' (sat.), no HC odor

SILTY CLAY: cream-gryish cream -lt pinkish brn, carbonate clasts, angular, moist, carbonate layer at 22.25' (sat.), no HC odor

25 CLAY: reddish brn, stiff, dense, minor silt, blk organic flecks, carbonate layers with clasts at 24.4 (not sat.) and 27.8' (dry), clay is damp, more silt at 27.8', no HC odor



Western Water Consultants, Inc.

APPENDIX D

LABORATORY ANALYTICAL REPORTS

SOILS

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125MW17C-57.3-57.5 MW 17C (57.3 to 57.5 ft)
Project Number: 90125L.7 soil sample
Sample ID: L1327-25
Site / Project ID: Not Reported
GALP ID: 57070
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 11-APR-95					
Analysis Date: 11-APR-95 18:18					
Acetone	67-64-1	1	-	ug/Kg	100
Benzene	71-43-2	1	-	ug/Kg	5
Bromodichloromethane	75-27-4	1	-	ug/Kg	5
Bromoform	75-25-2	1	-	ug/Kg	5
Bromomethane	74-83-9	1	-	ug/Kg	10
2-Butanone	78-93-3	1	-	ug/Kg	100
Carbon disulfide	75-15-0	1	-	ug/Kg	100
Carbon tetrachloride	56-23-5	1	-	ug/Kg	5
Chlorobenzene	108-90-7	1	-	ug/Kg	5
Chlorodibromomethane	74-95-3	1	-	ug/Kg	5
Chloroethane	75-00-3	1	-	ug/Kg	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/Kg	10
Chloroform	67-66-3	1	-	ug/Kg	5
Chloromethane	74-87-3	1	-	ug/Kg	10
1,2-Dichlorobenzene	95-50-1	1	-	ug/Kg	5
1,3-Dichlorobenzene	541-73-1	1	-	ug/Kg	5
1,4-Dichlorobenzene	106-46-7	1	-	ug/Kg	5
1,1-Dichloroethane	75-35-4	1	-	ug/Kg	5
1,2-Dichloroethane	107-06-2	1	-	ug/Kg	5
1,1-Dichloroethene	75-34-3	1	-	ug/Kg	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/Kg	5
1,2-Dichloropropane	78-87-5	1	-	ug/Kg	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/Kg	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/Kg	5
Ethylbenzene	100-41-4	1	-	ug/Kg	5
2-Hexanone	591-78-6	1	-	ug/Kg	50
Methylene chloride	75-09-2	1	-	ug/Kg	5
4-Methyl-2-pentanone	108-10-1	1	-	ug/Kg	50
Styrene	100-42-5	1	-	ug/Kg	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/Kg	5
Tetrachloroethene	127-18-4	1	-	ug/Kg	5
Toluene	108-88-3	1	-	ug/Kg	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/Kg	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/Kg	5
Trichloroethene	79-01-6	1	-	ug/Kg	5
Trichlorofluoromethane	75-69-4	1	-	ug/Kg	5
Vinyl chloride	75-01-4	1	-	ug/Kg	2

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID:	90125MW17C-57.3-57.5
Project Number:	90125L.7
Sample ID:	L1327-25
Site / Project ID:	Not Reported
GALP ID:	57070
Collection Date:	03-APR-95
Received Date:	05-APR-95
Report Date:	20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Xylene (Total)	1330-20-7	1	-	ug/Kg	5
Dibromofluoromethane	SURROGATE	1	111	%	
Toluene-d8	SURROGATE	1	104	%	
4-Bromofluorobenzene	SURROGATE	1	94	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID:	90125.SOIL2-MW17A
Project Number:	90125L.7
Sample ID:	L1327-26
Site / Project ID:	Not Reported
GALP ID:	57071
Collection Date:	03-APR-95
Received Date:	05-APR-95
Report Date:	20-APR-95

MW-17AD (~17.5 feet) soil sample

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 11-APR-95					
Analysis Date: 11-APR-95 18:59					
Acetone	67-64-1	1	-	ug/Kg	100
Benzene	71-43-2	1	5.9	ug/Kg	5
Bromodichloromethane	75-27-4	1	-	ug/Kg	5
Bromoform	75-25-2	1	-	ug/Kg	5
Bromomethane	74-83-9	1	-	ug/Kg	10
2-Butanone	78-93-3	1	-	ug/Kg	100
Carbon disulfide	75-15-0	1	-	ug/Kg	100
Carbon tetrachloride	56-23-5	1	-	ug/Kg	5
Chlorobenzene	108-90-7	1	-	ug/Kg	5
Chlorodibromomethane	74-95-3	1	-	ug/Kg	5
Chloroethane	75-00-3	1	-	ug/Kg	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/Kg	10
Chloroform	67-66-3	1	-	ug/Kg	5
Chloromethane	74-87-3	1	-	ug/Kg	10
1,2-Dichlorobenzene	95-50-1	1	-	ug/Kg	5
1,3-Dichlorobenzene	541-73-1	1	-	ug/Kg	5
1,4-Dichlorobenzene	106-46-7	1	-	ug/Kg	5
1,1-Dichloroethane	75-35-4	1	-	ug/Kg	5
1,2-Dichloroethane	107-06-2	1	-	ug/Kg	5
1,1-Dichloroethene	75-34-3	1	-	ug/Kg	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/Kg	5
1,2-Dichloropropane	78-87-5	1	-	ug/Kg	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/Kg	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/Kg	5
Ethylbenzene	100-41-4	1	-	ug/Kg	5
2-Hexanone	591-78-6	1	-	ug/Kg	50
Methylene chloride	75-09-2	1	-	ug/Kg	5
4-Methyl-2-pentanone	108-10-1	1	-	ug/Kg	50
Styrene	100-42-5	1	-	ug/Kg	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/Kg	5
Tetrachloroethene	127-18-4	1	-	ug/Kg	5
Toluene	108-88-3	1	-	ug/Kg	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/Kg	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/Kg	5
Trichloroethene	79-01-6	1	-	ug/Kg	5
Trichlorofluoromethane	75-69-4	1	-	ug/Kg	5
Vinyl chloride	75-01-4	1	-	ug/Kg	2

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.SOIL2-MW17A
Project Number: 90125L.7
Sample ID: L1327-26
Site / Project ID: Not Reported
GALP ID: 57071
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Xylene (Total)	1330-20-7	1	-	ug/Kg	5
Dibromofluoromethane	SURROGATE	1	108	%	
Toluene-d8	SURROGATE	1	92	%	
4-Bromofluorobenzene	SURROGATE	1	94	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

APPENDIX E

LABORATORY ANALYTICAL REPORTS

GROUND WATER

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.1 MW-1
Project Number: 90125L.7
Sample ID: L1327-15
Site / Project ID: Not Reported
GALP ID: 57329
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 10-APR-95					
Analysis Date: 10-APR-95 18:53					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	-	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	-	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	-	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	-	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.1
Project Number: 90125L.7
Sample ID: L1327-15
Site / Project ID: Not Reported
GALP ID: 57329
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	-	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	-	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	89	%	
Toluene-d8	SURROGATE	1	88	%	
4-Bromofluorobenzene	SURROGATE	1	90	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.2 MW-2
Project Number: 90125L.7
Sample ID: L1327-18
Site / Project ID: Not Reported
GALP ID: 57402
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 12-APR-95					
Analysis Date: 12-APR-95 17:52					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	50	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	26	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	-	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	-	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.2
Project Number: 90125L.7
Sample ID: L1327-18
Site / Project ID: Not Reported
GALP ID: 57402
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	35	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	-	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	98	%	
Toluene-d8	SURROGATE	1	101	%	
4-Bromofluorobenzene	SURROGATE	1	96	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.3 MW-3
Project Number: 90125L.7
Sample ID: L1327-22
Site / Project ID: Not Reported
GALP ID: 57404
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
8260 Method 8240					
Preparation Date: 13-APR-95					
Analysis Date: 13-APR-95 16:35					
Acetone	67-64-1	5	-	ug/L	500
Acetonitrile	75-05-8	5	-	ug/L	500
Acrolein	107-02-8	5	-	ug/L	500
Acrylonitrile	107-13-1	5	-	ug/L	500
Allyl chloride	107-05-1	5	-	ug/L	25
Benzene	71-43-2	5	47	ug/L	25
Benzyl chloride	100-44-7	5	-	ug/L	500
Bromodichloromethane	75-27-4	5	-	ug/L	25
Bromoform	75-25-2	5	-	ug/L	25
Bromomethane	74-83-9	5	-	ug/L	50
2-Butanone	78-93-3	5	-	ug/L	500
Carbon disulfide	75-15-0	5	-	ug/L	500
Carbon tetrachloride	56-23-5	5	-	ug/L	25
Chlorobenzene	108-90-7	5	-	ug/L	25
Chlorodibromomethane	74-95-3	5	-	ug/L	25
Chloroethane	75-00-3	5	-	ug/L	50
2-Chloroethyl vinyl ether	110-75-8	5	-	ug/L	50
Chloroform	67-66-3	5	-	ug/L	25
Chloromethane	74-87-3	5	-	ug/L	50
Chloroprene	126-99-8	5	-	ug/L	25
1,2-Dibromo-3-chloropropane	96-12-8	5	-	ug/L	500
1,2-Dibromoethane	106-93-4	5	-	ug/L	25
Dibromomethane	74-95-3	5	-	ug/L	25
1,4-Dichloro-2-butene	764-41-0	5	-	ug/L	500
Dichlorodifluoromethane	75-71-8	5	-	ug/L	50
1,1-Dichloroethane	75-35-4	5	100	ug/L	25
1,2-Dichloroethane	107-06-2	5	-	ug/L	25
1,1-Dichloroethene	75-34-3	5	110	ug/L	25
trans-1,2-Dichloroethene	156-60-5	5	-	ug/L	25
1,2-Dichloropropane	78-87-5	5	-	ug/L	25
cis-1,3-Dichloropropene	10061-01-5	5	-	ug/L	25
trans-1,3-Dichloropropene	10061-02-6	5	-	ug/L	25
Ethylbenzene	100-41-4	5	450	ug/L	25
Ethyl methacrylate	97-63-2	5	-	ug/L	25
2-Hexanone	591-78-6	5	-	ug/L	250
Isobutyl alcohol	78-83-1	5	-	ug/L	500
Methacrylonitrile	126-98-7	5	-	ug/L	500

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.3
Project Number: 90125L.7
Sample ID: L1327-22
Site / Project ID: Not Reported
GALP ID: 57404
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	5	-	ug/L	25
Methyl iodide	74-88-4	5	-	ug/L	25
Methyl methacrylate	80-62-6	5	-	ug/L	250
4-Methyl-2-pentanone	108-10-1	5	-	ug/L	250
Pentachloroethane	76-01-7	5	-	ug/L	50
Propionitrile	107-12-0	5	-	ug/L	500
Styrene	100-42-5	5	-	ug/L	25
1,1,1,2-Tetrachloroethane	630-20-6	5	-	ug/L	25
1,1,2,2-Tetrachloroethane	79-34-5	5	-	ug/L	25
Tetrachloroethene	127-18-4	5	-	ug/L	25
Toluene	108-88-3	5	-	ug/L	25
1,1,1-Trichloroethane	71-55-6	5	-	ug/L	25
1,1,2-Trichloroethane	79-00-5	5	-	ug/L	25
Trichloroethene	79-01-6	5	150	ug/L	25
1,2,3-Trichloropropane	96-18-4	5	-	ug/L	25
Vinyl acetate	108-05-4	5	-	ug/L	250
Vinyl chloride	75-01-4	5	-	ug/L	10
Xylene (Total)	1330-20-7	5	1300	ug/L	25
Dibromofluoromethane	SURROGATE	1	101	%	
Toluene-d8	SURROGATE	1	99	%	
4-Bromofluorobenzene	SURROGATE	1	96	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.A MW-3 duplicate
Project Number: 90125L.7
Sample ID: L1327-23
Site / Project ID: Not Reported
GALP ID: 57405
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 13-APR-95					
Analysis Date: 13-APR-95 15:53					
Acetone	67-64-1	5	-	ug/L	500
Acetonitrile	75-05-8	5	-	ug/L	500
Acrolein	107-02-8	5	-	ug/L	500
Acrylonitrile	107-13-1	5	-	ug/L	500
Allyl chloride	107-05-1	5	-	ug/L	25
Benzene	71-43-2	5	47	ug/L	25
Benzyl chloride	100-44-7	5	-	ug/L	500
Bromodichloromethane	75-27-4	5	-	ug/L	25
Bromoform	75-25-2	5	-	ug/L	25
Bromomethane	74-83-9	5	-	ug/L	50
2-Butanone	78-93-3	5	-	ug/L	500
Carbon disulfide	75-15-0	5	-	ug/L	500
Carbon tetrachloride	56-23-5	5	-	ug/L	25
Chlorobenzene	108-90-7	5	-	ug/L	25
Chlorodibromomethane	74-95-3	5	-	ug/L	25
Chloroethane	75-00-3	5	-	ug/L	50
2-Chloroethyl vinyl ether	110-75-8	5	-	ug/L	50
Chloroform	67-66-3	5	-	ug/L	25
Chloromethane	74-87-3	5	-	ug/L	50
Chloroprene	126-99-8	5	-	ug/L	25
1,2-Dibromo-3-chloropropane	96-12-8	5	-	ug/L	500
1,2-Dibromoethane	106-93-4	5	-	ug/L	25
Dibromomethane	74-95-3	5	-	ug/L	25
1,4-Dichloro-2-butene	764-41-0	5	-	ug/L	500
Dichlorodifluoromethane	75-71-8	5	-	ug/L	50
1,1-Dichloroethane	75-35-4	5	100	ug/L	25
1,2-Dichloroethane	107-06-2	5	-	ug/L	25
1,1-Dichloroethene	75-34-3	5	120	ug/L	25
trans-1,2-Dichloroethene	156-60-5	5	-	ug/L	25
1,2-Dichloropropane	78-87-5	5	-	ug/L	25
cis-1,3-Dichloropropene	10061-01-5	5	-	ug/L	25
trans-1,3-Dichloropropene	10061-02-6	5	-	ug/L	25
Ethylbenzene	100-41-4	5	450	ug/L	25
Ethyl methacrylate	97-63-2	5	-	ug/L	25
2-Hexanone	591-78-6	5	-	ug/L	250
Isobutyl alcohol	78-83-1	5	-	ug/L	500
Methacrylonitrile	126-98-7	5	-	ug/L	500

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.A
Project Number: 90125L.7
Sample ID: L1327-23
Site / Project ID: Not Reported
GALP ID: 57405
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	5	-	ug/L	25
Methyl iodide	74-88-4	5	-	ug/L	25
Methyl methacrylate	80-62-6	5	-	ug/L	250
4-Methyl-2-pentanone	108-10-1	5	-	ug/L	250
Pentachloroethane	76-01-7	5	-	ug/L	50
Propionitrile	107-12-0	5	-	ug/L	500
Styrene	100-42-5	5	-	ug/L	25
1,1,1,2-Tetrachloroethane	630-20-6	5	-	ug/L	25
1,1,2,2-Tetrachloroethane	79-34-5	5	-	ug/L	25
Tetrachloroethene	127-18-4	5	-	ug/L	25
Toluene	108-88-3	5	-	ug/L	25
1,1,1-Trichloroethane	71-55-6	5	-	ug/L	25
1,1,2-Trichloroethane	79-00-5	5	-	ug/L	25
Trichloroethene	79-01-6	5	150	ug/L	25
1,2,3-Trichloropropane	96-18-4	5	-	ug/L	25
Vinyl acetate	108-05-4	5	-	ug/L	250
Vinyl chloride	75-01-4	5	-	ug/L	10
Xylene (Total)	1330-20-7	5	1200	ug/L	25
Dibromofluoromethane	SURROGATE	1	104	%	
Toluene-d8	SURROGATE	1	98	%	
4-Bromofluorobenzene	SURROGATE	1	99	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.4 MW-4
Project Number: 90125L.7
Sample ID: L1327-17
Site / Project ID: Not Reported
GALP ID: 57346
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 10-APR-95					
Analysis Date: 10-APR-95 20:18					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	100	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	-	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	-	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	190	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.4
Project Number: 90125L.7
Sample ID: L1327-17
Site / Project ID: Not Reported
GALP ID: 57346
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	-	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	-	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	92	%	
Toluene-d8	SURROGATE	1	93	%	
4-Bromofluorobenzene	SURROGATE	1	97	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.5 MW-5
Project Number: 90125L.7
Sample ID: L1327-16
Site / Project ID: Not Reported
GALP ID: 58487
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 21-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
W846 Method 8240					
Preparation Date: 10-APR-95					
Analysis Date: 10-APR-95 19:36					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	270	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	-	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	-	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	87	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

QUANT FOR BENZENE EXCEEDS INSTRUMENT LINEAR RANGE SEE DL FOR CORRECT QUANT

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.5
Project Number: 90125L.7
Sample ID: L1327-16
Site / Project ID: Not Reported
GALP ID: 58487
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 21-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	62	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	15	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	80	%	
Toluene-d8	SURROGATE	1	83	%	
4-Bromofluorobenzene	SURROGATE	1	82	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

QUANT FOR BENZENE EXCEEDS INSTRUMENT LINEAR RANGE SEE DL FOR CORRECT QUANT

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID:	Sample MW-5 dilution
Project Number:	Not Reported
Sample ID:	L1327-16DL
Site / Project ID:	Not Reported
GALP ID:	58470
Collection Date:	Not Reported
Received Date:	20-APR-95
Report Date:	20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 11-APR-95					
Analysis Date: 11-APR-95 15:23					
Acetone	67-64-1	5	-	ug/L	500
Acetonitrile	75-05-8	5	-	ug/L	500
Acrolein	107-02-8	5	-	ug/L	500
Acrylonitrile	107-13-1	5	-	ug/L	500
Allyl chloride	107-05-1	5	-	ug/L	500
Benzene	71-43-2	5	390	ug/L	25
Benzyl chloride	100-44-7	5	-	ug/L	25
Bromodichloromethane	75-27-4	5	-	ug/L	500
Bromoform	75-25-2	5	-	ug/L	25
Bromomethane	74-83-9	5	-	ug/L	25
2-Butanone	78-93-3	5	-	ug/L	50
Carbon disulfide	75-15-0	5	-	ug/L	500
Carbon tetrachloride	56-23-5	5	-	ug/L	500
Chlorobenzene	108-90-7	5	-	ug/L	25
Chlorodibromomethane	74-95-3	5	-	ug/L	25
Chloroethane	75-00-3	5	-	ug/L	25
2-Chloroethyl vinyl ether	110-75-8	5	-	ug/L	50
Chloroform	67-66-3	5	-	ug/L	50
Chloromethane	74-87-3	5	-	ug/L	25
Chloroprene	126-99-8	5	-	ug/L	50
1,2-Dibromo-3-chloropropane	96-12-8	5	-	ug/L	25
1,2-Dibromoethane	106-93-4	5	-	ug/L	500
Dibromomethane	74-95-3	5	-	ug/L	25
1,4-Dichloro-2-butene	764-41-0	5	-	ug/L	25
Dichlorodifluoromethane	75-71-8	5	-	ug/L	500
1,1-Dichloroethane	75-35-4	5	-	ug/L	50
1,2-Dichloroethane	107-06-2	5	-	ug/L	25
1,1-Dichloroethene	75-34-3	5	-	ug/L	25
trans-1,2-Dichloroethene	156-60-5	5	-	ug/L	25
1,2-Dichloropropane	78-87-5	5	-	ug/L	25
cis-1,3-Dichloropropene	10061-01-5	5	-	ug/L	25
trans-1,3-Dichloropropene	10061-02-6	5	-	ug/L	25
Ethylbenzene	100-41-4	5	130	ug/L	25
Ethyl methacrylate	97-63-2	5	-	ug/L	25
2-Hexanone	591-78-6	5	-	ug/L	250
Isobutyl alcohol	78-83-1	5	-	ug/L	500
Methacrylonitrile	126-98-7	5	-	ug/L	500

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: Sample
Project Number: Not Reported
Sample ID: L1327-160L
Site / Project ID: Not Reported
GALP ID: 58470
Collection Date: Not Reported
Received Date: 20-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	5	-	ug/L	25
Methyl iodide	74-88-4	5	-	ug/L	25
Methyl methacrylate	80-62-6	5	-	ug/L	250
4-Methyl-2-pentanone	108-10-1	5	-	ug/L	250
Pentachloroethane	76-01-7	5	-	ug/L	50
Propionitrile	107-12-0	5	-	ug/L	500
Styrene	100-42-5	5	-	ug/L	25
1,1,1,2-Tetrachloroethane	630-20-6	5	-	ug/L	25
1,1,2,2-Tetrachloroethane	79-34-5	5	-	ug/L	25
Tetrachloroethene	127-18-4	5	90	ug/L	25
Toluene	108-88-3	5	-	ug/L	25
1,1,1-Trichloroethane	71-55-6	5	-	ug/L	25
1,1,2-Trichloroethane	79-00-5	5	-	ug/L	25
Trichloroethene	79-01-6	5	-	ug/L	25
1,2,3-Trichloropropane	96-18-4	5	-	ug/L	25
Vinyl acetate	108-05-4	5	-	ug/L	250
Vinyl chloride	75-01-4	5	-	ug/L	10
Xylene (Total)	1330-20-7	5	-	ug/L	25
Dibromofluoromethane	SURROGATE	1	107	%	
Toluene-d8	SURROGATE	1	107	%	
4-Bromofluorobenzene	SURROGATE	1	101	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.6 MW-6
Project Number: 90125L.7
Sample ID: L1327-34
Site / Project ID: Not Reported
GALP ID: 58477
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 10-APR-95					
Analysis Date: 10-APR-95 16:04					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	-	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	15	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	74	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	-	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-8

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.6
Project Number: 90125L.7
Sample ID: L1327-34
Site / Project ID: Not Reported
GALP ID: 58477
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	48	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	-	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	90	%	
Toluene-d8	SURROGATE	1	89	%	
4-Bromofluorobenzene	SURROGATE	1	94	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-8

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

MW-7

Client ID: 90125.7
Project Number: 90125L.7
Sample ID: L1327-9
Site / Project ID: Not Reported
GALP ID: 58485
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 21-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 12-APR-95					
Analysis Date: 12-APR-95 15:42					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	5.7	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	29	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	250	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	-	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

1,1-DICHLOROETHENE AND TETRACHLOROETHENE EXCEED INSTRUMENT LINEAR RANGE SEE DL F

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.7
Project Number: 90125L.7
Sample ID: L1327-9
Site / Project ID: Not Reported
GALP ID: 58485
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 21-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	230	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	38	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	99	%	
Toluene-d8	SURROGATE	1	94	%	
4-Bromofluorobenzene	SURROGATE	1	94	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

1,1-DICHLOROETHENE AND TETRACHLOROETHENE EXCEED INSTRUMENT LINEAR RANGE SEE DL F

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID:	Re-analysis / Re-ext MW-7 dilution
Project Number:	Not Reported
Sample ID:	WG1831-7
Site / Project ID:	Not Reported
GALP ID:	58483
Collection Date:	Not Reported
Received Date:	19-APR-95
Report Date:	21-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 13-APR-95					
Analysis Date: 13-APR-95 14:30					
Acetone	67-64-1	5	-	ug/L	2500
Acetonitrile	75-05-8	5	-	ug/L	2500
Acrolein	107-02-8	5	-	ug/L	2500
Acrylonitrile	107-13-1	5	-	ug/L	2500
Allyl chloride	107-05-1	5	-	ug/L	130
Benzene	71-43-2	5	-	ug/L	130
Benzyl chloride	100-44-7	5	-	ug/L	2500
Bromodichloromethane	75-27-4	5	-	ug/L	130
Bromoform	75-25-2	5	-	ug/L	130
Bromomethane	74-83-9	5	-	ug/L	250
2-Butanone	78-93-3	5	-	ug/L	2500
Carbon disulfide	75-15-0	5	-	ug/L	2500
Carbon tetrachloride	56-23-5	5	-	ug/L	130
Chlorobenzene	108-90-7	5	-	ug/L	130
Chlorodibromomethane	74-95-3	5	-	ug/L	130
Chloroethane	75-00-3	5	-	ug/L	250
2-Chloroethyl vinyl ether	110-75-8	5	-	ug/L	250
Chloroform	67-66-3	5	-	ug/L	130
Chloromethane	74-87-3	5	-	ug/L	250
Chloroprene	126-99-8	5	-	ug/L	130
1,2-Dibromo-3-chloropropane	96-12-8	5	-	ug/L	2500
1,2-Dibromoethane	106-93-4	5	-	ug/L	130
Dibromomethane	74-95-3	5	-	ug/L	130
1,4-Dichloro-2-butene	764-41-0	5	-	ug/L	2500
Dichlorodifluoromethane	75-71-8	5	-	ug/L	250
1,1-Dichloroethane	75-35-4	5	-	ug/L	130
1,2-Dichloroethane	107-06-2	5	-	ug/L	130
1,1-Dichloroethene	75-34-3	5	290	ug/L	130
trans-1,2-Dichloroethene	156-60-5	5	-	ug/L	130
1,2-Dichloropropane	78-87-5	5	-	ug/L	130
cis-1,3-Dichloropropene	10061-01-5	5	-	ug/L	130
trans-1,3-Dichloropropene	10061-02-6	5	-	ug/L	130
Ethylbenzene	100-41-4	5	-	ug/L	130
Ethyl methacrylate	97-63-2	5	-	ug/L	130
2-Hexanone	591-78-6	5	-	ug/L	1300
Isobutyl alcohol	78-83-1	5	-	ug/L	2500
Methacrylonitrile	126-98-7	5	-	ug/L	2500

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

L1327-9DL

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: Re-analysis / Re-ext
Project Number: Not Reported
Sample ID: WG1831-7
Site / Project ID: Not Reported
GALP ID: 58483
Collection Date: Not Reported
Received Date: 19-APR-95
Report Date: 21-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	5	-	ug/L	130
Methyl iodide	74-88-4	5	-	ug/L	130
Methyl methacrylate	80-62-6	5	-	ug/L	1300
4-Methyl-2-pentanone	108-10-1	5	-	ug/L	1300
Pentachloroethane	76-01-7	5	-	ug/L	250
Propionitrile	107-12-0	5	-	ug/L	2500
Styrene	100-42-5	5	-	ug/L	130
1,1,1,2-Tetrachloroethane	630-20-6	5	-	ug/L	130
1,1,2,2-Tetrachloroethane	79-34-5	5	-	ug/L	130
Tetrachloroethene	127-18-4	5	260	ug/L	130
Toluene	108-88-3	5	-	ug/L	130
1,1,1-Trichloroethane	71-55-6	5	-	ug/L	130
1,1,2-Trichloroethane	79-00-5	5	-	ug/L	130
Trichloroethene	79-01-6	5	-	ug/L	130
1,2,3-Trichloropropane	96-18-4	5	-	ug/L	130
Vinyl acetate	108-05-4	5	-	ug/L	1300
Vinyl chloride	75-01-4	5	-	ug/L	50
Xylene (Total)	1330-20-7	5	-	ug/L	130
Dibromofluoromethane	SURROGATE	1	102	%	
Toluene-d8	SURROGATE	1	98	%	
4-Bromofluorobenzene	SURROGATE	1	91	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

L1327-90L

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.8 MW-8
Project Number: 90125L.7
Sample ID: L1327-35
Site / Project ID: Not Reported
GALP ID: 58478
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 11-APR-95					
Analysis Date: 11-APR-95 13:19					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	-	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	5.5	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	74	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	-	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-10

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.8
Project Number: 90125L.7
Sample ID: L1327-35
Site / Project ID: Not Reported
GALP ID: 58478
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	17	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	8.3	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	102	%	
Toluene-d8	SURROGATE	1	101	%	
4-Bromofluorobenzene	SURROGATE	1	103	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-10

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.9 MW-9
Project Number: 90125L.7
Sample ID: L1327-36
Site / Project ID: Not Reported
GALP ID: 58479
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 11-APR-95					
Analysis Date: 11-APR-95 12:38					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	-	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	15	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	-	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	-	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-11

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.9
Project Number: 90125L.7
Sample ID: L1327-36
Site / Project ID: Not Reported
GALP ID: 58479
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	-	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	-	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	100	%	
Toluene-d8	SURROGATE	1	100	%	
4-Bromofluorobenzene	SURROGATE	1	97	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-11

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.10 MW-10
Project Number: 90125L.7
Sample ID: L1327-37
Site / Project ID: Not Reported
GALP ID: 58480
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Separation Date: 11-APR-95					
Analysis Date: 11-APR-95 14:00					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	-	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	-	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	70	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	-	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-12

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.10
Project Number: 90125L.7
Sample ID: L1327-37
Site / Project ID: Not Reported
GALP ID: 58480
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	-	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	-	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	91	%	
Toluene-d8	SURROGATE	1	91	%	
4-Bromofluorobenzene	SURROGATE	1	88	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-12

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.11 MW-11
Project Number: 90125L.7
Sample ID: L1327-13
Site / Project ID: Not Reported
GALP ID: 58486
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 21-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 12-APR-95					
Analysis Date: 12-APR-95 16:24					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	8.5	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	62	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	380	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	-	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit
1-DICHLOROETHENE AND TETRACHLOROETHENE EXCEED INSTRUMENTS LINEAR RANGE SEE DL

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.11
Project Number: 90125L.7
Sample ID: L1327-13
Site / Project ID: Not Reported
GALP ID: 58486
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 21-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	380	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	13	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	100	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	118	%	
Toluene-d8	SURROGATE	1	114	%	
4-Bromofluorobenzene	SURROGATE	1	111	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

1,1-DICHLOROETHENE AND TETRACHLOROETHENE EXCEED INSTRUMENTS LINEAR RANGE SEE DL

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: Re-analysis / Re-ext MW-11 dilution
Project Number: Not Reported
Sample ID: WG1831-8
Site / Project ID: Not Reported
GALP ID: 58484
Collection Date: Not Reported
Received Date: 19-APR-95
Report Date: 21-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 13-APR-95					
Analysis Date: 13-APR-95 15:12					
Acetone	67-64-1	5	-	ug/L	2500
Acetonitrile	75-05-8	5	-	ug/L	2500
Acrolein	107-02-8	5	-	ug/L	2500
Acrylonitrile	107-13-1	5	-	ug/L	2500
Allyl chloride	107-05-1	5	-	ug/L	130
Benzene	71-43-2	5	-	ug/L	130
Benzyl chloride	100-44-7	5	-	ug/L	2500
Bromodichloromethane	75-27-4	5	-	ug/L	130
Bromoform	75-25-2	5	-	ug/L	130
Bromomethane	74-83-9	5	-	ug/L	250
2-Butanone	78-93-3	5	-	ug/L	2500
Carbon disulfide	75-15-0	5	-	ug/L	2500
Carbon tetrachloride	56-23-5	5	-	ug/L	130
Chlorobenzene	108-90-7	5	-	ug/L	130
Chlorodibromomethane	74-95-3	5	-	ug/L	130
Chloroethane	75-00-3	5	-	ug/L	250
2-Chloroethyl vinyl ether	110-75-8	5	-	ug/L	250
Chloroform	67-66-3	5	-	ug/L	130
Chloromethane	74-87-3	5	-	ug/L	250
Chloroprene	126-99-8	5	-	ug/L	130
1,2-Dibromo-3-chloropropane	96-12-8	5	-	ug/L	2500
1,2-Dibromoethane	106-93-4	5	-	ug/L	130
Dibromomethane	74-95-3	5	-	ug/L	130
1,4-Dichloro-2-butene	764-41-0	5	-	ug/L	2500
Dichlorodifluoromethane	75-71-8	5	-	ug/L	250
1,1-Dichloroethane	75-35-4	5	-	ug/L	130
1,2-Dichloroethane	107-06-2	5	-	ug/L	130
1,1-Dichloroethene	75-34-3	5	410	ug/L	130
trans-1,2-Dichloroethene	156-60-5	5	-	ug/L	130
1,2-Dichloropropane	78-87-5	5	-	ug/L	130
cis-1,3-Dichloropropene	10061-01-5	5	-	ug/L	130
trans-1,3-Dichloropropene	10061-02-6	5	-	ug/L	130
Ethylbenzene	100-41-4	5	-	ug/L	130
Ethyl methacrylate	97-63-2	5	-	ug/L	130
2-Hexanone	591-78-6	5	-	ug/L	1300
Isobutyl alcohol	78-83-1	5	-	ug/L	2500
Methacrylonitrile	126-98-7	5	-	ug/L	2500

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

1327-13DL

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID:	Re-analysis / Re-ext
Project Number:	Not Reported
Sample ID:	WG1831-8
Site / Project ID:	Not Reported
GALP ID:	58484
Collection Date:	Not Reported
Received Date:	19-APR-95
Report Date:	21-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	5	-	ug/L	130
Methyl iodide	74-88-4	5	-	ug/L	130
Methyl methacrylate	80-62-6	5	-	ug/L	1300
4-Methyl-2-pentanone	108-10-1	5	-	ug/L	1300
Pentachloroethane	76-01-7	5	-	ug/L	250
Propionitrile	107-12-0	5	-	ug/L	2500
Styrene	100-42-5	5	-	ug/L	130
1,1,1,2-Tetrachloroethane	630-20-6	5	-	ug/L	130
1,1,2,2-Tetrachloroethane	79-34-5	5	-	ug/L	130
Tetrachloroethene	127-18-4	5	430	ug/L	130
Toluene	108-88-3	5	-	ug/L	130
1,1,1-Trichloroethane	71-55-6	5	-	ug/L	130
1,1,2-Trichloroethane	79-00-5	5	-	ug/L	130
Trichloroethene	79-01-6	5	-	ug/L	130
1,2,3-Trichloropropane	96-18-4	5	-	ug/L	130
Vinyl acetate	108-05-4	5	-	ug/L	1300
Vinyl chloride	75-01-4	5	-	ug/L	50
Xylene (Total)	1330-20-7	5	-	ug/L	130
Dibromofluoromethane	SURROGATE	1	105	%	
Toluene-d8	SURROGATE	1	101	%	
4-Bromofluorobenzene	SURROGATE	1	95	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

1327-13DL

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.12 MW-12
Project Number: 90125L.7
Sample ID: L1327-14
Site / Project ID: Not Reported
GALP ID: 57401
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 12-APR-95					
Analysis Date: 12-APR-95 17:05					
Acetone	67-64-1	5	-	ug/L	500
Acetonitrile	75-05-8	5	-	ug/L	500
Acrolein	107-02-8	5	-	ug/L	500
Acrylonitrile	107-13-1	5	-	ug/L	500
Allyl chloride	107-05-1	5	-	ug/L	25
Benzene	71-43-2	5	150	ug/L	25
Benzyl chloride	100-44-7	5	-	ug/L	500
Bromodichloromethane	75-27-4	5	-	ug/L	25
Bromoform	75-25-2	5	-	ug/L	25
Bromomethane	74-83-9	5	-	ug/L	50
2-Butanone	78-93-3	5	-	ug/L	500
Carbon disulfide	75-15-0	5	-	ug/L	500
Carbon tetrachloride	56-23-5	5	-	ug/L	25
Chlorobenzene	108-90-7	5	-	ug/L	25
Chlorodibromomethane	74-95-3	5	-	ug/L	25
Chloroethane	75-00-3	5	-	ug/L	50
2-Chloroethyl vinyl ether	110-75-8	5	-	ug/L	50
Chloroform	67-66-3	5	-	ug/L	25
Chloromethane	74-87-3	5	-	ug/L	50
Chloroprene	126-99-8	5	-	ug/L	25
1,2-Dibromo-3-chloropropane	96-12-8	5	-	ug/L	500
1,2-Dibromoethane	106-93-4	5	-	ug/L	25
Dibromomethane	74-95-3	5	-	ug/L	25
1,4-Dichloro-2-butene	764-41-0	5	-	ug/L	500
Dichlorodifluoromethane	75-71-8	5	-	ug/L	50
1,1-Dichloroethane	75-35-4	5	160	ug/L	25
1,2-Dichloroethane	107-06-2	5	-	ug/L	25
1,1-Dichloroethene	75-34-3	5	110	ug/L	25
trans-1,2-Dichloroethene	156-60-5	5	-	ug/L	25
1,2-Dichloropropane	78-87-5	5	-	ug/L	25
cis-1,3-Dichloropropene	10061-01-5	5	-	ug/L	25
trans-1,3-Dichloropropene	10061-02-6	5	-	ug/L	25
Ethylbenzene	100-41-4	5	790	ug/L	25
Ethyl methacrylate	97-63-2	5	-	ug/L	25
2-Hexanone	591-78-6	5	-	ug/L	250
Isobutyl alcohol	78-83-1	5	-	ug/L	500
Methacrylonitrile	126-98-7	5	-	ug/L	500

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.12
Project Number: 90125L.7
Sample ID: L1327-14
Site / Project ID: Not Reported
GALP ID: 57401
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	5	-	ug/L	25
Methyl iodide	74-88-4	5	-	ug/L	25
Methyl methacrylate	80-62-6	5	-	ug/L	250
4-Methyl-2-pentanone	108-10-1	5	-	ug/L	250
Pentachloroethane	76-01-7	5	-	ug/L	50
Propionitrile	107-12-0	5	-	ug/L	500
Styrene	100-42-5	5	-	ug/L	25
1,1,1,2-Tetrachloroethane	630-20-6	5	-	ug/L	25
1,1,2,2-Tetrachloroethane	79-34-5	5	-	ug/L	25
Tetrachloroethene	127-18-4	5	56	ug/L	25
Toluene	108-88-3	5	200	ug/L	25
1,1,1-Trichloroethane	71-55-6	5	96	ug/L	25
1,1,2-Trichloroethane	79-00-5	5	-	ug/L	25
Trichloroethene	79-01-6	5	43	ug/L	25
1,2,3-Trichloropropane	96-18-4	5	-	ug/L	25
Vinyl acetate	108-05-4	5	-	ug/L	250
Vinyl chloride	75-01-4	5	-	ug/L	10
Xylene (Total)	1330-20-7	5	1100	ug/L	25
Dibromofluoromethane	SURROGATE	1	104	%	
Toluene-d8	SURROGATE	1	100	%	
4-Bromofluorobenzene	SURROGATE	1	95	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.13 MW-13
Project Number: 90125L.7
Sample ID: L1327-39
Site / Project ID: Not Reported
GALP ID: 58482
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 11-APR-95					
Analysis Date: 11-APR-95 16:46					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	100
Benzene	71-43-2	1	-	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	5
Bromodichloromethane	75-27-4	1	-	ug/L	100
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	5
2-Butanone	78-93-3	1	-	ug/L	10
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	100
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	5
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	10
Chloromethane	74-87-3	1	-	ug/L	5
Chloroprene	126-99-8	1	-	ug/L	10
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	5
1,2-Dibromoethane	106-93-4	1	-	ug/L	100
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	5
Dichlorodifluoromethane	75-71-8	1	-	ug/L	100
1,1-Dichloroethane	75-35-4	1	-	ug/L	10
1,2-Dichloroethane	107-06-2	1	13	ug/L	5
1,1-Dichloroethene	75-34-3	1	-	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	-	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-20

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.13
Project Number: 90125L.7
Sample ID: L1327-39
Site / Project ID: Not Reported
GALP ID: 58482
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	22	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	-	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	95	%	
Toluene-d8	SURROGATE	1	93	%	
4-Bromofluorobenzene	SURROGATE	1	88	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-20

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.14 MW-14
Project Number: 90125L.7
Sample ID: L1327-21
Site / Project ID: Not Reported
GALP ID: 57403
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
W846 Method 8240					
Preparation Date: 12-APR-95					
Analysis Date: 12-APR-95 18:33					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	-	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	63	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	58	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	-	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.14
Project Number: 90125L.7
Sample ID: L1327-21
Site / Project ID: Not Reported
GALP ID: 57403
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	130	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	-	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	97	%	
Toluene-d8	SURROGATE	1	96	%	
4-Bromofluorobenzene	SURROGATE	1	90	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.15 MW-15
Project Number: 90125L.7
Sample ID: L1327-38
Site / Project ID: Not Reported
GALP ID: 58481
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
W846 Method 8240					
Preparation Date: 11-APR-95					
Analysis Date: 11-APR-95 16:05					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	-	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	20	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	-	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	-	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-19

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.15
Project Number: 90125L.7
Sample ID: L1327-38
Site / Project ID: Not Reported
GALP ID: 58481
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	-	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	-	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	100	%	
Toluene-d8	SURROGATE	1	99	%	
4-Bromofluorobenzene	SURROGATE	1	97	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-19

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.17D MW-17D
Project Number: 90125L.7
Sample ID: L1327-32
Site / Project ID: Not Reported
GALP ID: 58475
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
W846 Method 8240					
Preparation Date: 11-APR-95					
Analysis Date: 11-APR-95 19:50					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	-	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	62	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	18	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	-	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-6

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.17D
Project Number: 90125L.7
Sample ID: L1327-32
Site / Project ID: Not Reported
GALP ID: 58475
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	14	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	12	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	19	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	104	%	
Toluene-d8	SURROGATE	1	92	%	
4-Bromofluorobenzene	SURROGATE	1	102	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-6

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.17A MW-17A
Project Number: 90125L.7
Sample ID: L1327-31
Site / Project ID: Not Reported
GALP ID: 58474
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 11-APR-95					
Analysis Date: 11-APR-95 19:08					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	8.7	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	79	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	61	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	-	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY 1327-5

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.17A
Project Number: 90125L.7
Sample ID: L1327-31
Site / Project ID: Not Reported
GALP ID: 58474
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	66	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	29	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	25	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	101	%	
Toluene-d8	SURROGATE	1	91	%	
4-Bromofluorobenzene	SURROGATE	1	99	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY 1327-5

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.17B MW-17B
Project Number: 90125L.7
Sample ID: L1327-30
Site / Project ID: Not Reported
GALP ID: 58473
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 11-APR-95					
Analysis Date: 11-APR-95 18:26					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	-	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	36	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	180	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	-	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-4

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.17B
Project Number: 90125L.7
Sample ID: L1327-30
Site / Project ID: Not Reported
GALP ID: 58473
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	180	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	19	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	-	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	103	%	
Toluene-d8	SURROGATE	1	94	%	
4-Bromofluorobenzene	SURROGATE	1	104	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-4

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.17C MW-17C
Project Number: 90125L.7
Sample ID: L1327-29
Site / Project ID: Not Reported
GALP ID: 58472
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
8240 Method 8240					
Preparation Date: 11-APR-95					
Analysis Date: 11-APR-95 17:44					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	32	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	58	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	99	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	60	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-3

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.17C
Project Number: 90125L.7
Sample ID: L1327-29
Site / Project ID: Not Reported
GALP ID: 58472
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	13	ug/L	5
Toluene	108-88-3	1	5.1	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	91	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	8.5	ug/L	2
Xylene (Total)	1330-20-7	1	54	ug/L	5
Dibromofluoromethane	SURROGATE	1	101	%	
Toluene-d8	SURROGATE	1	98	%	
4-Bromofluorobenzene	SURROGATE	1	102	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-3

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.8 MW-17C 2nd sample
Project Number: 90125L.7
Sample ID: L1327-33
Site / Project ID: Not Reported
GALP ID: 58476
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 11-APR-95					
Analysis Date: 11-APR-95 20:33					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	34	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	63	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	110	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	57	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-7

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.B
Project Number: 90125L.7
Sample ID: L1327-33
Site / Project ID: Not Reported
GALP ID: 58476
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	17	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	95	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	9	ug/L	2
Xylene (Total)	1330-20-7	1	45	ug/L	5
Dibromofluoromethane	SURROGATE	1	107	%	
Toluene-d8	SURROGATE	1	94	%	
4-Bromofluorobenzene	SURROGATE	1	102	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-7

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.18 MW-18
Project Number: 90125L.7
Sample ID: L1327-28
Site / Project ID: Not Reported
GALP ID: 58423
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 11-APR-95					
Analysis Date: 11-APR-95 11:56					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	-	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	17	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	93	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	-	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY 1327-1

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.18
Project Number: 90125L.7
Sample ID: L1327-28
Site / Project ID: Not Reported
GALP ID: 58423
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	71	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	34	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	103	%	
Toluene-d8	SURROGATE	1	104	%	
4-Bromofluorobenzene	SURROGATE	1	100	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY 1327-1

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.19 MW-19
Project Number: 90125L.7
Sample ID: L1327-27
Site / Project ID: Not Reported
GALP ID: 58471
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
SW846 Method 8240					
Preparation Date: 11-APR-95					
Analysis Date: 11-APR-95 14:42					
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	-	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	11	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	150	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	-	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-2

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: 90125.19
Project Number: 90125L.7
Sample ID: L1327-27
Site / Project ID: Not Reported
GALP ID: 58471
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	110	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	-	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	96	%	
Toluene-d8	SURROGATE	1	94	%	
4-Bromofluorobenzene	SURROGATE	1	96	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

FORMERLY L1327-2

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: TRIP BLANK
Project Number: 90125L.7
Sample ID: L1327-24
Site / Project ID: Not Reported
GALP ID: 57362
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

SW846 Method 8240
Preparation Date: 10-APR-95
Analysis Date: 10-APR-95 21:01

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Acetone	67-64-1	1	-	ug/L	100
Acetonitrile	75-05-8	1	-	ug/L	100
Acrolein	107-02-8	1	-	ug/L	100
Acrylonitrile	107-13-1	1	-	ug/L	100
Allyl chloride	107-05-1	1	-	ug/L	5
Benzene	71-43-2	1	-	ug/L	5
Benzyl chloride	100-44-7	1	-	ug/L	100
Bromodichloromethane	75-27-4	1	-	ug/L	5
Bromoform	75-25-2	1	-	ug/L	5
Bromomethane	74-83-9	1	-	ug/L	10
2-Butanone	78-93-3	1	-	ug/L	100
Carbon disulfide	75-15-0	1	-	ug/L	100
Carbon tetrachloride	56-23-5	1	-	ug/L	5
Chlorobenzene	108-90-7	1	-	ug/L	5
Chlorodibromomethane	74-95-3	1	-	ug/L	5
Chloroethane	75-00-3	1	-	ug/L	10
2-Chloroethyl vinyl ether	110-75-8	1	-	ug/L	10
Chloroform	67-66-3	1	-	ug/L	5
Chloromethane	74-87-3	1	-	ug/L	10
Chloroprene	126-99-8	1	-	ug/L	5
1,2-Dibromo-3-chloropropane	96-12-8	1	-	ug/L	100
1,2-Dibromoethane	106-93-4	1	-	ug/L	5
Dibromomethane	74-95-3	1	-	ug/L	5
1,4-Dichloro-2-butene	764-41-0	1	-	ug/L	100
Dichlorodifluoromethane	75-71-8	1	-	ug/L	10
1,1-Dichloroethane	75-35-4	1	-	ug/L	5
1,2-Dichloroethane	107-06-2	1	-	ug/L	5
1,1-Dichloroethene	75-34-3	1	-	ug/L	5
trans-1,2-Dichloroethene	156-60-5	1	-	ug/L	5
1,2-Dichloropropane	78-87-5	1	-	ug/L	5
cis-1,3-Dichloropropene	10061-01-5	1	-	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	1	-	ug/L	5
Ethylbenzene	100-41-4	1	-	ug/L	5
Ethyl methacrylate	97-63-2	1	-	ug/L	5
2-Hexanone	591-78-6	1	-	ug/L	50
Isobutyl alcohol	78-83-1	1	-	ug/L	100
Methacrylonitrile	126-98-7	1	-	ug/L	100

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

Form 1 - Data Summary Report
Prepared By: HydroLogic Laboratories, Inc.

Client ID: TRIP BLANK
Project Number: 90125L.7
Sample ID: L1327-24
Site / Project ID: Not Reported
GALP ID: 57362
Collection Date: 03-APR-95
Received Date: 05-APR-95
Report Date: 20-APR-95

Analyte	CAS No.	Dil	Sample Conc.	Units	RL
Methylene chloride	75-09-2	1	-	ug/L	5
Methyl iodide	74-88-4	1	-	ug/L	5
Methyl methacrylate	80-62-6	1	-	ug/L	50
4-Methyl-2-pentanone	108-10-1	1	-	ug/L	50
Pentachloroethane	76-01-7	1	-	ug/L	10
Propionitrile	107-12-0	1	-	ug/L	100
Styrene	100-42-5	1	-	ug/L	5
1,1,1,2-Tetrachloroethane	630-20-6	1	-	ug/L	5
1,1,2,2-Tetrachloroethane	79-34-5	1	-	ug/L	5
Tetrachloroethene	127-18-4	1	-	ug/L	5
Toluene	108-88-3	1	-	ug/L	5
1,1,1-Trichloroethane	71-55-6	1	-	ug/L	5
1,1,2-Trichloroethane	79-00-5	1	-	ug/L	5
Trichloroethene	79-01-6	1	-	ug/L	5
1,2,3-Trichloropropane	96-18-4	1	-	ug/L	5
Vinyl acetate	108-05-4	1	-	ug/L	50
Vinyl chloride	75-01-4	1	-	ug/L	2
Xylene (Total)	1330-20-7	1	-	ug/L	5
Dibromofluoromethane	SURROGATE	1	92	%	
Toluene-d8	SURROGATE	1	96	%	
4-Bromofluorobenzene	SURROGATE	1	96	%	

Review By: Diane Braithwaite, Report Approved By: Stacey Mekelburg

"Dil" - Sample Dilution Factor
"-" - Sample Concentration not Detected above RL
"RL" - Method Report Limit

APPENDIX F

LABORATORY ANALYTICAL REPORTS

AIR (SVE)

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240
PHONE (505) 326-4669 • 118 S. COMMERCIAL AVE. • FARMINGTON, NM 87401

FINAL ANALYSIS REPORT

Company:	Western Water Consultants, Inc .	Date:	5/18/95
Address:	P.O.Box 4128	Lab #:	H2033-1
City, State:	Laramie, WY 82070		
Project Name:	90-125L.4		
Location:	not given		
Sampled by:	KM	Date:	5/9/95
Sample Type:	Air	Sample Condition:	Intact
Sample ID:	Trkwsh.1-5/95		

PARAMETER	RESULT	UNITS: mg/M3
Dichlorodifluoromethane	<0.2	
Chloromethane	<0.2	
Vinyl Chloride	<0.2	
Bromomethane	<0.2	
Chloroethane	<0.2	
Acetone	<0.2	
1,1-Dichloroethene	<0.2	
Trichlorofluoromethane	<0.2	
Carbon Disulfide	<0.2	
Methylene chloride	<0.2	
trans-1,2-Dichloroethene	<0.2	
1,1-Dichloroethane	<0.2	
Vinyl Acetate	<0.2	
2-Butanone	<0.2	
cis-1,2-Dichloroethene	<0.2	
2,2-Dichloropropane	<0.2	
Chloroform	<0.2	
Bromochloromethane	<0.2	
1,1,1-Trichloroethane	<0.2	
1,2-Dichloroethane	<0.2	
1,1-Dichloropropene	<0.2	
Benzene	<0.2	
Carbon tetrachloride	<0.2	
Trichloroethene	<0.2	
Dibromomethane	<0.2	
Bromodichloromethane	<0.2	
trans-1,3-Dichloropropene	<0.2	
4-methyl-2-pentanone	<0.2	
1,2-Dichloropropane	<0.2	
cis-1,3-Dichloropropene	<0.2	
Toluene	0.8	
1,1,2-Trichloroethane	<0.2	
1,3-Dichloropropane	<0.2	
2-Hexanone	<0.2	
Dibromochloromethane	<0.2	
1,2-Dibromoethane	<0.2	
Tetrachloroethene	0.28	
Chlorobenzene	<0.2	
1,1,1,2-Tetrachloroethane	<0.2	
Ethylbenzene	0.78	
m,p-Xylene	4.12	
Bromoform	<0.2	
Styrene	<0.2	
O-Xylene	4.12	
1,1,2,2-Tetrachloroethane	<0.2	
1,2,3-Trichloropropane	<0.2	
Isopropylbenzene	0.49	
Bromobenzene	<0.2	
2-Chlorotoluene	<0.2	
n-propylbenzene	0.6	
4-Chlorotoluene	<0.2	
1,3,5-Trimethylbenzene	1.61	

FINAL ANALYSIS REPORT

Company:	Western Water Consultants, Inc.	Date:	5/18/95
Address:	P.O. Box 4128	Lab #:	H2033-1
City, State:	Laramie, WY 82070		
Project Name:	90-125L.4		
Location:	not given		
Sampled by:	KM	Date:	5/9/95
Sample Type:	Air	Sample Condition:	Intact
Sample ID:	Trkwsh.1-5/95		

PARAMETER	RESULT	UNITS mg/M3
tert-Butylbenzene	0.27	
1,2,4-Trimethylbenzene	2.24	
1,3-Dichlorobenzene	<0.2	
sec-Butylbenzene	<0.2	
1,4-Dichlorobenzene	<0.2	
4-Isopropyltoluene	<0.2	
1,2-Dichlorobenzene	<0.2	
n-Butylbenzene	<0.2	
1,2-dibromo-3-chloropropane	<0.2	
1,2,4-Trichlorobenzene	<0.2	
Naphthalene	<0.2	
1,2,3-Trichlorobenzene	<0.2	
Hexachlorobutadiene	<0.2	
Methyl iodide	<0.2	

METHOD: VOLATILES - EPA 8260

Hope S. Moreno

Hope S. Moreno

5-18-95

Date

CARDINAL LABORATORIES

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PHONE (505) 326-4669 • 118 S. COMMERCIAL AVE. • FARMINGTON, NM 87401

FINAL ANALYSIS REPORT

Company:	Western Water Consultants, Inc .	Date:	5/18/95
Address:	P.O.Box 4128	Lab #:	H2033-2
City, State:	Laramie, WY 82070		
Project Name:	90-125L.4		
Location:	not given		
Sampled by:	KM	Date:	5/9/95
Sample Type:	Air	Sample Condition:	Intact
Sample ID:	Trkwsh.2-5/95		

PARAMETER	RESULT	UNITS mg/M3
Dichlorodifluoromethane	<0.2	
Chloromethane	<0.2	
Vinyl Chloride	<0.2	
Bromomethane	<0.2	
Chloroethane	<0.2	
Acetone	<0.2	
1,1-Dichloroethene	<0.2	
Trichlorofluoromethane	<0.2	
Carbon Disulfide	<0.2	
Methylene chloride	<0.2	
trans-1,2-Dichloroethene	<0.2	
1,1-Dichloroethane	<0.2	
Vinyl Acetate	<0.2	
2-Butanone	<0.2	
cis-1,2-Dichloroethene	<0.2	
2,2-Dichloropropane	<0.2	
Chloroform	<0.2	
Bromochloromethane	<0.2	
1,1,1-Trichloroethane	<0.2	
1,2-Dichloroethane	<0.2	
1,1-Dichloropropene	<0.2	
Benzene	<0.2	
Carbon tetrachloride	<0.2	
Trichloroethene	<0.2	
Dibromomethane	<0.2	
Bromodichloromethane	<0.2	
trans-1,3-Dichloropropene	<0.2	
4-methyl-2-pentanone	<0.2	
1,2-Dichloropropane	<0.2	
cis-1,3-Dichloropropene	<0.2	
Toluene	5.44	
1,1,2-Trichloroethane	<0.2	
1,3-Dichloropropane	<0.2	
2-Hexanone	<0.2	
Dibromochloromethane	<0.2	
1,2-Dibromoethane	<0.2	
Tetrachloroethene	<0.2	
Chlorobenzene	<0.2	
1,1,1,2-Tetrachloroethane	<0.2	
Ethylbenzene	0.91	
m,p-Xylene	6.99	
Bromoform	<0.2	
Styrene	<0.2	
O-Xylene	7.68	
1,1,2,2-Tetrachloroethane	<0.2	
1,2,3-Trichloropropane	<0.2	
Isopropylbenzene	0.73	
Bromobenzene	<0.2	
2-Chlorotoluene	<0.2	
n-propylbenzene	0.73	
4-Chlorotoluene	<0.2	
1,3,5-Trimethylbenzene	2.86	

FINAL ANALYSIS REPORT

Company:	Western Water Consultants, Inc.	Date:	5/18/95
Address:	P.O. Box 4128	Lab #:	H2033-2
City, State:	Laramie, WY 82070		
Project Name:	90-125L.4		
Location:	not given		
Sampled by:	KM	Date:	5/9/95
Sample Type:	Air	Sample Condition:	Intact
Sample ID:	Trkwsh.2-5/95		

PARAMETER	RESULT	UNITS mg/M3
tert-Butylbenzene	0.46	
1,2,4-Trimethylbenzene	3.96	
1,3-Dichlorobenzene	<0.2	
sec-Butylbenzene	<0.2	
1,4-Dichlorobenzene	<0.2	
4-Isopropyltoluene	<0.2	
1,2-Dichlorobenzene	<0.2	
n-Butylbenzene	<0.2	
1,2-dibromo-3-chloropropane	<0.2	
1,2,4-Trichlorobenzene	<0.2	
Naphthalene	<0.2	
1,2,3-Trichlorobenzene	<0.2	
Hexachlorobutadiene	<0.2	
Methyl iodide	<0.2	

METHOD: VOLATILES - EPA 8260

Hope S. Moreno

Hope S. Moreno

5-18-95

Date

CARDINAL LABORATORIES

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PHONE (505) 326-4669 • 118 S. COMMERCIAL AVE. • FARMINGTON, NM 87401

FINAL ANALYSIS REPORT

Company:	Western Water Consultants, Inc .	Date:	5/18/95
Address:	P.O.Box 4128	Lab #:	H2033-3
City, State:	Laramie, WY 82070		
Project Name:	90-125L.4		
Location:	not given		
Sampled by:	KM	Date:	5/9/95
Sample Type:	Air	Sample Condition:	Intact
Sample ID:	Trkwsh.3-5/95		

PARAMETER	RESULT	UNITS mg/M3
Dichlorodifluoromethane	<0.2	
Chloromethane	<0.2	
Vinyl Chloride	<0.2	
Bromomethane	<0.2	
Chloroethane	<0.2	
Acetone	<0.2	
1,1-Dichloroethene	<0.2	
Trichlorofluoromethane	<0.2	
Carbon Disulfide	<0.2	
Methylene chloride	<0.2	
trans-1,2-Dichloroethene	<0.2	
1,1-Dichloroethane	<0.2	
Vinyl Acetate	<0.2	
2-Butanone	<0.2	
cis-1,2-Dichloroethene	<0.2	
2,2-Dichloropropane	<0.2	
Chloroform	<0.2	
Bromochloromethane	<0.2	
1,1,1-Trichloroethane	<0.2	
1,2-Dichloroethane	<0.2	
1,1-Dichloropropene	<0.2	
Benzene	<0.2	
Carbon tetrachloride	<0.2	
Trichloroethene	<0.2	
Dibromomethane	<0.2	
Bromodichloromethane	<0.2	
trans-1,3-Dichloropropene	<0.2	
4-methyl-2-pentanone	<0.2	
1,2-Dichloropropane	<0.2	
cis-1,3-Dichloropropene	<0.2	
Toluene	5.0	
1,1,2-Trichloroethane	<0.2	
1,3-Dichloropropane	<0.2	
2-Hexanone	<0.2	
Dibromochloromethane	<0.2	
1,2-Dibromoethane	<0.2	
Tetrachloroethene	0.4	
Chlorobenzene	<0.2	
1,1,1,2-Tetrachloroethane	<0.2	
Ethylbenzene	2.3	
m,p-Xylene	11.78	
Bromoform	<0.2	
Styrene	<0.2	
O-Xylene	13.94	
1,1,2,2-Tetrachloroethane	<0.2	
1,2,3-Trichloropropane	<0.2	
Isopropylbenzene	2.25	
Bromobenzene	<0.2	
2-Chlorotoluene	<0.2	
n-propylbenzene	3.16	
4-Chlorotoluene	<0.2	
1,3,5-Trimethylbenzene	3.89	

FINAL ANALYSIS REPORT

Company:	Western Water Consultants, Inc.	Date:	5/18/95
Address:	P.O. Box 4128	Lab #:	H2033-3
City, State:	Laramie, WY 82070		
Project Name:	90-125L.4		
Location:	not given		
Sampled by:	KM	Date:	5/9/95
Sample Type:	Air	Sample Condition:	Intact
Sample ID:	Trkwsh.3-5/95		

PARAMETER	RESULT	UNITS mg/M3
tert-Butylbenzene	0.96	
1,2,4-Trimethylbenzene	8.24	
1,3-Dichlorobenzene	<0.2	
sec-Butylbenzene	<0.2	
1,4-Dichlorobenzene	<0.2	
4-Isopropyltoluene	<0.2	
1,2-Dichlorobenzene	<0.2	
n-Butylbenzene	<0.2	
1,2-dibromo-3-chloropropane	<0.2	
1,2,4-Trichlorobenzene	<0.2	
Naphthalene	<0.2	
1,2,3-Trichlorobenzene	<0.2	
Hexachlorobutadiene	<0.2	
Methyl iodide	<0.2	

METHOD: VOLATILES - EPA 8260

Hope S. Moreno
Hope S. Moreno

5-18-95
Date

CARDINAL LABORATORIES

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PHONE (505) 326-4669 • 118 S. COMMERCIAL AVE. • FARMINGTON, NM 87401

FINAL ANALYSIS REPORT

Company:	Western Water Consultants, Inc .	Date:	5/18/95
Address:	P.O.Box 4128	Lab #:	H2033-4
City, State:	Laramie, WY 82070		
Project Name:	90-125L.4		
Location:	not given		
Sampled by:	KM	Date:	5/9/95
Sample Type:	Air	Sample Condition:	Intact
Sample ID:	Trkwsh.4-5/95		

PARAMETER	RESULT	UNITS	mg/M3
Dichlorodifluoromethane	<0.2		
Chloromethane	<0.2		
Vinyl Chloride	<0.2		
Bromomethane	<0.2		
Chloroethane	<0.2		
Acetone	<0.2		
1,1-Dichloroethene	<0.2		
Trichlorofluoromethane	<0.2		
Carbon Disulfide	<0.2		
Methylene chloride	<0.2		
trans-1,2-Dichloroethene	<0.2		
1,1-Dichloroethane	<0.2		
Vinyl Acetate	<0.2		
2-Butanone	<0.2		
cis-1,2-Dichloroethene	<0.2		
2,2-Dichloropropane	<0.2		
Chloroform	<0.2		
Bromochloromethane	<0.2		
1,1,1-Trichloroethane	<0.2		
1,2-Dichloroethane	<0.2		
1,1-Dichloropropene	<0.2		
Benzene	1.27		
Carbon tetrachloride	<0.2		
Trichloroethene	<0.2		
Dibromomethane	<0.2		
Bromodichloromethane	<0.2		
trans-1,3-Dichloropropene	<0.2		
4-methyl-2-pentanone	<0.2		
1,2-Dichloropropane	<0.2		
cis-1,3-Dichloropropene	<0.2		
Toluene	19.7		
1,1,2-Trichloroethane	<0.2		
1,3-Dichloropropane	<0.2		
2-Hexanone	<0.2		
Dibromochloromethane	<0.2		
1,2-Dibromoethane	<0.2		
Tetrachloroethene	1.88		
Chlorobenzene	<0.2		
1,1,1,2-Tetrachloroethane	<0.2		
Ethylbenzene	5.43		
m,p-Xylene	34.39		
Bromoform	<0.2		
Styrene	<0.2		
O-Xylene	45.8		
1,1,2,2-Tetrachloroethane	<0.2		
1,2,3-Trichloropropane	<0.2		
Isopropylbenzene	9.27		
Bromobenzene	<0.2		
2-Chlorotoluene	<0.2		
n-propylbenzene	16.25		
4-Chlorotoluene	<0.2		
1,3,5-Trimethylbenzene	13.23		

FINAL ANALYSIS REPORT

Company:	Western Water Consultants, Inc.	Date:	5/18/95
Address:	P.O. Box 4128	Lab #:	H2033-4
City, State:	Laramie, WY 82070		
Project Name:	90-125L.4		
Location:	not given		
Sampled by:	KM	Date:	5/9/95
Sample Type:	Air	Sample Condition:	Intact
Sample ID:	Trkwsh.4-5/95		

PARAMETER	RESULT	UNITS mg/M3
tert-Butylbenzene	3.06	
1,2,4-Trimethylbenzene	27.2	
1,3-Dichlorobenzene	<0.2	
sec-Butylbenzene	<0.2	
1,4-Dichlorobenzene	<0.2	
4-Isopropyltoluene	<0.2	
1,2-Dichlorobenzene	<0.2	
n-Butylbenzene	<0.2	
1,2-dibromo-3-chloropropane	<0.2	
1,2,4-Trichlorobenzene	<0.2	
Naphthalene	<0.2	
1,2,3-Trichlorobenzene	<0.2	
Hexachlorobutadiene	<0.2	
Methyl iodide	<0.2	

METHOD: VOLATILES - EPA 8260

Hope S. Moreno
Hope S. Moreno

5-18-95
Date

CARDINAL LABORATORIES

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PHONE (505) 326-4669 • 118 S. COMMERCIAL AVE. • FARMINGTON, NM 87401

FINAL ANALYSIS REPORT

Company:	Western Water Consultants, Inc .	Date:	5/18/95
Address:	P.O.Box 4128	Lab #:	H2033-5
City, State:	Laramie, WY 82070		
Project Name:	90-125L.4		
Location:	not given		
Sampled by:	KM	Date:	5/9/95
Sample Type:	Air	Sample Condition:	Intact
Sample ID:	Trkwsh.5-5/95		

PARAMETER	RESULT	UNITS	mg/M3
Dichlorodifluoromethane	<0.2		
Chloromethane	<0.2		
Vinyl Chloride	<0.2		
Bromomethane	<0.2		
Chloroethane	<0.2		
Acetone	<0.2		
1,1-Dichloroethene	<0.2		
Trichlorofluoromethane	<0.2		
Carbon Disulfide	<0.2		
Methylene chloride	<0.2		
trans-1,2-Dichloroethene	<0.2		
1,1-Dichloroethane	<0.2		
Vinyl Acetate	<0.2		
2-Butanone	<0.2		
cis-1,2-Dichloroethene	<0.2		
2,2-Dichloropropane	<0.2		
Chloroform	<0.2		
Bromochloromethane	<0.2		
1,1,1-Trichloroethane	<0.2		
1,2-Dichloroethane	<0.2		
1,1-Dichloropropene	<0.2		
Benzene	2.13		
Carbon tetrachloride	<0.2		
Trichloroethene	<0.2		
Dibromomethane	<0.2		
Bromodichloromethane	<0.2		
trans-1,3-Dichloropropene	<0.2		
4-methyl-2-pentanone	<0.2		
1,2-Dichloropropane	<0.2		
cis-1,3-Dichloropropene	<0.2		
Toluene	22.5		
1,1,2-Trichloroethane	<0.2		
1,3-Dichloropropane	<0.2		
2-Hexanone	<0.2		
Dibromochloromethane	<0.2		
1,2-Dibromoethane	<0.2		
Tetrachloroethene	1.17		
Chlorobenzene	<0.2		
1,1,1,2-Tetrachloroethane	<0.2		
Ethylbenzene	5.57		
m,p-Xylene	19.02		
Bromoform	<0.2		
Styrene	<0.2		
O-Xylene	32.9		
1,1,2,2-Tetrachloroethane	<0.2		
1,2,3-Trichloropropane	<0.2		
Isopropylbenzene	6.45		
Bromobenzene	<0.2		
2-Chlorotoluene	<0.2		
n-propylbenzene	9.5		
4-Chlorotoluene	<0.2		
1,3,5-Trimethylbenzene	9.27		

FINAL ANALYSIS REPORT

Company:	Western Water Consultants, Inc.	Date:	5/18/95
Address:	P.O. Box 4128	Lab #:	H2033-5
City, State:	Laramie, WY 82070		
Project Name:	90-125L.4		
Location:	not given		
Sampled by:	KM	Date:	5/9/95
Sample Type:	Air	Sample Condition:	Intact
Sample ID:	Trkwsh.5-5/95		

PARAMETER	RESULT	UNITS mg/M3
tert-Butylbenzene	2.18	
1,2,4-Trimethylbenzene	19.35	
1,3-Dichlorobenzene	<0.2	
sec-Butylbenzene	0.31	
1,4-Dichlorobenzene	<0.2	
4-Isopropyltoluene	<0.2	
1,2-Dichlorobenzene	<0.2	
n-Butylbenzene	0.3	
1,2-dibromo-3-chloropropane	<0.2	
1,2,4-Trichlorobenzene	<0.2	
Naphthalene	<0.2	
1,2,3-Trichlorobenzene	<0.2	
Hexachlorobutadiene	<0.2	
Methyl iodide	<0.2	

METHOD: VOLATILES - EPA 8260

Hope S. Moreno

Hope S. Moreno

5-18-95

Date

CARDINAL LABORATORIES

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FINAL ANALYSIS REPORT

Company:	Western Water Consultants, Inc .	Date:	5/18/95
Address:	P.O.Box 4128	Lab #:	H2033-6
City, State:	Laramie, WY 82070		
Project Name:	90-125L.4		
Location:	not given		
Sampled by:	KM	Date:	5/9/95
Sample Type:	Air	Sample Condition:	Intact
Sample ID:	Trkwsh.6-5/95		

PARAMETER	RESULT	UNITS	mg/M3
Dichlorodifluoromethane	<0.2		
Chloromethane	<0.2		
Vinyl Chloride	<0.2		
Bromomethane	<0.2		
Chloroethane	<0.2		
Acetone	<0.2		
1,1-Dichloroethene	0.23		
Trichlorofluoromethane	<0.2		
Carbon Disulfide	<0.2		
Methylene chloride	<0.2		
trans-1,2-Dichloroethene	<0.2		
1,1-Dichloroethane	<0.2		
Vinyl Acetate	<0.2		
2-Butanone	<0.2		
cis-1,2-Dichloroethene	<0.2		
2,2-Dichloropropane	<0.2		
Chloroform	<0.2		
Bromochloromethane	<0.2		
1,1,1-Trichloroethane	<0.2		
1,2-Dichloroethane	<0.2		
1,1-Dichloropropene	<0.2		
Benzene	0.58		
Carbon tetrachloride	<0.2		
Trichloroethene	<0.2		
Dibromomethane	<0.2		
Bromodichloromethane	<0.2		
trans-1,3-Dichloropropene	<0.2		
4-methyl-2-pentanone	<0.2		
1,2-Dichloropropane	<0.2		
cis-1,3-Dichloropropene	<0.2		
Toluene	8.08		
1,1,2-Trichloroethane	<0.2		
1,3-Dichloropropane	<0.2		
2-Hexanone	<0.2		
Dibromochloromethane	<0.2		
1,2-Dibromoethane	<0.2		
Tetrachloroethene	0.6		
Chlorobenzene	<0.2		
1,1,1,2-Tetrachloroethane	<0.2		
Ethylbenzene	2.38		
m,p-Xylene	7.93		
Bromoform	<0.2		
Styrene	<0.2		
O-Xylene	10.64		
1,1,2,2-Tetrachloroethane	<0.2		
1,2,3-Trichloropropane	<0.2		
Isopropylbenzene	2.04		
Bromobenzene	<0.2		
2-Chlorotoluene	<0.2		
n-propylbenzene	3.34		
4-Chlorotoluene	<0.2		
1,3,5-Trimethylbenzene	2.95		

FINAL ANALYSIS REPORT

Company:	Western Water Consultants, Inc.	Date:	5/18/95
Address:	P.O. Box 4128	Lab #:	H2033-6
City, State:	Laramie, WY 82070		
Project Name:	90-125L.4		
Location:	not given		
Sampled by:	KM	Date:	5/9/95
Sample Type:	Air	Sample Condition:	Intact
Sample ID:	Trkwsh.6-5/95		

PARAMETER	RESULT	UNITS mg/M3
tert-Butylbenzene	0.73	
1,2,4-Trimethylbenzene	6.78	
1,3-Dichlorobenzene	<0.2	
sec-Butylbenzene	<0.2	
1,4-Dichlorobenzene	<0.2	
4-Isopropyltoluene	<0.2	
1,2-Dichlorobenzene	<0.2	
n-Butylbenzene	<0.2	
1,2-dibromo-3-chloropropane	<0.2	
1,2,4-Trichlorobenzene	<0.2	
Naphthalene	<0.2	
1,2,3-Trichlorobenzene	<0.2	
Hexachlorobutadiene	<0.2	
Methyl iodide	<0.2	

METHOD: VOLATILES - EPA 8260

Hope S. Moreno

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5-18-95

Date

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240
PHONE (505) 326-4669 • 118 S. COMMERCIAL AVE. • FARMINGTON, NM 87401

FINAL ANALYSIS REPORT

Company: Western Water Consultants, Inc .
Address: P.O.Box 4128
City, State: Laramie, WY 82070
Project Name: 90-125L.4
Location: not given
Sampled by: KM
Sample Type: Air
Sample ID: Trkshp.2-5/95

Date: 5/18/95
Lab #: H2033-7
Date: 5/9/95
Sample Condition: Intact

PARAMETER	RESULT	UNITS mg/M3
Dichlorodifluoromethane	<0.2	
Chloromethane	<0.2	
Vinyl Chloride	<0.2	
Bromomethane	<0.2	
Chloroethane	<0.2	
Acetone	<0.2	
1,1-Dichloroethene	<0.2	
Trichlorofluoromethane	<0.2	
Carbon Disulfide	<0.2	
Methylene chloride	<0.2	
trans-1,2-Dichloroethene	<0.2	
1,1-Dichloroethane	<0.2	
Vinyl Acetate	<0.2	
2-Butanone	<0.2	
cis-1,2-Dichloroethene	<0.2	
2,2-Dichloropropane	<0.2	
Chloroform	<0.2	
Bromochloromethane	<0.2	
1,1,1-Trichloroethane	<0.2	
1,2-Dichloroethane	<0.2	
1,1-Dichloropropene	<0.2	
Benzene	<0.2	
Carbon tetrachloride	<0.2	
Trichloroethene	<0.2	
Dibromomethane	<0.2	
Bromodichloromethane	<0.2	
trans-1,3-Dichloropropene	<0.2	
4-methyl-2-pentanone	<0.2	
1,2-Dichloropropane	<0.2	
cis-1,3-Dichloropropene	<0.2	
Toluene	<0.2	
1,1,2-Trichloroethane	<0.2	
1,3-Dichloropropane	<0.2	
2-Hexanone	<0.2	
Dibromochloromethane	<0.2	
1,2-Dibromoethane	<0.2	
Tetrachloroethene	1.68	
Chlorobenzene	<0.2	
1,1,1,2-Tetrachloroethane	<0.2	
Ethylbenzene	<0.2	
m,p-Xylene	0.4	
Bromoform	<0.2	
Styrene	<0.2	
0-Xylene	<0.2	
1,1,2,2-Tetrachloroethane	<0.2	
1,2,3-Trichloropropane	<0.2	
Isopropylbenzene	<0.2	
Bromobenzene	<0.2	
2-Chlorotoluene	<0.2	
n-propylbenzene	<0.2	
4-Chlorotoluene	<0.2	
1,3,5-Trimethylbenzene	<0.2	

FINAL ANALYSIS REPORT

Company:	Western Water Consultants, Inc.	Date:	5/18/95
Address:	P.O. Box 4128	Lab #:	H2033-7
City, State:	Laramie, WY 82070		
Project Name:	90-125L.4		
Location:	not given		
Sampled by:	KM	Date:	5/9/95
Sample Type:	Air	Sample Condition:	Intact
Sample ID:	Trkshp.2-5/95		

PARAMETER	RESULT	UNITS mg/M3
tert-Butylbenzene	<0.2	
1,2,4-Trimethylbenzene	<0.2	
1,3-Dichlorobenzene	<0.2	
sec-Butylbenzene	<0.2	
1,4-Dichlorobenzene	<0.2	
4-Isopropyltoluene	<0.2	
1,2-Dichlorobenzene	<0.2	
n-Butylbenzene	<0.2	
1,2-dibromo-3-chloropropane	<0.2	
1,2,4-Trichlorobenzene	<0.2	
Naphthalene	<0.2	
1,2,3-Trichlorobenzene	<0.2	
Hexachlorobutadiene	<0.2	
Methyl iodide	<0.2	

METHOD: VOLATILES - EPA 8260

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5-18-95
Date